

ABSTRACT

Since January 9, 2008, China gold futures contract has been listed on the Shanghai Futures Exchange. Now China's gold futures market has been developing for ten years. The purpose of this paper is to explore whether the Chinese gold futures market has the price discovery function. In this paper, the Unit Root test, Cointegration test, Vector Error Correction Model (VECM) test, Granger Causality test and Impulse Response Function are used to examine the lead-lag relationship between gold spot price and gold futures price. This paper selects the data for the period of January 9, 2008 to January 9, 2018. The daily gold futures price used in this research is the daily settlement price of the gold futures continuous contract. Daily spot price is the daily closing price of Au99.95. Au99.95 is the contract of the Shanghai Gold Exchange.

The Unit Root test shows that gold spot and futures prices are stationary at first order difference. Cointegration test reports a long-term equilibrium relationship between gold spot prices and gold futures prices. The short-term dynamic relationship between the gold futures price and the spot price is proved by the VECM test. The results of the Granger Causality test and the Impulse Response Function show that the gold spot price leads the gold futures price, but not vice versa. The conclusion of this paper is that China's gold futures market does not have price discovery function.

The findings of this paper are beneficial to producers, operators and investors involved in gold trading. Gold producers and operators can design their hedging strategies through the results of this paper to make more scientific production and management decisions. For investors, due to the existence of global economic uncertainty, whether as a commodity or money, gold has shown excellent investment value. Investors can use the conclusion of this paper as a reference to develop corresponding trading strategies.