

Design *quasi-futures contracts****Omid khodaverdi***^{*}***Mohsen Mehrara***^{**}***Majid rezaee***^{***}***seyed ziaediin kiaalhoseini***^{****}

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Abstract

The present study aims to provide a model for covering price risks in Iranian importers of agricultural commodities, which may help prevent adverse effects of price fluctuations. The proposed model uses futures-like contracts for agricultural commodity imports. In order to assess the efficiency of the model, daily spot and futures prices of soybeans and corn were collected from the Chicago Mercantile Exchange (CME) during the period 05/01/2010 to 06/08/2018. The data were analyzed for two situations as follows: 1- Futures contracts can be traded. 2- Futures contracts cannot be traded. The method of the optimal risk coverage ratio bears crucial importance in these two situations. In the first case, using the Markov switching method, the optimal risk coverage ratio for corn was shown to be 0.966572 and 0.0051858 in the zero and one regimes, respectively. The ratio for soybeans was computed to be 0.977403 and 0.019816 in the zero and one regimes, respectively. it may not cover risks in this situation for Iranian importers due to a lack of futures market. Thus, real-world risk coverage should be obtained through using futures-like contracts. Using this strategy, optimal risk coverage ratio for soybeans and corn would be 0.849 and 0.9065, respectively, while the efficiency of risk coverage for them would be 82% and 78%, respectively.

Keywords: The optimal hedge ratio, Spot exchange rate, futures market, Markov switching model.

Jet Classification: *G13, G14, G17, C32*

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