CENTRO DE ECONOMÍA APLICADA

Abstract

In this paper we estimate a dominant firm model on crude oil data for the period 1986-2009. In the model, OPEC sets the price as a markup of its residual demand over marginal cost, implying a nonlinear (in logs) price response function. In the estimation all structural parameters are estimated with the right expected sign and are significative. Our estimates suggest that OPEC exerts market power in the sample period. We show that a competitive model leads to a specification bias. Hence, we conjecture that nonlinearity induced by OPEC's dominant position is an important factor when modelling oil prices. Our counterfactual experiments suggest that income is the main driver of long-run oil prices. Supply (depletion) factors have become more important the last five years.