

Analysis of Commodity Hedging Risk in the Futures Market - A Case Study of Tsingshan Nickel Incident

Lingling Wu*

School of Economics and Management, China University of Petroleum (North East), Qingdao, China

Email address:

591748825@qq.com (Lingling Wu)

*Corresponding author

Abstract

With the rapid development of the global new energy automobile industry, the demand for nickel from various countries continues to increase, and the overall global inventory of nickel has shown a downward trend. The tension between Russia and Ukraine escalated in 2022, causing greater concerns about the supply of nickel products in the market. In early 2022, nickel prices began to rise significantly. In February, it was reported by the media that Tsingshan, in order to ensure the stability of the price of its own future nickel output, had held 200,000 tons of nickel futures short contracts. In fact, Tsingshan's own nickel products do not meet the LME futures delivery standards. In the past, it could use Russian nickel products for futures delivery, but with the outbreak of the Russia-Ukraine war, the market speculated that Russian nickel products might be blocked from trading or removed from LME deliverable varieties. Coupled with factors such as Tsingshan holding excessively large short positions, the bulls believed that Tsingshan did not have enough spot goods for delivery in the short term, taking advantage of its financial strength to boost nickel futures prices. Meanwhile, when Tsingshan was forced to close out or transfer its short positions, it further pushed up prices, thus staging a round of skyrocketing market. This article focuses on the case of Tsingshan Nickel Incident, studies the hedging trading risks of bulk commodities in the futures market, analyzes the differences between domestic and foreign futures markets. By using GARCH model and event study method, this article identifies and determine Tsingshan Nickel's intertemporal spot market manipulation behavior. The research results show that in the Tsingshan Nickel incident, the daily return sequences of LME nickel futures and nickel spot prices deviate from the normal fluctuation range, and the market prices show significant distortions, indicating the possibility of artificial price manipulation. The nickel futures-spot price sequence exhibits significantly positive cumulative abnormal returns, and the choice of estimation window does not affect the identification of manipulation behavior. It is important to pay attention to the impact of trading systems and the trend of bulk commodities on prices. The relevant authorities should vigorously develop and increase the scale of the domestic exchange market, strengthen the pricing power of nickel futures, and strengthen the hedging function of enterprises.

Keywords

Nickel, Futures Risk, Hedging Strategy, High-risk Financial Derivatives