# The Impact of Imports on Customs Revenue of The Directorate General of Customs and Excise (DJBC)

Yudi Hasnawan[1], Boy Nurdin[2]
{yudihasnawan@gmail.com[1], Drboynurdin_ppslaw@yahoo.com[2]}
Universitas Borobudur[1, 2]

**Abstract.** The state receives revenue from customs duties imposed on commodities imported into Indonesia. Customs duties will be collected at the Traditions and Extract Oversight and Administration Office in 2018 and 2022. The motivation behind this study is to decide how the assortment of customs obligations at the Traditions and Extract Management and Administration Office is influenced by tariff rates, volume, and value. The descriptive associative method, multiple linear regression analysis, and documentation-based data collection procedures were all used in the research approach. The discoveries of the examination demonstrate that exchange advancement will assist the Directorate With generaling of Customs and Extract (DJBC) operate more effectively as it can increase customs duty revenue (import taxes and PDRI). The research results show that tariff rates, import volume, and import value have a positive and significant effect on customs duty revenue. Simultaneously, tariff rates, import volume, and import value significantly influence customs duty revenue at the Traditions and Extract Oversight and Administration Office, Type A Customs Medium Supervision Office in Bandung. Further research is expected in this study to explore other factors that may affect customs duty revenue and to add or extend the observation period.

**Keywords:** Import, Customs, Directorate General of Customs and Excise

## 1 Introduction

The Unitary State of the Republic of Indonesia receives funding from various sources, including taxes. According to Bernardin, Indonesia's main source of income is the tax industry.[1] According to Nurdin and Riana, one of the main sources of state revenue is from the tax sector.[2]

Taxes can be categorized according to their types, nature, and collecting institutions when considering the various forms of taxes applicable in Indonesia. Direct and indirect taxes are two different categories of taxes.[3] Unlike indirect taxes, which are typically imposed on consumers of goods and services, including sales tax, import tax, export tax, and others, Rachim states that direct taxes cannot be handed on to others and must be borne by the payer,[4] and paid directly to taxpayers, such as income tax.

ICLSSEE 2024, May 25, Jakarta, Indonesia

DOI 10.4108/eai.25-5-2024.2348916

Export and import taxes, originating from foreign or international trade operations, are a significant source of indirect tax revenue in developing countries.[4] As one of the developing countries involved in national development initiatives, Indonesia must increase state revenue, and one source of such revenue is international trade.[5]

Import and sales taxes generate the largest revenue from international trade; the purpose of imposing high import taxes is to deter consumers from importing luxury products while also safeguarding domestic industries and maintaining balance of payments stability.[5] Imported goods are referred to as imports to Indonesia. Based on data from the Central Statistics Agency, Indonesia experiences an increase in import volume each year. Therefore, the government implements import duty policies, also known as import levies, on imported commodities. [6]

The Directorate General of Customs and Excise is a government institution whose main task is to collect state revenue in the field of customs and excise, including revenue from import duties, export duties, excise duties, and taxes.[7]

In the context of customs activities, the Directorate General of Customs and Excise (DGCE) collects revenue in the form of import duties, export duties, and taxes on imports (PDRI), which include import income tax (Import Income Tax), import value, import tax, esteem added charge (Tank on Imports), and extravagance merchandise deals charge (Import PPnBM). Charge regulation depends on Regulation Number 42 of 2009 (the third change to Regulation Number 8 of 1983) concerning Worth Included Assessment Labor and products and Extravagance Merchandise Deals Expense and Regulation Number 36 of 2008 (the fourth amendment to Regulation Number 7 of 1983) concerning Annual Duty.

Based on the above, in import customs activities, DGCE collects state revenue in the form of import duties and taxes (PDRI), while in export customs activities, it collects state revenue in the form of export duties. Customs revenue realization is one of the main performance indicators (IKU) of DGCE as a tax collector. Based on the financial reports and performance reports of DGCE in 2015, Free Trade Areas (FTAs) and trade liberalization programs are two elements that impact a company's ability to meet its revenue targets.

Nongsina and Hutabarat state that trade liberalization is marked by the formation of the General Agreement on Tariffs and Trade (GATT) in 1947. GATT's role was later taken over by the World Trade Organization (WTO).[8] One sign of trade liberalization is the reduction or elimination of trade barriers in the form of tariffs. The reduction or elimination of tariffs can promote the movement of goods and services between countries and is expected to increase trade volume and value.

In view of the foundation depiction, the definition of examination issues remembers the effect of exchange advancement for import customs income and the commitment of customs income to burden income.

## 2 Literature Review

### 2.1 Import Duty Rates

Tariffs are figures charged by a business unit for buyers or customers or goods sold.[5] The Republic of Indonesia Law Number 17 of 2006, which serves as the basis for the review, states in Article 1 paragraph (21) that import duty rates can affect import duty revenue because the rates are used to classify goods and impose import duties; the higher the tariff, the greater the burden.[9] There is also an increase in import duties. This is because import duty rates and import values are multiplied to determine the import duty rates. Import duty rates can be calculated based on the average effective rate, which is the average of the tariff imposition on all imported goods over a certain period, which is the result of dividing the import duty by the product of the import value and the exchange rate.

### 2.2 Import Volume

Import volume refers to the overall import transactions of goods entering the country directly, which directly affects import duty revenue. Import volume in this study uses the weight of an imported item in metric tons. According to the Republic of Indonesia Law Number 17 of 2006, Article 26 Paragraph 1 Letter G, import volume will determine whether import duties are paid or not. Because a decrease in import volume will also result in a decrease in the amount of import duty collected. On the other hand, an increase in import volume will prompt an expansion in import obligation income. The amount of imported merchandise significantly affects import obligation income, as shown by past examination by Bimantoro, which showed that an expansion in the amount of imported products additionally prompts an increment in import duty revenue, and vice versa.

### 2.3 Import Value

Import value is the basic value used in calculating import duties, including money plus other charges imposed by the country based on the provisions of the regulations. In this study, import value is based on the transaction amount stated in the purchase documents (invoice) in US Dollars. According to Law Number 42 of 2009 Article 20

Paragraph 1, import value serves as the basis for determining import tariffs and other levies according to applicable regulations. Therefore, import value will affect how import duties are calculated, which in turn can affect the amount of import duties paid. This is supported by previous research by Bimantoro, which showed that import duty revenue is positively and significantly influenced by customs value. In other words, when the import value increases, import duty revenue also increases, and vice versa.

### 2.4 Receipt of Import Duty

Sinaga expressed that import obligation income, which is one method for surveying the adequacy of the Directorate General of Customs and Extract, is state cash that comes from charges on imported merchandise entering Indonesia.[10] The primary responsibility of the government organization called the Directorate General of Customs and Excise is to collect state revenue related to customs and excise, which includes import duties, export duties, excise duties, and taxes related to imports.

According to Nurhidayati & Cahyani, import duty revenue is the total payment received from the imposition of import duties on imported goods over a certain period.[11] Therefore, good import duty revenue will drive the national development process. Examining it based on Law Number 17 of (2006), the factors that can influence revenue in import duties are import duty rates, exchange rates, import volume, import value, free trade, and the average price of imported goods.

## 3 Method

The study was conducted to determine the impact of trade liberalization represented by import duty rates on state revenue from the import customs sector, which consists of import duty revenue and tax revenue in the context of imports (PDRI). Additionally, this research also aims to ascertain the contribution of customs revenue to tax revenue.

The research design employed a quantitative method, namely:

a. To address the issue of the impact of trade liberalization on the performance of import customs revenue, a time series regression model was used with the assistance of SPSS software.
b. To address the issue of the contribution of customs revenue to tax revenue, a quantitative method using the mid-value contribution test (proportion) was employed with the assistance of SPSS software.

The quantitative method utilized secondary data from the years 2018 to 2022. The variables used in this study consist of independent (explanatory) variables and dependent (response) variables.[12] Receipt of import duties and taxes in the context of imports is determined as the dependent variable while the independent variable consists of 3 (three) variables, namely import duty rates, import volume, and import value.

# 4 Result and Discussion

## 4.1 Classical Assumption Test

### 4.1.1 Normality Test

The test utilized in this review is the ordinariness test with the factual test One-sample Kolmogorov-Smirnov Test with dynamic premise as follows:

- In the event that the importance esteem > 0.05, in the relapse model, the remaining information is typically appropriated.
- If the value of VIF > 10.00, then it indicates multicollinearity symptoms in the regression model. b. Conversely, if the significance value ≤ 0.05, then the residual data is not normally distributed.

**Table 1.** One-sample Kolmogorov-Smirnov Test Result

**One-Sample Kolmogorov-Smirnov Test**

| | | Unstandardized Residual |
|---|---|---|
| N | | 81 |
| Normal Parameters[a,b] | Mean | .0000000 |
| | Std. Deviation | .68469847 |
| Most Extreme Differences | Absolute | .117 |
| | Positive | .100 |
| | Negative | -.117 |
| Test Statistic | | .117 |
| Asymp. Sig. (2-tailed) | | .098[c] |

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Source: Output SPSS 29.0

In view of the outcomes over, the consequence of the One-Example Kolmogorov-Smirnov Test for ordinariness with an importance worth of Asymp. Sig. (2-followed) is 0.098, which is more prominent than 0.05. Hence, in light of the dynamic in the ordinariness test utilizing the One-Example Kolmogorov-Smirnov Test, it very well may be presumed that the lingering information is regularly appropriated. Hence, the suspicion of ordinariness in the relapse model is satisfied.

### 4.1.2 Multicollinearities Test

In this study, the multicollinearity test is conducted by examining the values of tolerance and Variance Inflation Factor (VIF). The decision-making basis according to the tolerance value is as follows:

- If the tolerance value $> 0.10$, it indicates that there is no multicollinearity in the regression model.
- If the tolerance value $< 0.10$, it indicates that there is multicollinearity in the regression model.

The decision-making basis according to the VIF value is:

- Assuming the VIF esteem $< 10.00$, it demonstrates that there is no multicollinearity in the relapse model.
- Assuming the VIF esteem $> 10.00$, it demonstrates that there is multicollinearity in the relapse model.

**Table 2.** Multicollinearity Test Result

**Coefficients**[a]

| Model | | Unstandardized Coefficients | | Standardized Coefficients | Collinearity Statistics | |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | Tolerance | VIF |
| 1 | (Constant) | 2.178 | .973 | | | |
| | Import Duty Rates | .232 | .098 | .288 | .346 | 2.889 |
| | Import Volume | -1.147 | .222 | -1.370 | .174 | 3.474 |
| | Import Value | .996 | .187 | 1.665 | .153 | 8.698 |

a. Dependent Variable: Receipt of Import Duty

Source: Output SPSS 29.0

In view of the SPSS yield results over, the consequences of the multicollinearity test were gotten with resilience values for all free factors more noteworthy than 0.10 and VIF values for all autonomous factors less than 10.00.

Thus, in light of dynamic in the multicollinearity test, it tends to be presumed that in the relapse model, there are no side effects of multicollinearity.

### 4.1.3 Heteroscedasticity Test

The heteroskedasticity test examines whether varieties in the residuals' change between various perceptions exist inside the relapse model. Homoskedasticity characterizes a situation where the residuals' variances remain consistent across observations, while heteroskedasticity denotes variance discrepancies or the presence of heteroskedasticity.

Analyzing the heteroskedasticity assumption entails employing the Glejser test method. This test involves regressing independent variables against the absolute values of residuals. A significance value exceeding 0.05 between independent variables and absolute residuals suggests the absence of either homoskedasticity or heteroskedasticity.

**Table 3.** Heteroscedasticity Test Result

**Coefficients**[a]

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 1 | (Constant) | 2.329 | .719 | | 3.239 | .002 |
| | Import Duty Rates | .101 | .133 | .951 | 1.982 | .041 |
| | Import Volume | .314 | .164 | 1.987 | 3.305 | .026 |
| | Import Value | -.294 | .138 | -.983 | -2.128 | .037 |

a. Dependent Variable: Abs_RES

## 4.2 Multiple Regression Analysis

The results of multiple linear regression analysis can be seen in the following table:

**Table 4.** Multiple Linear Regression Analysis Result

**Coefficients[a]**

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 1 | (Constant) | 2.178 | .973 | | 2.239 | .028 |
| | Import Duty Rates | .232 | .098 | .288 | 2.352 | .021 |
| | Import Volume | 1.147 | .222 | 1.370 | 5.173 | .000 |
| | Import Value | .996 | .187 | 1.665 | 5.336 | .000 |

a. Dependent Variable: Receipt of Import Duty

The results of the t-test on import duty revenue indicate that:

1) From the table above, it can be observed that the import duty rate is sufficiently evident to declare its significant influence on import duty revenue, with a positive coefficient value (0.288) consistent with the expected positive sign (+). The import duty rate directly represents the implementation of trade liberalization. A decrease in the import duty rate will therefore reduce import duty revenue. Hence, the expected sign of the coefficient of the import duty rate on import duty revenue is positive (+).
2) From the table above, it is clear that import volume has a positive coefficient worth of 1.370 and an importance worth of 0.000. Consequently, it very well may be presumed that import volume fundamentally affects expanding public import obligation income.
3) Sufficient evidence indicates that import value significantly affects import duty revenue, with a positive coefficient value (0.1665) consistent with the expected positive sign (+). Trade liberalization will increase import value, thereby enhancing import duty revenue. Consequently, the coefficient of import value on import duty revenue is positive (+).

Based on the quantitative analysis above, the significant impact of trade liberalization represented by the import duty rate on import duty and tax revenue is positive (+). This implies that a reduction in the import duty rate will result in a decrease in import duty and tax revenue because the basis for calculating import duties and taxes decreases. However, the current situation is represented by the square of the import duty rate, which significantly affects import duty and tax revenue and has a negative value (-), indicating that a reduction in the import duty rate still leads to an increase in import duty and tax revenue. Therefore, the impact of trade liberalization on the performance of the Directorate General of Customs and Excise (DJBC) in import duty revenue will improve DJBC's performance as it can increase import duty revenue (import duty and tax revenue).

## 5 Conclusion

The performance of customs and excise revenue conducted by DJBC contributes around 30% to 35% to the total taxation and significantly contributes to tax revenue. Meanwhile, the contribution of customs revenue to tax revenue is around 20% to 25% and significantly contributes to tax revenue.

At the Traditions and Extract Oversight and Administration Office, import duty rates have a significant and positive impact on import duty revenue. This can be interpreted as import duty revenue increasing with an increase in import duty rates, and vice versa.

At the Customs and Excise Supervision and Service Office, import volume has a significant and positive influence on import duty revenue. This implies that import duty revenue decreases with an increase in import volume, and vice versa.

There is a positive and significant impact of import value on import duty revenue at the Customs and Excise Supervision and Service Office. This suggests that when import value increases, import duty revenue also increases.

There is a significant impact of import duty rates, import volume, and import value on import duty revenue at the Customs and Excise Supervision and Service Office simultaneously.

## References


[1] D. E. Y. Bernardin, "Pendapatan Asli Daerah (PAD) melalui Kontribusi Pajak Kendaraan Bermotor (PKB)," *Jurnal Ekspansi*, vol. 9, no. 1, 2017.

[2] S. Nurdin and D. Riana, "Analisis Perbandingan Penerimaan PKB Sebelum dan Sesudah Penerapan Tarif Progresif dan Pengaruhnya Terhadap Penerimaan BBNKB (Studi Pada Kantor Cabang Pelayanan Dispenda Provinsi Wilayah Kota Bandung II Kawaluyaan)," *Ecodemica*, vol. 1, no. 2, Sep. 2013.

[3] J. Ratnawati and R. I. Hernawati, *Dasar-Dasar Perpajakan*. Ypgyakarta: Deepublish , 2015.

[4] Abd. Rachim, *Ekonomi Pembangunan*. Yogyakarta: Penerbit Andi.

[5] D. Mulyanti and A. Bagianto, "Analisis Penerapan Metode Activity Based Costing Terhadap Tarif Rawat Inap Pada Rumah Sakit Umum Kasih Bunda," *Jurnal Ecodemica : Jurnal Ekonomi Manajemen dan Bisnis*, 2013.

[6] H. B. Sasono, *Manajemen Pelabuhan & Realisasi Ekspor Impor*. Yogyakarta: Andi, 2012.

[7] A. S. Purwana, *Penagihan Pajak Dengan Surat Paksa Di Bidang Kepabeanan dan Cukai*. Ponorogo: Uwais Inspirasi Indonesia, 2019.

[8] F. S. Nongsina and Hutabarat Pos M, "Pengaruh Kebijakan Liberalisasi Perdagangan terhadap Laju Pertumbuhan Ekspor-Impor Indonesia," Jakarta, Dec. 2007.

[9] *Undang-Undang Republik Indonesia Nomor 17 Tahun 2006 Tentang Perubahan Atas Undang-Undang Nomor 10 Tahun 1995 Tentang Kepabeanan*.

[10] M. Sinaga, “Analisis Pengaruh Tarif Bea Masuk, Kurs, Nilai Impor Dan Volume Impor Terhadap Penerimaan Bea Masuk Di Indonesia Dengan Free Trade Agreement (FTA) Sebagai Variabel Moderating,” Universitas Sumatera Utara, 2017.
[11] Nurhidayati and P. Cahyani, “Pengaruh Kebijakan Penurunan Jalur Merah terhadap Penerimaan Negara,” *Jurnal Ekonomi dan Pembangunan Indonesia*, vol. 20, no. 1, pp. 79–93, Jan. 2020, doi: 10.21002/jepi.2020.05.
[12] Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: CV. Alfa Beta, 2010.