

# Exploring Asymmetries in the Effects of El Niño-Southern Oscillation on U.S. Food and Agricultural Stock Returns

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## Abstract

State-dependent local projection (Jorda, 2005) methods have become the state-of-the-art technique for investigating asymmetric or nonlinear responses to economic (and other) shocks. We apply this methodology to examine whether El Niño-Southern Oscillation (ENSO) has asymmetric impacts on U.S. food and agricultural stock returns. Using weekly data from 1990:01 to 2019:04, we find support for the hypothesis that food and agricultural stock returns respond asymmetrically to ENSO shocks. In particular, we provide evidence that El Niño shocks typically decrease or have no effects on U.S. food and agricultural stock returns, whereas La Niña shocks generally increase returns. The analysis, thus, emphasizes the need to consider asymmetries in the impacts of ENSO, as failure to do so might result in misleading conclusions about the effect of ENSO on U.S. food and agricultural stock returns.

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