CHAPTER V. CONCLUSIONS AND IMPLICATIONS

A. Conclusion

This study aims to analyze the influence of international CPO prices, CPO production, Chinese GDP, and price of substitute goods on the volume of Indonesia's CPO exports to China in the period 1993–2023 using a multiple linear regression approach. Based on the results of the data analysis that has been discussed in Chapter IV, the following conclusions are obtained:

- 1. International CPO prices have proven to have no significant effect on the volume of Indonesian CPO exports to China. These findings indicate that global price mechanisms are not the main determinant in the formation of CPO export volumes. China's demand for CPO is relatively unflexible due to its essential use in various industrial sectors. In addition, the existence of a long-term trade scheme, the stability of industrial needs, and the strategy of diversification of energy and food resources in China cause international price fluctuations to not result in significant changes in import volumes.
- 2. Indonesia's CPO production has a positive and significant effect on export volume. This shows that the higher the national production capacity, the greater Indonesia's ability to meet the demand of the export market,

including China. The abundant availability of supply allows for increased exports, and this is in line with supply theory in international trade. Increased production from the plantation and processing industries sectors is the main driver of the increase in export volume.

- 3. China's GDP has a positive and significant effect on Indonesia's CPO export volume. China's growing economy reflects the increasing demand for industrial raw materials, including vegetable oils such as CPO. The growth of the food, oleochemical, and vegetable energy industries strengthens China's dependence on CPO imports, so that as GDP increases, import demand also increases. This is in accordance with the theory of international trade that the economic development of the destination country is an important determinant of import demand.
- 4. The price of sunflower seed oil as a substitute has no effect on the volume of Indonesian CPO exports to China. This is because sunflower seed oil cannot completely replace the function of CPO in many sectors of China's industry. The industry considers technical characteristics, supply stability, and long-term needs more than the price difference between vegetable oils. Thus, even though sunflower oil is a substitution, the price change is not strong enough to shift the demand for CPO imports.

B. Implications

The implications of this study can be a recommendation to find out what are the factors that affect the volume of Indonesia's exports to China and how to increase the number of Indonesia's exports to destination countries based on the following implications:

a. CPO production has a significant positive effect on the volume of Indonesia's exports to China. Efforts to increase domestic Crude Palm Oil (CPO) production can be carried out through an integrated strategy from upstream to downstream. Increasing land productivity is the main step, for example by using high-yielding superior seeds, the application of modern agricultural technology, efficient irrigation systems, and fertilization according to plant needs. The replanting program of old oil palm plantations is also important so that the potential yield can return to optimal. In addition, the development of supporting infrastructure such as production roads, storage facilities, and logistics transportation needs to be strengthened to facilitate the process of distributing crops to processing plants. On the other hand, increasing the capacity of human resources (HR) through training farmers on sustainable cultivation techniques and effective plantation management can improve production efficiency. The government also has an important role through policies and financing support, such as providing fertilizer subsidies, easy access to credit, and incentives for investors in the plantation sector. No less

important, research and innovation in the field of palm oil need to continue to be developed through cooperation between research institutions and universities, for example in biotechnology, processing process efficiency, and waste management into renewable energy. With these strategic steps, Indonesia can maintain its position as the world's largest CPO producer while strengthening the national economic resilience based on these superior commodities.

b. China's GDP is variable that has a significant effect on the volume of Indonesia's exports to China. Increasing the volume of Indonesia's exports to China can be done by taking advantage of the country's economic growth which is reflected in the increase in Gross Domestic Product (GDP). The higher China's GDP, the greater its purchasing power and industrial needs for raw materials such as palm oil (CPO) and its derivative products. For this reason, Indonesia needs to strengthen market access through closer trade cooperation, targeted export promotion, and the development of value-added products to be able to compete in the Chinese market. Efforts to improve quality, international standard certification, and efficiency of logistics lines are also important to strengthen Indonesia's position as a strategic trading partner. In addition, economic diplomacy and bilateral agreements that reduce tariff barriers can open up wider export opportunities. With these measures, Indonesia has the potential to increase exports to China in a sustainable manner in line with economic growth and increased demand in the country.

C. Research Limitations

This research has limitations that need to be considered. namely there are diversity in data recording and calculation methods between sources such as the World Bank, the Central Statistics Agency (BPS), Directorate General of Plantations (Ditjenbun), ETC. These diversity can include aspects such as base years, units of measurement, and data publication times that are not always in sync. This has the potential to cause inconsistencies in the interpretation of the analysis results, especially in measuring economic variables such as international prices, export volumes, and total production. Thus, the results of this study should be seen as an indicative overview, not a universal conclusion for all export destination conditions and countries.