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# Comparative Analysis of Sales, Gross Profit and GPM Before After the Increase in Vat in the Industrial Sector 2020-2024

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A R T I C L E I N F O

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A B S T R A C T

This study aims to perform a comparative analysis of sales levels, gross profit, and GPM before and after the increase in the (VAT) rate in companies listed on the IDX from 2020 to 2024. This is a comparative study using a quantitative approach. The data used in this research is secondary data, obtained from financial reports of companies listed on the IDX for the years 2020-2024.Sampling in this study was conducted using a purposive sampling technique, resulting in 32 companies from a population of 66 that met the criteria. The technique used to analyze the comparison of sales levels, gross profit, and GPM before and after the VAT rate increase is the Wilcoxon Signed Rank Test. The analysis reveals a significant difference in sales levels and gross profit, while no significant difference was found in the GPM before and after the VAT rate increase in the companies listed on the IDX.The results of the study indicate a significant difference in sales levels and gross profit before and after the VAT rate increase.

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## INTRODUCTION

The industrial revolution 4.0 is a fundamental shift in human life about how production, consumption, and relating to each other can be driven by the convergence of physical digital or humans themselves (Musnaini et al., 2020). Significant changes and major impacts are always followed by every revolutionary change that occurs. Physical and digital are part of the integrated impacts of increasingly rapid and rapid technological advances. The implementation of the industrial revolution 4.0 in Indonesia is a momentum to revitalize the industrial sector and accelerate the achievement of the goal of becoming the 10th country with the largest economy in the world (Musnaini et al., 2020).

Sales play a role as one of the drivers of the economy in Indonesia. Therefore, when the Indonesian economy experienced a decline after the COVID-19 pandemic, the sales level of business actors also experienced the same thing, namely a decline. This is evidenced by data from the Central Statistics Agency. The Central Statistics Agency reported that the Indonesian economy after the COVID-19 pandemic cumulatively throughout 2021 managed to grow positively by 3.69 percent. When compared to the results of 2020 which contracted by 2.07 percent, economic growth can be said to be improving. However, all of this is not enough to restore the economic situation to what it was before the pandemic. In dealing with the various impacts caused by the pandemic, the government has taken a number of policies to restore the Indonesian economy. Facing a situation like this, companies compete to improve their management capabilities in managing the best sales strategies so that the company's economy also has an impact and can even increase (Munawwar, 2024).

This phenomenon can be seen through the Industrial GDP Growth Rate level shown in the following graph:

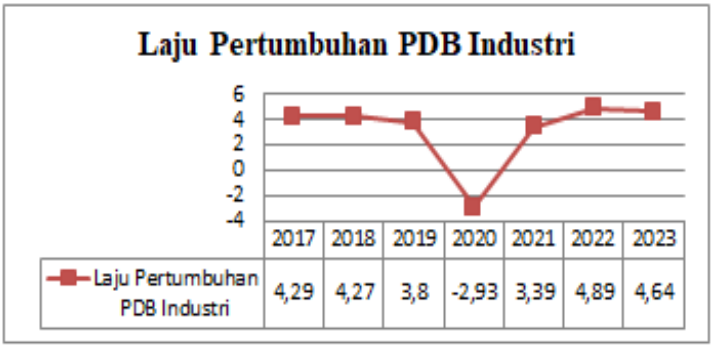


**Figure 1. Industrial GDP growth rate**

*Source: Indonesian National Income, BPS (Processed Data 2024).*

The graph above shows that industrial sector companies listed on the Indonesia Stock Exchange experienced a decline in the growth rate of gross domestic product (GDP) in 2020, which was caused by the impact of the COVID-19 pandemic. This has an impact on the rate of Indonesia's national income. In 2021, although growth was still not significant, conditions began to improve and continued to increase in 2022. However, in 2023 there was another decline of 0.25%.

This phenomenon has encouraged the government to implement various new policies, including in the field of taxation. One of the important points with the enactment of Law Number 7 of 2021 concerning Tax Harmonization. One of the important things in the Tax Harmonization Law is the change in the Value Added Tax (VAT) rate, which will come into effect on April 1, 2022, from the initial 10% to 11% and will be planned to increase to 12% in early 2025 (Putri, 2024) (Tiswiyanti et al., 2022). The government believes that the step to increase the Value Added Tax rate will be implemented soon, because this policy was taken with the aim of saving the increasingly worrying state losses due to the pandemic. The government hopes that this policy can have a very significant effect on state revenues.

From the background above, the question arises, is there a significant difference in the level of sales, gross profit and gross profit margin before and after the increase in the value added tax rate in industrial sector companies listed on the Indonesia Stock Exchange. Therefore, the author is interested in researching "**Comparative Analysis of Sales Levels, Gross Profit, and Gross Profit Margin Before and After the Increase in Value Added Tax in Companies Listed on the Indonesia Stock Exchange in the Industrial Sector in 2020-2024**".

## LITERATURE REVIEW

### *Microeconomic theory*

Microeconomic theory explains how the price of goods or services is affected by changes in tax rates such as value added tax. An increase in value added tax usually causes the price of goods and services to increase. A comparative analysis before and after a value added tax increase can see the impact on the quantity of goods demanded by consumers and the quantity supplied by producers. This theory also measures how much the demand for goods or services changes in response to price changes. An increase in value added tax rates that causes an increase in the price of goods can affect the elasticity of demand, especially for highly elastic goods. A comparative analysis before and after an increase in value added tax rates will show how much the consumption of goods that experienced a price increase decreased or increased due to the influence of the increase in value added tax rates.

### *Macroeconomic theory*

Macroeconomic theory focuses on the effect of fiscal policy on macroeconomic variables such as inflation, unemployment, and economic growth. An increase in VAT can cause inflation, because the price of goods and services will increase. Higher inflation can reduce consumer purchasing power, which in turn can reduce aggregate consumption. Comparative analysis, this theory is used to assess the impact of an increase in VAT on the economy as a whole, whether the impact is more on economic growth or actually slows growth.

### *Sales*

Changes in Value Added Tax rates have an impact on various aspects of the management process in industrial businesses. With this increase, it affects several prices of goods, both raw materials and finished materials. So that it affects the

increase in selling prices caused by the increase in production costs. In several companies, the increase in VAT rates of 11% has an impact on declining sales, so there needs to be a policy and strategy in increasing sales in order to be consistent in generating profits that have been targeted by the company.
H1: There is a significant difference in sales levels in the period before and after the increase in value added tax rates.

***Gross Profit***

Profit or gain is one of the goals of a company in carrying out its activities. Business owners always think about getting profit every period, and of course need to achieve the planned goals. For a manager, achieving company profit is not just about profit, but must be consistent with the goals set by the company. Gross profit is profit after deducting the cost of goods sold or before deducting overhead costs. Gross profit analysis is one of the most important activities for management to make decisions for the present and the future. The relationship between Gross Profit and Value Added Tax includes. The imposition of VAT where when the company sells products and calculates gross profit, the VAT imposed will be a deduction from the total income received (Hidayat et al., 2023) (Tiswiyanti et al., 2022).
H2: There is a significant difference in gross profit in the period before and after the increase in value added tax rates.

***Gross Profit Margin***

Gross profit margin is one of the profitability indicators that measures the relationship between gross profit (i.e. net sales minus cost of goods sold) to net sales (Yuliantin & Aprianti, 2022). Gross profit margin is one of the profitability ratios between gross profit (i.e. net sales minus cost of goods sold) to net sales. An increasing gross profit margin indicates a greater level of gross profit return obtained by the Company on its net sales.The relationship between Gross Profit Margin and Value Added Tax is as follows. Gross Profit Margin is calculated based on sales revenue. When the selling price of goods is added with VAT, the company must ensure that the price set still allows for the desired margin. If the VAT rate increases, a higher selling price may be required to maintain the Gross Profit Margin (Hidayat et al., 2023.
H3: There is a significant difference in gross profit margin in the period before and after the increase in value added tax rates.

***Taxes***

The definition of tax as a community contribution to the government that has a binding mandatory nature without receiving direct compensation. The definition of tax can be viewed from two perspectives, namely the economic perspective and the legal perspective. The definition of tax from an economic perspective is the transfer of wealth from the private sector to the public sector based on laws and regulations that can be enforced without any demonstrable compensation, which is used as a driver, inhibitor, or deterrent to achieve goals that are outside the state financial sector (Tampubolon, 2017).

***Previous Research Results***

The study entitled "Comparative Analysis of Sales Levels Before and After the 11% VAT Increase (Study of Manufacturing Companies Listed on the IDX)" the results of this study show that there is a significant difference in the sales level of manufacturing companies in the food and beverage sub-sector listed on the IDX before and after the implementation of the 11% VAT rate (Munawwar, 2024).

Another study entitled "Analysis of the Impact of Increase in Value Added Tax Rates on Sales Volume at CV. Harko Jaya Offset" which results of the study conducted There is no impact on product sales from the Increase in Value Added Tax rates, because the Company still uses the same selling price. It can be proven from the results of the calculation of sales volume which has increased by 58.19% (Rosyta Devi Arifianti Putri et al., 2023).

The results of the study entitled "Analysis of the Impact of the Increase in Value Added Tax (VAT) Rates from 10% to 11% on Sales at PT. Anugrah Busana Surabaya" is the increase in the 1% VAT rate at PT. Anugrah Busana indirectly has an impact on sales at PT. Anugrah Busana Surabaya. The decline was due to the increase in raw materials, the increase in the price of goods, and caused a lack of public buying interest (Karisma, 2023).

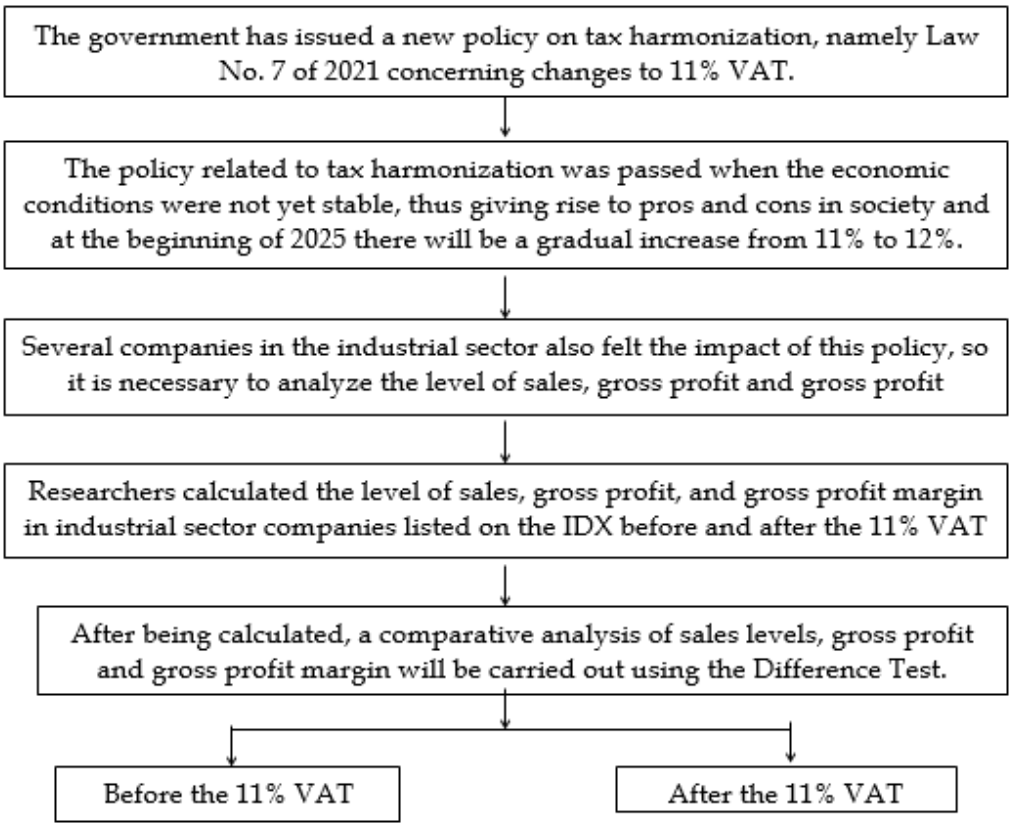


**Figure 2. Framework of Thought**

## METHODOLOGY

The type of research conducted by the researcher is quantitative research. The type of data used in this study is secondary data. The data source for this study is from the website of company reports listed on the Indonesian Stock

Exchange in the industrial sector for the period 2020-2024. Which can be accessed at www.idx.com. By downloading the financial reports owned by each industrial sector company listed on the Indonesian Stock Exchange. The population in this study are companies listed on the Indonesian Stock Exchange in the industrial sector. There are 67 civil companies in 2024 that will be the population in this study, sampling is the process of selecting a sufficient number of elements from the population. Of the entire population in this study that meets the sampling criteria based on the points above, there are 32 companies. The technique used in data collection is a documentation technique in the form of financial reports for the first, second, third, and fourth quarters of 2020-2024 in industrial sector companies listed on the Indonesian Stock Exchange which can be accessed on the IDX website (www.idx.com).

***Operasional Definition of Variables***

Table 1. Operasional Definition of Variables

| No | Variable | Variable Definition | Indicator | Scale |
|---|---|---|---|---|
| 1 | Sales Level | Sales volume is used as one of the indicators to assess business health. The indicator aims to monitor the performance of marketing strategies, determine whether the business is growing, and assess physical sales points effectively and efficiently in order to optimize the goals of the Company (Triyonowati & Maryam, 2022). | $Y = \frac{Yt - Yt1}{Yt1}$ | Nominal |

| No | Variable | Variable Definition | Indicator | Scale |
|---|---|---|---|---|
| 2 | Gross Profit | Gross profit is also often referred to as gross profit, where gross profit is the difference between a company's total income and the direct costs of producing goods or services produced (Pipit Muliyah, 2020). | **Laba Bruto = Penjualan Bersih – Harga Pokok Penjualan (HPP)** | Nominal |
| 3 | *Gross Profit Margin* | The increasing Gross Profit margin indicates the increasing level of gross profit return obtained by the Company on its net sales. This means the increasing efficiency of the costs incurred by the Company to support Gross Profit margin (GPM) is a ratio that measures how efficient the Company is in generating profits from its revenue (Pipit Muliyah, 2020). | **GPM** $= (\frac{\boldsymbol{Penjualan\ Bersih - Harg}}{\boldsymbol{Penjualan}}$ | % |

## RESEARCH RESULT

### *Descriptove Statistical Analysis*

Descriptive statistical analysis technique is an initial description of each variable in the study. Where in the data description, each variable can be seen from the mean, maximum-minimum and standard deviation. The results of the descriptive statistical calculations in this study are as follows:

Table 2. Results of Descriptive Statistical Analysis Before and After the Increase in Value Added Tax Rates

| Descriptive Statistics | | | | | |
|---|---|---|---|---|---|
| | N | Minimum | Maximum | Mean | Std. Deviation |
| Tingkat Penjualan Sebelum Kenaikan PPN | 32 | -0,1453 | 257,6584 | 8,278969 | 45,5073381 |
| Tingkat Penjualan Setelah Kenaikan PPN | 32 | -0,8578 | 0,2944 | -0,050144 | 0,2284343 |
| Laba Bruto Sebelum Kenaikan PPN | 32 | -198615953605 | 18885000000000 | 1107912930511,84 | 3797666369313,550 |
| Laba Bruto Setelah Kenaikan PPN | 32 | -2954860000000 | 1118000000000 | -84768582401,38 | 600999939725,387 |
| Gross Profit Margin Sebelum Kenaikan PPN | 32 | 0,0000 | 0,5700 | 0,222188 | 0,1420299 |
| Gross Profit Margin Setelah Kenaikan PPN | 32 | 0,0200 | 0,6100 | 0,235313 | 0,1566377 |
| Valid N (listwise) | 32 | | | | |

*Source: IBM SPSS (Data processed, 2024)*

### *Classical Assumption Test*

*Normality Test*

Normality test is a procedure used to determine whether data comes from a normally distributed population or is in a normal distribution (Nuryadi et al., 2017). In conducting a normality test, it can be done by looking at the probability in the Kolmogorov-Smirnov test, where if the probability value is more than or equal to 0.05 then the regression model is normally distributed but if the probability is less than or equal to 0.05 then the regression model is not normally distributed. The following are the results of the normality test using Kolmogorov-Smirnov:

Table 3. Results of Normality Test for Sales Level, Gross Profit and Gross Profit Margin

| Tests of Normality | | | | | | |
|---|---|---|---|---|---|---|
| | Kolmogorov-Smirnov[a] | | | Shapiro-Wilk | | |
| | Statistic | df | Sig. | Statistic | df | Sig. |
| Sales level | 0,524 | 64 | 0,000 | 0,110 | 64 | 0,000 |
| Gross Profit | 0,423 | 64 | 0,000 | 0,282 | 64 | 0,000 |
| *Gross Profit Margin* | 0,115 | 64 | 0,035 | 0,945 | 64 | 0,006 |
| a. Lilliefors Significance Correction | | | | | | |

*Source: IBS SPSS (Data processed, 2024)*

Table 4. Summary of Kolmogorov-Smirnov Test Normality Results

| Variable | Sig. | Significance Level | Conclusion |
|---|---|---|---|
| Sales Level | 0,000 | 0,05 | Not Normally Distributed |
| GrossProfit | 0,000 | 0,05 | Not Normally Distributed |
| *Gross Profit Margin* | 0,035 | 0,05 | Not Normally Distributed |

*Source: IBS SPSS (Data processed, 2024)*

***Hypothesis Testing***

*Wilcoxon Signed Rank Test*

Wilcoxon Signed Rank Test is a non-parametric test to measure the significance of the difference between 2 groups of paired data on an ordinal or interval scale but not normally distributed. Wilcoxon Signed Rank Test is an alternative paired sample test if it does not meet the normality assumption. This test is also known as the Wilcoxon Match Pair Test (Fitri et al., 2023). This test research as a source of decision making is seen from its significance value. If Asymp.sig (2-tailed) <5% or 0.05 then Ho: r = 0 is rejected and Ha: r ≠ 0 is accepted. If Asymp.sig (2-tailed) <5% or 0.05 then Ho: r = 0 is rejected and Ha: r ≠ 0 is accepted. The results of the difference test using the Wilcoxon Signed Rank Test in this study are divided into two tables where the first table shows the statistical results of the increase and decrease or average data while the results in the second table show the significance results whether there is a difference or not so that the two tables can be seen as follows:

Table 5. Rank Uji Wilcoxon Signed Rank Test Ranks

| **Wilcoxon Signed Ranks Test** | | | | |
|---|---|---|---|---|
| | | **N** | **Mean Rank** | **Sum of Ranks** |
| Sales Level After VAT Increase - Sales Level Before VAT Increase | **Negative Ranks** | **26[a]** | **18,08** | **470,00** |
| | **Positive Ranks** | **6[b]** | **9,67** | **58,00** |
| | Ties | 0[c] | | |
| | Total | 32 | | |
| Gross Profit After VAT Increase - Gross Profit Before VAT Increase | **Negative Ranks** | **25[d]** | **16,00** | **400,00** |
| | **Positive Ranks** | **7[e]** | **18,29** | **128,00** |
| | Ties | 0[f] | | |
| | Total | 32 | | |
| Gross Profit Margin After VAT Increase - Gross Profit Margin Before VAT Increase | **Negative Ranks** | **14[g]** | **14,29** | **200,00** |
| | **Positive Ranks** | **17[h]** | **17,41** | **296,00** |
| | Ties | 1[i] | | |
| | Total | 32 | | |

a. Sales Level After VAT Increase < Sales Level Before VAT Increase
b. Sales Level After VAT Increase > Sales Level Before VAT Increase
c. Sales Level After VAT Increase = Sales Level Before VAT Increase
d. Gross Profit After VAT Increase < Gross Profit Before VAT Increase
e. Gross Profit After VAT Increase > Gross Profit Before VAT Increase
f. Gross Profit After VAT Increase = Gross Profit Before VAT Increase
g. Gross Profit Margin After VAT Increase < Gross Profit Margin Before VAT Increase
h. Gross Profit Margin After VAT Increase > Gross Profit Margin Before VAT Increase
i. Gross Profit Margin After VAT Increase = Gross Profit Margin Before VAT Increase

Table 6. Statistics Results of the Wilcoxon Signed Rank Test

| Test Statistics[a] | | | |
|---|---|---|---|
| | **Sales Level After VAT Increase - Sales Level Before VAT Increase** | **Gross Profit After VAT Increase - Gross Profit Before VAT Increase** | **Gross Profit Margin After VAT Increase - Gross Profit Margin Before VAT Increase** |
| Z | -3,852[b] | -2,543[b] | -,944[c] |
| Asymp. Sig. (2-tailed) | 0,000 | 0,011 | 0,345 |
| a. Wilcoxon Signed Ranks Test<br>b. Based on positive ranks.<br>c. Based on negative ranks. | | | |

*Source: IBS SPSS (Data processed, 2024)*

## DISCUSSION

### *Comparative Analysis of Sales Levels Before and After the Increase in Value Added Tax (VAT)*

The results of the sales level data in this study using the Wilcoxon signed rank test showed that 26 companies had negative sales values and 6 companies had positive values. The Wilcoxon signed rank test also showed a significant value of 0.000 <0.0500 where this value is less than 0.05 so that H0 is rejected and Ha is accepted, meaning that there is a significant difference in sales levels in industrial companies listed on the Indonesia Stock Exchange before and after the increase in Value Added Tax rates.

The increase in Value Added Tax (VAT) rates from 10 to 11 has a significant negative impact on one of the industrial sector companies engaged in heavy equipment such as that experienced by Pt. Arkha Jayanti Pesada Tbk (ARKA). The results of the analysis showed that the sales level before the increase in Value Added Tax (VAT) decreased from the previous period by -0.0966, while after the increase in Value Added Tax (VAT) the sales level also decreased by -0.3703. Reflecting that the sales level of the company has decreased by 0.2737. Factors that contribute to the decrease in sales levels in each period both before and after the increase in VAT rates that occurred at Pt. Arkha Jayanti Pesada Tbk (ARKA) are as follows:

- The increase in VAT causes companies to have to increase the selling price of products to adjust to the additional costs arising from the tax policy. This makes heavy equipment products more expensive, thus reducing their appeal to consumers.
- The increase in tax rates has the potential to reduce the purchasing power of the community and business actors in the mining and plantation sectors. The increased selling price causes consumers to postpone purchasing heavy equipment because they allocate a larger budget for other basic needs. This decrease in purchasing power causes the level of heavy equipment sales to decline significantly.

- Tight market competition also affects the level of sales, apart from the influence of the tax increase. Difficult market conditions require companies to compete not only in terms of product prices but also in the quality and services provided to consumers. Companies that are unable to compete well will continue to experience a decline in sales levels each period.

The increase in the Value Added Tax (VAT) rate from 10 to 11 also had a significant positive impact on one of the industrial sector companies engaged in villa and apartment property in Bali, PT. Island Concepts Indonesia Tbk (ICON). The results of the analysis showed that before the increase in the Value Added Tax (VAT) rate, sales decreased by -0.1452, while after the increase in the Value Added Tax (VAT) rate, sales increased by 0.0462. Reflecting that the sales level at the company increased between before and after the increase in the VAT rate by 0.1914. The main factors driving this increase were aggressive marketing strategies, end-of-year discounts, changes in consumer preferences for existing units, and flexible financing programs from existing developments.

Companies are advised to be able to maintain sales performance amidst the increase in Value Added Tax (VAT) rates in various ways, including utilizing digital marketing strategies to reach more consumers, offering various creative financing programs such as interest-free installments or low DP, and optimizing promotional tools to increase the attractiveness of existing property products. The right strategy used by the company will continue to increase its sales even though it faces various competitions and challenges from upcoming policies.

***Comparative Analysis of Gross Profit Before and After Increase in Value Added Tax (VAT)***

The results of gross profit data in this study using the Wilcoxon signed rank test showed that 25 companies had negative values in gross profit and 7 companies had positive values. The Wilcoxon signed rank test also showed a significant value of 0.011 <0.050 where this value is smaller than 0.05 so that H0 is rejected and Ha is accepted, meaning that there is a significant difference in gross profit in industrial companies listed on the Indonesia Stock Exchange before and after the increase in Value Added Tax rates.

The increase in the Value Added Tax (VAT) rate from 10% to 11% has a significant negative impact on one of the automotive industry companies, Toyota, as experienced by PT. Astra Internasional Tbk (ASII). The results of the analysis show that before the increase in the Value Added Tax (VAT) rate, there was an increase in gross profit of Rp. 18,885,000,000,000, while after the increase in the Value Added Tax (VAT) rate, there was an increase in gross profit of Rp. 1,118,000,000,000. Reflecting that the gross profit of the company decreased by Rp. 17,767,000,000,000. The factors that contributed to the decrease in Toyota's gross profit before and after the increase in the VAT rate that occurred at PT. Astra Internasional Tbk (ASII) are as follows:

- The increase in VAT rates has increased production costs for Toyota. Higher raw material and component costs have a direct impact on the cost of goods sold (COGS).

- The increase in tax rates has affected the company's strategy in adjusting selling prices. This has made Toyota products more expensive in the market, which can reduce their appeal to consumers.
- The increasingly tight automotive market competition has also been a factor influencing the decline in gross profit. Other brands offer vehicles at more competitive prices, which tends to make consumers switch to other brands that offer products with better value.
- The scandal related to the quality of Toyota products that occurred also affected the company's reputation and reduced consumer confidence.

Toyota Company is advised to optimize operational efficiency to reduce production costs, implement more aggressive marketing strategies to re-attract consumers, be creative in product innovation and environmentally friendly technology to increase product appeal in the market, and strengthen supplier relationships to obtain raw materials at more competitive prices.

The increase in the Value Added Tax (VAT) rate from 10% to 11% also had a significant positive impact on one of the industrial sector companies engaged in the production of electrical cables, telecommunications, and fiber optics at PT. Voksel Electric Tbk (VOKS). The results of the analysis showed that before the increase in the Value Added Tax (VAT) rate, there was a decrease in gross profit of -Rp.198,61,93,605, while after the increase in the Value Added Tax (VAT) rate, there was an increase in gross profit of Rp.22,043,810,060. Reflecting that the gross profit at the company increased between before and after the increase in the VAT rate by Rp.423,69,763,665. The factors that contributed to the increase in gross profit at the company before and after the increase in the Value Added Tax (VAT) rate are as follows:

- Demand for electrical and telecommunication cables increases along with the growth of the construction and infrastructure sector in Indonesia. Large projects such as building construction, toll roads, and new electricity networks drive the need for cable products, thus increasing sales that affect the company's gross profit.
- The increase in Value Added Tax (VAT) rates can be adjusted wisely to the selling price of the product without losing customers.
- Companies that continue to innovate in developing new products, such as environmentally friendly and high-tech cables, have succeeded in attracting consumers and increasing their target market.
- The company has also succeeded in increasing operational efficiency through automation and reducing production waste. This is able to emphasize the cost of goods sold (COGS), so that the contribution to gross profit increases despite the increase in tax rates.

Companies are advised to continue to innovate in product development to meet market needs, optimize marketing strategies to reach more consumers, and implement operational efficiency practices to reduce production costs.

***Comparative Analysis of Gross Profit Margin (GPM) Before and After Increase in Value Added Tax (VAT)***

The results of the Gross Profit Margin data in this study using the Wilcoxon signed rank test showed that 14 companies had negative Gross Profit

Margin values and 17 companies had positive values. The Wilcoxon signed rank test also showed a significant value of 0.345> 0.050 where this value is greater than 0.05 so that H0 is rejected and Ha is accepted, meaning that there is no significant difference in Gross Profit Margin in industrial companies listed on the Indonesia Stock Exchange before and after the increase in Value Added Tax rates.

The increase in Value Added Tax (VAT) rates from 10% to 11% has a significant negative impact on one of the industrial sector companies in the fiber optic cable manufacturing sector as experienced by PT. Communication Cable System Indonesia Tbk (CSSI). The results of the analysis show that before the increase in Value Added Tax (VAT) rates, there was an increase in Gross Profit Margin (GPM) of 24.10%, while after the increase in Value Added Tax (VAT) rates, there was an increase in Gross Profit Margin (GPM) of 13.82%. Reflecting that the Gross Profit Margin (GPM) in the company decreased by 10.24%. Factors that contributed to the decrease in Toyota's gross profit before and after the increase in VAT rates that occurred at PT. Communication Cable System Indonesia Tbk (CSSI) are as follows:

- The increase in VAT rates causes an increase in the cost of raw materials and components used in the production of fiber optic cables. Cost of goods sold (COGS) increases after the increase in Value Added Tax (VAT).
- The increase in tax rates affects the company's strategy in adjusting selling prices. This makes fiber optic cable products more expensive in the market, which can reduce their appeal to consumers.
- Increasing market competition is also a factor that influences the decline in Gross Profit Margin (GPM) with many competitors offering similar products at more competitive prices.
- The increase in tax rates also has an impact on operational costs such as distribution and marketing costs.

Fiber optic cable companies are advised to improve operational efficiency to reduce production costs, develop innovative products that can provide added value to consumers at competitive prices, strengthen marketing strategies to increase consumer awareness of these products, and analyze the market regularly to understand consumer behavior and evolving industry trends.

The increase in the Value Added Tax (VAT) rate from 10% to 11% also had a significant positive impact on one of the industrial sector companies engaged in the production of corporate imaging PT. Modern Internasional Tbk (MDRN). The results of the analysis showed that before the increase in the Value Added Tax (VAT) rate, there was an increase in the Gross Profit Margin (GPM) of 38.38%, while after the increase in the Value Added Tax (VAT) rate, there was an increase in the Gross Profit Margin (GPM) of 60.63%. Reflecting that the Gross Profit Margin (GPM) in the company increased between before and after the increase in the VAT rate by 22.25%. The factors that contributed to the increase in the Gross Profit Margin (GPM) in the company before and after the increase in the Value Added Tax (VAT) rate are as follows:

- Demand for imaging products and services, such as digital cameras, photo printers, and image editing software, is increasing as the creative and digital

sectors grow. New projects in media and advertising are driving the need for high-quality imaging products.

- Ability to adjust product prices wisely by implementing flexible pricing strategies to ensure that profit margins are maintained as sales levels increase.
- Companies that invest in technological innovation and new product development are successful in attracting consumer interest. Newer products with advanced features and improved efficiency can sell at a premium, thereby increasing gross profit.

Companies are advised to continue to innovate in product development to meet market needs, optimize marketing strategies to reach more consumers, and implement operational efficiency practices to reduce production costs in order to compete with other similar companies.

## CONCLUSIONS AND RECOMMENDATIONS

1. The results of the sales level data in this study using the Wilcoxon signed rank test also showed a significant value of 0.000 <0.0500 where this value is smaller than 0.05 so that H0 is rejected and Ha is accepted, meaning that there is a significant difference in sales levels in industrial companies listed on the Indonesia Stock Exchange before and after the Increase in Value Added Tax rates.
2. The results of the gross profit data in this study using the Wilcoxon signed rank test also showed a significant value of 0.011 <0.050 where this value is smaller than 0.05 so that H0 is rejected and Ha is accepted, meaning that there is a significant difference in gross profit in industrial companies listed on the Indonesia Stock Exchange before and after the Increase in Value Added Tax rates.
3. The results of the Gross Profit Margin data in this study using the Wilcoxon signed rank test also showed a significance value of 0.35>0.050 where this value is greater than 0.05 so that H0 is rejected and Ha is accepted, meaning that there is no significant difference in Gross Profit Margin in industrial companies listed on the Indonesia Stock Exchange before and after the increase in Value Added Tax rates.

This research is expected to provide For companies affected by the increase in value added tax rates must improve their sales strategies so that they can be adjusted to the policies set, so that they can survive in accordance with current developments and compete with other similar companies. For the government in making regulations to increase tax rates, there needs to be broader consideration by looking at various angles related to the impacts of the policies to be set**.**

## ADVANCED RESEARCH

There are several limitations in this study, including the first limitation in using samples, because it only uses industrial sector companies listed on the Indonesia Stock Exchange so that, it is hoped that further researchers can use more samples from other sectors. Second, the limitation of the period used is for 4 years from 2020-2024 so that, it is hoped that further researchers can use a

longer period or in accordance with the ongoing time with the latest regulations that will be set. The third limitation of the variables used is 3, namely sales level, gross profit and gross profit margin (GPM) so that, it is hoped that further researchers can add variables related to the study.

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