ABSTRACT

AMBAR KURNIAWAN. Linkage Analysis of Vegetable Oils and Crude Oil Prices in Vegetable Oils World Trade (BONAR M. SINAGA as Chairman and NUNUNG KUSNADI as Member of the Advisory Committee).

The increasing as non-food uses of vegetable oils especially as biodiesel and the basis of the oleochemical industry, making the formation of vegetable oil prices in world trade has been linked to world prices of crude oil in addition to linkages with the world price of vegetable oils competitor. The objectives of this study were (1) to analyze the linkage of the world price of crude oil and vegetable oil simultaneously, (2) to make the forecasting of the real price of crude oil and vegetable oil in world market, the vegetable oil real price in domestic market and the performance of Indonesian palm oil industry, particularly the production, domestic supply, domestic consumption and export volumes of Indonesian palm oil for the period 2012-2025, (3) to examine the impact of the changes of the external factors and trade policy by the vegetable oil’s exporting countries and importing countries on the world trade of vegetable oils, and particularly the production, domestic supply, domestic consumption and exports volumes of Indonesian palm oil and (4) to formulate the policy for development of the Indonesian oil palm industry in the future. The study employs an econometric model and specification was dynamic simultaneous equations and consists of 81 behavioral equations and 16 identities equations. Parameters are estimated using two Stage Least Squares methods for the period 1980-2008. This study finds that real price projections in the world market of 2012-2025 periods showed that the price fluctuations of crude oil and vegetable oil tend to have same patterns with slightly trend to increases. Although positively correlated, the percentage increase of vegetable oils price as the effect of the increasing of crude oil price is less than the percentage change of crude oil prices, except for soybean oil prices that varies with the percentage change of crude oil prices. The effect on percentage change of price of soybean oils is the highest and then followed by sunflower oil, rapeseed oil and palm oil. Beside the chemical characteristics, this condition thought to be related to the limited volumes of vegetable oils world’s productions and the food sector needs as a main constraints in the use of vegetable oils as crude oil substitutes. As annual crop commodities and the substitutes of seed oils, however, palm oil price has more responsive to export fluctuation then seed oils. Base on this study, in order to support the Indonesian oil palm industry, the Indonesian government has been suggested (1) to develop the domestic market, (2) to ensure the exchange rate stability and the palm oils trade policy and (3) to arrange the grand design of Indonesian oil palm industry for the long run term.

Keywords: prices formation, world trade, vegetable oil, crude oil.