A time series analysis of the relationship between total area planted, palm oil price and production of Malaysian palm oil

ABSTRACT

Malaysia is a very well-known country in the oils and fats sector especially palm oil because it is the world's biggest producer and exporter of the commodity. This study was conducted to analyze the relationship between total area planted and palm oil price with production of palm oil in terms of magnitude and direction using the time series analysis method. Johansen cointegration technique, error correction model and Granger causality tests were used to estimate those relationships. The findings showed that the total area planted and palm oil price have negative relationship towards production of Malaysian palm oil. On the other hand, there is no causality relationship between total area planted and production of Malaysian palm oil in the short run. However, there is a unidirectional causality relationship between palm oil price and production of palm oil in Malaysia. For future recommendation, it is suggested that other researchers will supplement this research by integrating other factors that might affect the production of palm oil such as climate change and geographical area.

Keyword: Total area planted; Palm oil price; Production of palm oil; Time series analysis; STATA