

Analysis of Production Value Relationship & GDP of Destination Countries with Indonesian CBU Car Exports

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Abstract

This study aims to determine the analysis of Indonesia's CBU car export trends in 2021-2025, to determine the relationship between the production value and exports of CBU cars, and to determine the relationship between the GDP value of the destination country and the export of Indonesian CBU cars. The method used is trend analysis and correlation analysis. The results of this study indicate that the trend of CBU car exports has increased in 2021-2025, there is a strong correlation between the production value and exports of Indonesian CBU cars, and a very strong correlation between the GDP value of the destination country and the export of Indonesian CBU cars.

Keywords: CBU car exports, Trend, Correlation.

1. Introduction

The automotive industry is one of the oldest manufacturing activities in Indonesia, since the establishment of General Motors in 1928 (GM) [1]. The definition of a CBU car is a car that is complete and complete that is ready for use. The Indonesian government also supports CBU car export activities by simplifying export regulations to exporters. Of the 80 destination countries for Indonesia's CBU car exports, the Philippines is the country with the most imports of CBU cars in the last 5 years. Philippines, has its own reasons related to the very high import of vehicles from Indonesia, namely prices that are still competitive when compared to those who assemble themselves. Because the investment cost to assemble yourself in the Philippines is more expensive than imported directly from Indonesia [2].

The total production amount from 2015-2019 tends to increase, as well as the total export volume of CBU cars which increases every year. However, in 2020, as a result of this pandemic, CBU car production decreased from January to July. The trend of Philippine imports towards Indonesian CBU cars is followed by the development of the Philippine GDP which continues to increase every year from 2015 to 2019 [3].

The existence of CBU cars made by Indonesia is a branch company established by the original company, for example Toyota Japan. The opening of branches in Indonesia has gone through the process of a legal agreement between MNC companies and Indonesia, such as Law No.1 of 1967 concerning Foreign Investment which is a statutory provision that supports the establishment of multinational companies in Indonesia [4]. The existence of multinational companies as a driver of globalization has changed the viewpoint of developing countries, the transformation of ideology has influenced an important change in the political and economic outlook of developing countries [5].

2. Literature Review

Dunning, J., & Lundan [6]

Shows that multinational companies invest in an effort to maximize the benefits of joint ownership of various business activities and capabilities, as well as from the same business activities and capabilities that exist in various economic and potential environments.

Helpman., & Krugman [7]

Shows that the linkage between the industrial sector and intra-industrial trade can be seen in the product differentiation and economies of scale which create differences in market structures in each country. The market structure is formed from differences in tastes, causing a demand cluster in the country.

3. Problem Formulation

The hypothesis of this project is:

- i. It is suspected that Indonesia's CBU car exports will have an increasing trend over the next 5 years (2021-2025)
- ii. It is suspected that the export production value of CBU cars has a moderate correlation with the export volume of Indonesian CBU cars.
- iii. It is suspected that the GDP of the CBU car export destination countries has a strong correlation with the export volume of Indonesia's CBU cars.

4. Research Methodology

- Yearly secondary data on Export CBU, Production Value, and GDP Philippines
- Analysis Trend use Least Square Method
- Analysis Correlation use Karl Pearson or product moment

5. Analysis Result

Trend equation ie $209,374.1 + 21,374.26x$. This means that the coefficient analysis of the trend analysis of Indonesian CBU car export transactions is 21,374.26 and is positive, indicating that if the increase in car exports is 1, CBU car export transactions will increase by 21,374 units. Based on these calculations it can be predicted that in 2021 the number of Indonesian CBU car exports will reach 337,619 units, then in 2022 it will increase by 358,993 units, 2023 to reach 380,368 units, 2024 to reach 401,742 units and in 2025 the estimated number of transactions will reach 423,117 units. This means that Indonesia's CBU car exports have an increasing trend in the next 5 years.

The results show that the production value with Indonesian CBU car exports has a strong and positive correlation, which is shown by the coefficient of 0.77, which means that the production value has a strong and positive correlation to Indonesia's CBU car exports. This shows that the production value has a relationship in Indonesia's CBU car exports. In terms of Indonesia's CBU car exports, it can be seen that in 2011 to 2015, the number of exports increased and decreased in 2016, then increased again until 2019.

The results show that the value of GDP with Indonesia's CBU car exports has a very strong correlation, which is indicated by the result of 0.93, which means that the value of GDP has a very strong and positive correlation with Indonesia's CBU car exports. This shows that the value of GDP has a relationship in Indonesia's CBU car exports. The GDP value of the Philippines is one of the indicators in Indonesia's CBU car exports which can be seen from the fluctuating GDP value. The relationship between car sales and economic growth, namely GDP growth (gross domestic product) boosts people's purchasing power, while consumer confidence is strong, people want to buy a car. Because GDP here shows the size of the importer country market.

6. Conclusion

Based on the results of the trend analysis, the export of Indonesian CBU cars to the main destination countries shows a positive trend, meaning that the export volume of Indonesian CBU cars will increase from year to year over a period of 5 years. The results of these two correlations show a strong and even very strong relationship because the Philippines as an export destination country has a very wide market, so it is able to absorb Indonesian CBU cars every year. The relationship between car sales and economic growth, namely GDP growth boosts people's purchasing power, while consumer confidence is strong, people want to buy cars, because GDP here shows the size of the importing country's market.

7. References

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