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Pengaruh Tarif Bea Masuk dan PPh 22 pada Performa Produksi Industri Elektronika dan Telematika

Impact of Import Duties and PPh 22 Rates on Electronics and Telematics Industry Production Performance

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Abstrak

Dalam studi ini, para penulis berupaya memberikan analisis tentang efek dari tarif bea masuk dan tarif PPh22 terhadap kinerja industri elektronik dan telekomunikasi di Indonesia dengan mempertimbangkan tahun 2022 dan 2023 sebagai data utama. Studi ini juga bertujuan untuk memahami melalui metode statistik efek kebijakan fiskal ini terhadap berbagai parameter kinerja industri dengan rujukan khusus pada produksi lokal. Penelitian ini memperlihatkan adanya kebijakan, walau dapat memperkuat produksi domestik, akan tetapi ada tantangan yang cukup berat dalam sektor pertumbuhan ekspor. Selain itu, beban fiskal yang lebih besar ini membuat produk elektronika dan telekomunikasi Indonesia menjadi tidak memiliki daya saing pada tingkat pasar internasional. Sementara itu, tarif ekspor langsung dapat dikatakan berpengaruh paling kecil pada ekspor dibandingkan PPh22, tetapi penggabungan dari kedua kebijakan ini akan mempengaruhi biaya bahan baku secara agregatif, yang akhirnya memberikan pengaruh negatif pada daya saing produk ekspor. Penelitian ini menggarisbawahi pentingnya para pembuat kebijakan dalam pengimbangan antara tarif ekspor PPh 22 dan berbagai jenis percepatan tarif yang lain untuk pemungutan pertimbangan untuk tingkat produksi domestik dan pengikatan daya saing. Oleh karena itu, optimalisasi pengelolaan kebijakan fiskal ini dirasa sangat perlu untuk dicermati agar bisa mendongkrak pertumbuhan yang berkelanjutan bagi industri elektronika dan telekomunikasi di Indonesia serta penambahan kapasitas produksi lokal.

Kata Kunci: Bea Masuk; Tarif PPh22; Industri Elektronika dan Telekomunikasi

Abstract

In this study, the authors attempt to provide an analysis of the effects of import duty rates and PPh22 rates on the performance of the electronics and telecommunications industry in Indonesia by considering the years 2022 and 2023 as the main data. The study also aims to understand through statistical methods the effects of these fiscal policies on various parameters of industry performance with special reference to local production. The study shows that while the policy may strengthen domestic production, there are considerable challenges in the export growth sector. In addition, the greater fiscal burden makes Indonesian electronics and telecommunications products less competitive at the international market level. Meanwhile, direct export tariffs have arguably the least effect on exports compared to PPh22, but the combination of these two policies will affect raw material costs in aggregate, which in turn negatively affects the competitiveness of export products. This study underscores the importance for policymakers in balancing between the export tariff of PPh22 and other types of tariff acceleration for levying considerations for domestic production levels and binding competitiveness. Therefore, optimizing the management of this fiscal policy is deemed very necessary to be examined in order to boost sustainable growth for the electronics and telecommunications industry in Indonesia and the addition of local production capacity.

Keywords: *Import Duties; PPh22 Rates; Electronics and Telematics Industry*

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INTRODUCTION

The electronics and telematics industry is crucial for Indonesia's manufacturing sector, contributing significantly to both economic development and technological advancement. This industry encompasses various components such as consumer electronics, telecommunications equipment, and other technological devices (Christoe et al., 2019). With Indonesia increasingly participating in the global economy, the performance of this sector is vital for maintaining national economic growth and global competitiveness.

However, the Indonesian electronics industry heavily relies on imported components, such as microchips, circuit boards, and other parts used in the assembly of finished goods. The importation of these components is central to the production process, and it is directly influenced by government policies, particularly the rates of import duties and PPh 22 (Income Tax Article 22) (Hatmoko, 2021; Harahap et al., 2020). These regulations can significantly affect the cost of acquiring the necessary parts for production, ultimately impacting manufacturing costs and, by extension, the industry's ability to compete both locally and internationally (Mashilal & Pambudi, 2023).

In 2022, Indonesia introduced adjustments to PPh 22, affecting importation, production, and export activities within various industries. These changes, aimed at increasing government revenue, also had considerable effects on the competitiveness of Indonesian manufacturers. Additionally, the government has modified import duties, especially on electronic components, further influencing production costs (Wijaya & Dewi, 2022; Li et al., 2022).

Import duties are levied on imported goods and affect the cost of acquiring electronic parts, which in turn raises production costs and may reduce profitability (Budi, 2021). Conversely, more favorable import duty rates can lower production costs and improve competitiveness (Ngatikoh & Faqih, 2020). The effects of these changes are measurable through various metrics, such as import volumes, production efficiency, and profitability. With these rates constantly being reviewed and adjusted, it is essential to understand their broader impact on the sector's ability to maintain competitiveness.

The Ministry of Industry plays a central role in shaping the development of the electronics and telematics sector in Indonesia. It oversees policies that influence the cost structure of the industry, including import duties and PPh 22 tax rates, which directly affect the production costs for local manufacturers (Arsyad & Natsir, 2022). The Ministry's focus is on increasing value-added production, decreasing reliance on imports, and supporting the global competitiveness of Indonesian products.

The sector has seen significant growth in recent years, with innovations in consumer electronics driving increased domestic demand and export potential. However, the industry remains highly sensitive to changes in government policies, particularly those concerning taxation and import duties (Amalia, 2021).

The Indonesian electronics and telematics sector faces significant financial challenges due to the high import duties

and PPh 22 tax rates imposed on imported components. These taxes increase the cost of acquiring essential electronic parts, which directly impacts the production process. For manufacturers, these higher production costs may erode profit margins and reduce the competitiveness of Indonesian-made electronics, both in the local and international markets (Agasie & Zubaedah, 2022). This research aims to investigate the direct effects of these taxes on the production capacities of the industry.

High import duties can make it more expensive to source the necessary parts for manufacturing, leading to increased production costs and a reduced ability to price products competitively (Rumianti et al., 2021). Similarly, PPh 22 rates affect cash flow, limiting the financial flexibility of manufacturers to invest in production capacity or innovation (Roel et al., 2023). Therefore, understanding the effects of these policies on production is essential for developing strategies to improve competitiveness.

Given the complexities surrounding the impact of import duties and PPh 22 on the Indonesian electronics industry, this research aims to understand the effects of import duties and the PPh 22 tax policies on the production sector of the electronics and telematics industry in Indonesia. Specifically, the study focuses on how changes in import duties and PPh 22 rates affect the importation of electronic components during the years 2022 and 2023. The main research questions in this study are as follows: First, what were the impact of import duties and the PPh 22 tax rates on the import volume of electronic components for the years 2022 until 2023? Second, How did these policies influence the production costs and output of finished goods within the Indonesian electronics industry during the designated period? And third, what were the impact of import duties and the PPh 22 tax rates on the overall production capacity and competitiveness of the Indonesian electronics industry in both the local and international markets?

This study aims to thoroughly exami ne how the import duties and the PPh 22 tax rates influence the electronics and telematics industry in Indonesia. First, this research seeks to examine how the import

duties and the PPh 22 tax rates influence the volume of electronic component imports in Indonesia during 2022 and 2023. Second, the research will assess how these policies have impacted production costs and the output of finished goods within the Indonesian electronics industry during the same period. Lastly, the study aims to evaluate the extent to which import duties and PPh 22 rates have affected the overall production capacity and competitiveness of Indonesian electronics products, both in the domestic and international markets.

The research examines the impact of the import duties and the PPh 22 tax on Indonesia's electronics and telematics sector during the fiscal years 2022 and 2023. The study will examine how these measures have affected the importation of components, production costs, and the ability to produce competitive finished goods for both local consumption and export.

Key limitations include the accessibility of accurate and reliable financial data from businesses, which may affect the depth of analysis. Additionally, external global factors, such as shifts in

international trade policies or economic trends, may also influence the performance of the industry, even if these factors are not the primary focus of the research.

In Indonesia, Regulation Number 17 in 2006, an amendment to Regulation Number 10 of 1995, plays a crucial role in regulating the import and export activities, with a primary focus on the customs process. It is designed to maintain transparency and accountability in customs operations, providing clear rules for the levying of tariffs and taxes on imported goods. This law aims to safeguard domestic industries from excessive competition while generating revenue for the government through import duties. Import duties under this regulation are used to control the volume of imports entering the country and to protect the local market (Kementerian Perdagangan, 2006). The implementation of tariffs on foreign goods is a primary focus of Law Number 17 of 2006. This legislation aims to protect local industries from unfair competition and generate revenue for the government by specifying particular duties and taxes applicable to various categories of imports. These charges are designed to regulate the flow of goods entering the country, ensuring that imports are taxed appropriately and that potential damage to regional businesses is minimized. This law supports Indonesia's economic interests and maintains a balanced trading environment by setting forth specific requirements.

Regulation of the Minister of Finance Number 34/PMK.010/2017 implementation of Income Tax Article 22 (PPh 22), which applies to various economic activities, including imports. PPh 22 aims to ensure that taxes are collected systematically throughout the fiscal year, rather than through large end-of-year payments. Specifically, it covers tax collection on imports, which plays a significant role in Indonesia's economic operations. For firms in the electronics and telematics sector, the rates of PPh 22 can directly influence production costs, as they affect the cost of imported materials. Higher PPh 22 rates can increase the final cost of production and impact the pricing strategies of businesses (JDIH Kementerian Keuangan, 2017).

PPh 22 is designed as a prepayment mechanism for corporate income taxes, helping the government collect taxes over the course of the fiscal year. For imports, PPh 22 taxes are applied to the goods as they enter the country, with rates varying based on the type of transaction and the value of the imported goods (Wilantari, 2021). The tax burden on imported goods increases production costs, especially in the electronics and telematics industry, where manufacturers rely heavily on imported components. These taxes can also influence the pricing strategy of firms, potentially reducing their competitiveness in both local and global markets. Noncompliance with the provisions governing these requirements incurs penalties, including fines and interest on delayed payments. Such penalties are intended to ensure strict adherence to tax obligations, compelling taxpayers to comply fully to maintain the system's efficacy (Muslim, 2023). Elevated rates of PPH 22 can significantly influence corporate costs and financial planning, particularly in the electronics and telematics sectors. This mandatory prepayment plays a crucial role in cash

flow management, as organizations often struggle to forecast their annual tax liabilities. It impacts financial operations by forming a component of operating expenses that businesses must account for. Additionally, PPH 22 rates can affect the cost of goods, especially when involving imported sub-assemblies, which may, in turn, influence pricing strategies and product competitiveness in the market.

Import taxes refer to levies imposed by governments on goods and services entering the country. These duties serve multiple purposes: regulating imports, safeguarding domestic markets from external competition, and generating government revenue (Hebous & Johannesen, 2021). Import duties enable governments to control trade flows, promote local products, and inflate the prices of imported goods. They are also integral to economic policy, particularly in supporting exports, imports, and the protection of emerging industries. The amount of duty imposed depends on product characteristics such as type, value, and country of origin (de Melo & Solleder, 2020). Governments can adjust customs duties in response to economic conditions and diplomatic relations, either encouraging or restricting trade with specific countries or regions.

Several factors influence import activities, including policies, regulations, supply chain dynamics, and consumer preferences. Political decisions, such as changes in import duty rates or the formation of new trade partnerships, significantly impact import volumes and costs. Global supply chain disruptions—driven by geopolitical divisions or natural disasters—pose further challenges. Market demand also shapes import levels; highly sought-after goods are imported in larger quantities compared to less frequently demanded items. In the electronics and telematics sectors, import duties are especially significant, as they affect the cost of imported components and materials. High import duties raise production costs, making domestically manufactured goods less competitive in international markets. Conversely, they may facilitate the procurement of superior foreign components, enhancing product quality and competitiveness (Mo et al., 2021).

For companies in the electronics and telematics industries, import duties and PPH 22 rates critically influence the landed cost of goods, affecting profit margins and pricing strategies. To remain competitive and profitable, businesses must effectively address these regulatory costs. Strategic and tactical management within the industry necessitates a thorough understanding of the fiscal responsibilities and taxes associated with imports and production.

The production of finished goods, particularly in industries reliant on advanced technology like electronics, involves assembling raw materials and components into market-ready products. For the electronics and telematics industry, this process is highly complex, involving various components, assembly, and quality control (Srinivasa, 2023). The availability and cost of raw materials, as well as the technological capabilities of manufacturers, directly influence production efficiency and cost. Import duties and PPh 22 rates affect the cost of imported materials, thereby increasing the cost of production. This increase can lead to higher prices for finished products,

affecting the market competitiveness of manufacturers in Indonesia (Yusub, 2022).

Finished goods intended for export play a vital role in the Indonesian economy, contributing to foreign exchange earnings and the growth of the industrial sector (Gerschewski et al., 2020). However, the costs associated with production, including import duties and PPh 22 rates, impact the pricing and competitiveness of exported goods. In destination markets, import duties may further increase the cost of Indonesian exports, affecting their attractiveness and marketability (Sato et al., 2020). Thus, understanding how to manage regulatory costs is critical for Indonesian companies striving to maintain competitiveness in the global marketplace. The conceptual framework of this study highlights the interconnections between PPh 22 rates (X1), import duties (X2), and the production of finished goods (Y2) in Indonesia's electronics and telematics industry. Both PPh 22 and import duties play a direct role in shaping manufacturing cost structures by influencing the prices of imported components, which are crucial for local production. Import duties raise the cost of materials imported for production, making the overall manufacturing process more expensive. This increase in production costs could potentially reduce the volume of finished goods produced, as manufacturers may struggle to maintain profit margins with higher input costs. Similarly, the PPh 22 tax imposed on imports also adds to the financial burden for businesses, particularly those reliant on foreign components. As this tax raises the upfront costs of acquiring imported goods, it can make the production of finished goods less economically viable, leading to a decrease in the quantity of goods produced. Therefore, changes in the rates of PPh 22 and import duties are expected to have a significant effect on the production levels of finished goods, either encouraging or deterring local manufacturing depending on the rate adjustments. This interconnected relationship highlights the critical role that import-related financial policies play in shaping the production capabilities of the electronics and telematics sector.

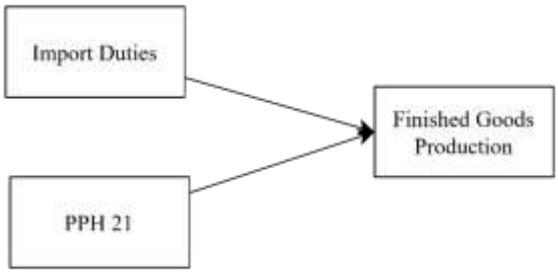

Figure 1. Conceptual Framework

Drawing from the conceptual framework, the study formulates the following hypotheses:

1. H1: PPh 22 rates and import duties exert a significant influence on the production of finished goods within the Indonesian electronics and telematics sector during 2022 and 2023.
2. H2: The effects of PPh 22 rates and import duties on the production of finished goods in the Indonesian electronics and telematics sector are substantial and quantifiable in the years 2022 and 2023.

METHOD

In the context of commerce and production, within the realm of commerce and production, this study employs quantitative research methods to analyze the relationship between independent and dependent variables (Pandey & Pandey,

2021). Quantitative research emphasizes the use of measurable data and statistical analysis to derive findings and conclusions. By applying this approach, the study seeks to offer a comprehensive understanding of the effects of Import Duty percentages and PPh 22 percentages on production, taking into account variables such as import value and production volume in the electronics and telematics sector.

This approach is appropriate for making decisions based on quantifiable relationships between variables, where quantitative data allows for the determination of patterns, influences, and relationships through statistical models (Kotronoulas et al., 2023). Given its capacity to process large datasets, quantitative methods enable the formulation of statistically sound recommendations on business operations.

For this study, a logistic regression model is used. Logistic regression examines the relationship between a categorical dependent variable and one or more independent variables (Tillmanns, 2021). Since the dependent variable—production—is discrete, the logistic regression model is suitable for examining how independent variables like Import Duty % and PPh 22 % affect production outcomes.

The model application involves several steps:

1. Model Specification: Describing how independent variables such as Import Duty % and PPh 22 % relate to production.
2. Estimation: Applying the logistic regression algorithm to obtain model coefficients, indicating the extent and direction of the variables' effects.
3. Interpretation: Determining the relationship between Import Duty % and PPh 22 % and their impact on production probabilities.

This research collects both primary and secondary data to compare the relationship between import duties, PPh 22, and production in the electronics and telematics industry. This combination ensures more accurate and conclusive results, covering all relevant areas.

Primary data is gathered from industry reports filed by companies, as required by Minister of Industry Regulation No. 2 of 2019. These reports, submitted to the National Industrial Information System (SIINas), provide production data for companies in the electronics and telematics industry. The data is collected directly from the Ministry of Industry and stored in the SIINas system, offering timely, relevant, and specific information on production trends.

Secondary data used in this study includes import and export data processed by the Ministry of Industry's SIINas system. The data, sourced from the Badan Pusat Statistik (BPS), provides statistical information on imports and exports, which is essential for analyzing the effects of import duties and taxes on production. Secondary data complements the primary data, helping to broaden the analysis of the impact on production.

The main tools for data collection include standardized industry reports submitted to the Ministry of Industry and the SIINas system, which ensures proper organization and retrieval of primary and secondary data (Kementerian Perindustrian, 2024). The BPS-corrected

databases, containing detailed trade statistics, are also essential for matching and comparing import/export data. These tools help avoid data oversights and ensure the adequacy of collected information.

Ethical standards are adhered to throughout data collection to prevent contamination of the research and protect data confidentiality. The study follows procedures for data verification and validation, ensuring that the data accurately reflects production, import, and export activities. Furthermore, the research complies with the State Minister of Industry Regulation No. 2 of 2019, maintaining the ethical integrity of the data collection process.

Descriptive statistics provide an overview of the dataset, summarizing its main features, such as central tendency (mean), variability (standard deviation), and range (minimum and maximum values). In this research, descriptive statistics were applied to variables like Import Duty %, PPh 22 %, and production values, helping to understand the basic characteristics of the data before further analysis.

Logistic regression is employed to describe the relationship between independent variables and the binary dependent variable (production). It evaluates how independent factors affect the likelihood of production outcomes.

The fit of the logistic regression model is assessed by comparing the -2 Log Likelihood values before and after the inclusion of independent variables. A reduction in the value indicates an improvement in the model's fit.

The feasibility of the model is tested using the Hosmer and Lemeshow test, which assesses whether the model provides a good match to the data. If the p-value is greater than 0.05, the model fits the data well.

The overall test, using the G test and Chi-Square calculations, assesses whether the independent variables significantly affect the dependent variable. A p-value less than 0.05 indicates that the independent variables collectively impact production.

The partial regression coefficients and significance values assess the effect of each independent variable on production, with p-values less than 0.05 indicating statistical significance.

The Nagelkerke R Square value measures how well the independent variables explain the variation in production. A higher value indicates a better model fit, with values closer to 1 representing a strong fit.

RESULTS AND DISCUSSION

The empirical examination of how import duty and PPh22 rates affect imports, output, and exports—three important economic variables—is covered in detail in Chapter 4. The goal of this chapter is to present a thorough understanding of how import, manufacture, and export impact the electronics industry. This study analyzes data from 2022 and 2023 to identify trends and evaluate the effectiveness of current policies. The focus is specifically on how these factors influence the production of electronic components and finished goods in the industry.

Indonesia's total imports decreased to USD 19.11 billion in December 2023, reflecting a 2.45% decline from November and a 3.81% drop compared to December

2022, as reported by Badan Pusat Statistik (2024). Oil and gas imports amounted to USD 3.37 billion, a 3.33% decrease from the previous month but a 5.35% increase year-over-year. Non-oil and gas imports were valued at USD 15.74 billion, marking a year-over-year decline of 5.57% and a 2.26% reduction month-over-month.

Among non-oil and gas imports, electrical machinery and components experienced a significant decline, dropping by USD 252.1 million (11.42%) from November. Conversely, mineral fuel imports surged by USD 248.3 million, an 89.80% increase. The top exporters of non-oil and gas products to Indonesia included China (USD 62.18 billion), Japan (USD 16.44 billion), and Thailand (USD 10.14 billion), with ASEAN and the EU contributing USD 31.05 billion and USD 14.02 billion, respectively.

Within the import categories, capital goods imports rose by USD 2.83 billion (7.78%), and consumer goods imports increased by USD 1.71 billion (8.64%). However, imports of intermediate and raw materials dropped significantly by USD 20.10 billion (11.09%). Despite these declines, Indonesia recorded a positive trade balance in December 2023, achieving a surplus of USD 3.31 billion. This surplus was largely driven by a USD 5.20 billion surplus in non-oil and gas exports, although partially offset by a USD 1.89 billion deficit in the oil and gas sector.

The trends observed in imports, production, and exports from 2022 to 2023 provide valuable insights into the shifting dynamics of Indonesia's electronics industry. Over this period, import figures showed a steady increase, from 109 million units in 2022 to 112 million units in 2023, with projections reaching 115 million units in 2024. This growth indicates a rising dependency on imported goods, which could be attributed to factors such as increased consumer demand, insufficient domestic production capacity, or the availability of new products not manufactured locally. The increasing reliance on foreign suppliers points to a potential gap between domestic production and market demand.

On the other hand, domestic production figures exhibited a more erratic trend. Production increased slightly from 118 million units in 2022 to 120 million units in 2023, but is projected to decrease to 110 million units in 2024. This decline contrasts with the increasing import figures, suggesting potential issues in domestic production, such as higher production costs, supply chain disruptions, or manufacturing inefficiencies. These factors have led to a situation where domestic production is struggling to meet market demands, contributing to the growing import reliance.

In terms of exports, the situation appears even more concerning. Exports dropped from 90 million units in 2022 to 80 million units in 2023, with projections indicating further decline to 70 million units in 2024. This decline may reflect various challenges, including reduced global competitiveness, shifts in international demand, or difficulties in entering new markets. The falling export numbers highlight a potential loss of market share for domestic products, which could have significant financial implications for the industry.

The interaction of these factors paints a picture of an industry facing production challenges and a decline in export performance, while simultaneously

becoming increasingly reliant on imports. The discrepancy between domestic production and market demand suggests a need for a comprehensive reevaluation of the industry's production capabilities and operational efficiency, with a particular focus on improving domestic manufacturing capacity to reduce dependence on imports. Analyzing the trends in import, production, and export data from 2022 to 2023 provides valuable insights into the market dynamics and economic challenges influencing the industry. During this period, import figures exhibit a steady upward trajectory, increasing from 109 million units in 2022 to 112 million units in 2023, with projections indicating further growth to 115 million units in 2024. This consistent rise suggests a growing dependency on imported goods, potentially driven by factors such as heightened consumer demand, insufficient domestic manufacturing capacity, or the introduction of products not locally produced. The increasing reliance on foreign suppliers underscores domestic industries' inability to fully meet market demands, as reflected in the sustained growth of import volumes.

In contrast, production data reveal a more fluctuating pattern. Domestic production showed a modest increase from 118 million units in 2022 to 120 million units in 2023. However, production is anticipated to decline significantly to 110 million units in 2024, reversing the prior growth trend. This downturn is concerning, particularly when juxtaposed with the rising import figures, as it may signal underlying issues within the domestic production sector. Contributing factors could include shifts away from specific product categories, escalating production costs, supply chain disruptions, or operational inefficiencies. The decline in production amidst increasing imports highlights a misalignment between domestic manufacturing capabilities and market demands.

Export data further reflect challenges, with a sharp decline observed over the same period. Exports fell from 90 million units in 2022 to 80 million units in 2023 and are projected to decrease further to 70 million units in 2024. This persistent downward trend may indicate a loss of global competitiveness, changes in international demand, or barriers to accessing new markets. The decline in exports raises concerns about the diminishing global appeal of local products and a reduced market share, potentially undermining the industry's overall profitability and sustainability.

These interconnected trends paint a picture of an industry facing multiple pressures: rising import reliance, declining production capabilities, and shrinking export performance. The combination of increasing imports with falling production and export figures suggests an intensifying gap between domestic production capacity and market needs. This imbalance may point to systemic challenges within the industry, where local production struggles to keep pace with both domestic consumption and international market demands. The necessity for a strategic reevaluation of local manufacturing capabilities, operational efficiency, and competitive positioning in international markets is particularly highlighted by the dropping output levels.

Table 1 Import Descriptive Statistics

Variable	N	Min	Max	Mean	Std. Dev
Component Import Value of Components	556	0	1	0.973	0.16217
Import Duties (%)	556	0	10	1.259	2.44533
PPh22 (%)	556	0	10	1.1691	3.10916

For import data, the Component Import Value has a mean of 0.973 and a standard deviation of 0.162, indicating little variability. The Import Duties (%) variable shows a mean of 1.259 with a standard deviation of 2.445, suggesting significant variability. Similarly, the PPh22 (%) variable has a mean of 1.1691 and a high standard deviation of 3.109, indicating considerable variability in this tax percentage.

Table 2. Production Descriptive Statistics

Variable	N	Min	Max	Mean	Std. Dev
Finished Goods Value of Finished Goods	1238	0	1	0.3788	0.48529
Import Duties (%)	1238	0	15	6.878	5.21921
PPh22 (%)	1238	0	10	9.6405	1.12031

The data for Finished Goods production reveals a mean of 0.3788 with a standard deviation of 0.485, indicating significant variability. The Import Duties (%) variable has a mean of 6.878 and a high standard deviation of 5.219, showing considerable variation in duties applied to different products. The PPh22 (%) variable has a high mean of 9.6405 and low variability with a standard deviation of 1.120, suggesting a consistent application of the PPh22 tax.

Table 3. Model Fit Test

Variable	Result	2 Log Likelihood	Decision
Component Import Value	Block Number = 0	137.973	Model Fit
	Block Number = 1	96.254	
Finished Goods Production Value	Block Number = 0	1642.806	Model Fit
	Block Number = 1	1504.598	

The Model Fit Test results show that the regression model improves when the independent variables—Import Duties and PPh22—are included, demonstrating a better fit for the observed data regarding production.

Table 4. Hosmer and Lemeshow's Test

Variable	Chi-Square	df	Sig.
Component Component Import Value	0	2	0.054
Finished Goods Production Value	235.294	4	0

The Hosmer and Lemeshow's Test indicates that the model fits the data well for Component Component Import Value, but the model does not fit for Finished Goods Production Value, indicating a need for further analysis of how import duties and PPh22 impact domestic production.

Table 5. Overall Test

Variable	Chi-Square	df	Sig.
Component Component Import Value	41.719	2	0
Finished Goods Production Value	128.235	2	0

The Chi-Square test indicates that both Import Duties and PPh22 have a significant impact on Finished Goods Production, suggesting that changes in these independent variables directly influence production output.

Table 6. Import Partial Test

Variable	Coefficient	Sig.
Import Duty	-48.91	0*
PPh22	193.19	0.997***
Constant	5.166	0

The partial test results show that Import Duty has a statistically significant negative relationship with the Component Import Value, whereas PPh22 has a non-significant positive relationship. This suggests that increasing import duties leads to a reduction in the value of imported components, whereas PPh22's effect on imports is less pronounced.

Table 7. Production Partial Test

Variable	Coefficient	Sig.
Import Duty	11.035	0
PPh22	43.219	0
Constant	-5.514	0

The results show that Import Duties and PPh22 have little influence on finished goods production, with the coefficient for Import Duties being statistically insignificant.

Table 8. Nagelkerke R Square

Variable	Nagelkerke R Square
Component Import Value	0.329
Production of Finished Goods	0.144

The regression model reveals how much the independent variables can explain the dependent variable. As shown in the table above, the variables Import Duty and PPh22 account for 32.9% of the variation in the Component Import Value variable, based on the Nagelkerke R Square value of 0.329. The remaining 67.1% is influenced by other factors. Similarly, the Nagelkerke R Square value of 0.144 for the Production of Finished Goods variable indicates that Import Duty and PPh22 explain 14.4% of the variation in this variable, while the remaining 85.6% is driven by other factors.

CONCLUSION

This study aimed to examine the influence of PPh22 rates and import duties on imports, production, and exports, analyzing data from 2022 and 2023. The hypotheses were tested through a series of statistical analyses, and the results provide a comprehensive overview of how these factors impact Indonesia's trade and manufacturing sectors. The following is a summary of the results for each model:

1. Impact of Import Duties and PPh22 Rates on the Import of Components in Indonesian Electronics and Telematics in 2022 and 2023:
    a. In both 2022 and 2023, higher PPh22 rates significantly reduced the import of components, leading to lower import volumes. This indicates that increased PPh22 rates discouraged imports during these years.
    b. Import duties also had a consistent negative effect on component imports in both years, further decreasing import volumes due to the added costs from these duties.
2. Impact of Import Duties and PPh22 Rates on the Production of Finished Goods in Indonesian Electronics and Telematics in 2022 and 2023:
    a. The analysis found a strong positive relationship between PPh22 rates and the production of finished goods in both 2022 and 2023. Higher PPh22 rates seemed to promote domestic production, likely compensating for the reduced imports.
    b. Import duties on materials used in production had a notable positive impact, resulting in increased imports of these materials. This effect was observed in both years, suggesting that import duties consistently influenced the availability and cost of production inputs.

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