



A Markov Regime Switching Approach for Estimating Commodity Prices Changes with Location of the Change-Points

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The rapid changes in commodity prices lead to remarkable consequences for many developing countries whose revenues strongly rest on exporting these products. For the purpose of forecasting prices against supply shocks, knowledge of their estimate is needed. Monthly data on commodity prices over the period 1989-2013 are used. We use a Markov switching model introduced by Hamilton (1989) to analyze the prices changes and to locate the change-points. The results show existence of two regimes for commodity prices estimated, with a persistence of the regime one in three commodities. The probability of being in regime 1 varies from 0.68 to 0.98 and the duration of all regime goes from 1 to 53 months. In addition, the change-points depend on the type of commodities. The Markov Switching Model provided very interesting results for the countries that export these commodities. In each date, it is possible to predict in the next date, the most likely regime. These results will allow countries to take appropriate measures and reduce the adverse effects associated with a gross fall of prices in the economy. In the context of commodity volatility prices, it is important that public policies use good techniques to forecast and analyze the prices.

Keywords: commodity prices; Markov switching model.