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The Impact of Globally Fluctuating Food Prices on the Bolivian Price Level: Market Integration Analysis against the Background of the Food Crisis 2007/08

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Abstract

In the face of the food crisis 2007/08, the impact of globally fluctuating food prices on the Bolivian price level is examined via cointegration/error correction modelling techniques. The analysis focuses on the Bolivian wholesale prices of wheat flour imported from Argentina, ex-factory prices for sunflower oil/soy extraction cake (from Santa Cruz, Bolivia) and the corresponding international reference prices. Results from the Johansen Trace-tests reveal a strong comovement between the national prices and Argentinean export prices. The long-run price transmission elasticities obtained from vector error correction models (VECM) and Granger-causality tests confirm that shocks in the Argentinean markets are transmitted fully to the Bolivian price level. Despite of massive policy interventions in the wheat and edible oil sector on behalf of the new socialist Bolivian government during the food crisis, the common long-term equilibrium between the national and Argentinean price series persists. Given the results from price transmission analysis and the fact that only 20 to 30 % of Bolivia's soy and sunflower oil production is consumed domestically, a temporary export-ban in March/April 2008 seems to be an inappropriate trade intervention. Tariff-liberalisations, export-bans and state-imports in the Bolivian market of wheat/wheat flour have had little influence on the transmission of price signals from Argentina. Bolivia imports 60 to 70 % of its national wheat consumption, about 95 % of all wheat/wheat flour imports are from Argentina. Spatial distance also plays a role in the transmission of positive price shocks: in case of wheat flour those Bolivian wholesale markets with the largest distance to the Argentinean border are worse off.

Keywords: Bolivia, cointegration, error correction models, food crisis, price transmission

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