A model for the palm oil market in Nigeria: an econometrics approach

ABSTRACT

The aim of this study is to formulate and estimate a model for the palm oil market in Nigeria with a view to identifying principal factors that shape the Nigerian palm oil industry. Four structural equation models comprising palm oil production, import demand, domestic demand and producer price have been estimated using the autoregressive distributed lag (ARDL) cointegration approach over the 1970 to 2011 period. The results reveal that significant factors that influence the Nigerian palm oil industry include the own price, technological improvements, and income level. Government expenditure on agricultural development is also an important determinant, which underscores the need for government support in agriculture. Our model provides a useful framework for analyzing the effects of changes in major exogenous variables such as income or import tariff on the production, demand, and price of palm oil.

Keyword: Palm oil; Production; Demand; Cointegration; Error-correction model; Speed of adjustment