

ABSTRACT

Indonesia is the largest palm oil exporter in the world so that the rise and fall of the return of palm oil prices in international markets will affect farmers' incomes and exporter of palm oil in Indonesia. This study is aimed to analyze the factors that affect the return volatility of crude palm oil prices in international market. Observation period from July 1985 until May 2010. Variables used in this analysis to influence the return of palm oil prices are the return of petroleum oil prices, the harvest of soybean in the United States that occurred in October / November, and harvest the palm oil that occurred in July / August.

Analysis model used in this study is autoregressive model (AR) which is processed by using Exponential Generalized autoregressive conditional Heteroskedastic (EGARCH). The advantages of this model is able to determine whether there is in addition to time varying behavior volatility, leverage effect is also contained in the data return of the international palm oil prices.

The results showed that petroleum prices return has positive and significant impact on crude palm oil prices return. Soybean harvest will increase average crude palm oil prices return. Harvest of palm oil does not impact on average crude palm oil prices return. Return of palm oil prices a month earlier, three months before and four months before gives psychological effect on increasing of crude palm oil prices return. But return of palm oil prices two months give psychological effect on decreasing of crude palm oil prices return. The variance equation show the existence of time varying volatility in this model, but it did not happen leverage effect. Petroleum price return affect the return volatility of crude palm oil prices. While the harvest of palm oil and soybean harvest has no effect the return volatility of crude palm oil prices.

Keywords: Agriculture, Volatility, CPO, the price return, AR (m)-EGARCH (p, q)