

# ***An Even Analysis: The Nickel Short Squeeze by Tsingshan and Lessons for Enterprises***

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**Abstract:** The short squeeze by Tsingshan has arisen a heated discussion in financial markets. Market participants have learned again the risk of shorting. Here are details of the case. After nickel prices went up in 2022, Tsingshan expected that the nickel price would decrease in the future. In order to lock into the profits, Tsingshan sold 200,000 tons of electroless nickel futures at about 20,000 dollars / ton. Prices went up even more and Tsingshan got a huge margin bill that endangered the firm's existence. With the help of some government measures, Tsingshan managed to minimize its loss and survive the unprecedented crisis. The incident has come to an end. Tsingshan's debacle provides us with some important lessons for enterprises' risk management. This paper first introduces the process of the whole event. After that, it analyzes the incident that happened to Tsingshan. Finally, it reflects on the risks in the process of short squeeze by Tsingshan.

**Keywords:** Tsingshan, nickel, financial markets

## **1. Introduction**

### **1.1. An Overview of the Tsingshan Enterprise**

Tsingshan Holdings Group Co., Ltd. is a renowned company operating in the nickel industry. It runs a large nickel plant in the southeastern region of China. The company specializes in the production of nickel pig iron (NPI), a critical component in the manufacturing process of stainless steel. Tsingshan's main activities involve mining, processing, and smelting nickel. Overall, the company's business covers various stages of the nickel production chain, from mining nickel ore to refining it into nickel products that can be used in various industries.

In terms of the manufacturing process, Tsingshan first conducts operations to extract nickel ore from mines or open-pit mining sites. The company utilizes proprietary cutting-edge technology to efficiently extract the ore and ensure its quality. Then, the company processes the mined ore through various methods to extract nickel and separate it from other impurities. One of the primary processes

used by Tsingshan is the Rotary Kiln Electric Furnace (RKEF) process, which involves smelting the ore in an electric furnace to produce nickel pig iron (NPI) or ferronickel [1]. Tsingshan's expertise lies in refining the extracted nickel ore through the smelting process, producing nickel pig iron and ferronickel. These refined nickel products are widely used as important components in the production of stainless steel, batteries, and other applications that require high-quality nickel.

Co-founder and billionaire Xiang Guangda played a crucial role in Tsingshan's development. His close relationship with high-ranking Chinese officials played a vital role in navigating challenges and gaining support for the company. Tsingshan's success can be attributed to its strategic timing and diversification, expanding its operations into the nickel production sector and capitalizing on global demand for stainless steel.

Today, Tsingshan has become a well-known nickel supplier and has made significant investments in nickel mining projects, particularly in Indonesia, which is the world's second-largest nickel ore supplier. The company's business extends to other countries, including India, Zimbabwe, and the United States, through its production centers. Tsingshan has gained considerable attention due to recent developments in the nickel market. As one of the world's largest producers of nickel and stainless steel, Tsingshan has been actively involved in various aspects of the industry.

## 1.2. Description of the Incident

At the end of 2021 and the beginning of 2022, Xiang Guangda made a reckless move to acquire a significant number of short positions in the nickel market. This was driven by a dual purpose – hedging against potential risks and a belief that Tsingshan's substantial increase in production would lead to a decline in nickel prices.

According to Chinese journalists, Xiang Guangda knew that his strategy was flawed. The nickel of Tsingshan Holdings and the products used in LME settlement are inconsistent, so the contract is not a perfect hedging tool. Although an unidentified nickel stockist controlled at least half of LME's inventory, the journalists stated that Xiang Guangda still believed that the risk was controllable.

But then, the arrival of a geopolitical crisis caught him off guard. For several weeks, nickel prices have been rising due to concerns that supply to Russia, the largest exporter of refined nickel, may be disrupted by Russia's invasion of Ukraine.

Previously, many Chinese academics and businessmen did not believe that Russia would attack its neighbors. According to Xiang's familiars, Xiang Guangda himself was not interested in international news, neglecting the potential impact of geopolitical crisis on the market. This led to huge mistakes in Xiang Guangda's trade strategy decisions.

After that, nickel prices on the London Stock Exchange surged 250% in just over 24 hours. On Tuesday, LME suspended trading in the nickel market. One day later, the Shanghai Futures Exchange also suspended trading. Previously, the price of China's largest commodity exchange reached the maximum daily increase.

On the evening of March 8, Xiang Guangda faced an urgent situation as senior bankers swarmed into Tsingshan Group's headquarters. The purpose was to seek his response to the ongoing crisis. Bankers both present and connecting remotely from London and Singapore discussed the unfolding events with Xiang [2].

Xiang's earlier short positions involved multiple banks and brokers. The surge in nickel prices led to difficulties in meeting margin requirements, resulting in significant debt owed by Xiang to various institutions. The situation prompted intense negotiations with the banks involved [3].

In the midst of negotiations, Xiang's decision-making exhibited elements of control and confidence. He asserted Tsingshan's strength and resisted making concessions to the banks despite the challenging circumstances. This assertiveness showcased his authority within the situation.

As the situation gradually stabilized, Tsingshan and its cooperating banks reviewed their agreements periodically. Xiang closed his positions in multiple banks, and Tsingshan's focus shifted to future planning and expansion [4].

## 2. Analysis of the Incident

### 2.1. Change of Nickel Price

The incident has come to an end, but it shed light on some crucial factors behind the dramatic nickel price changes. The LME nickel closing prices graph is shown in figure 1.

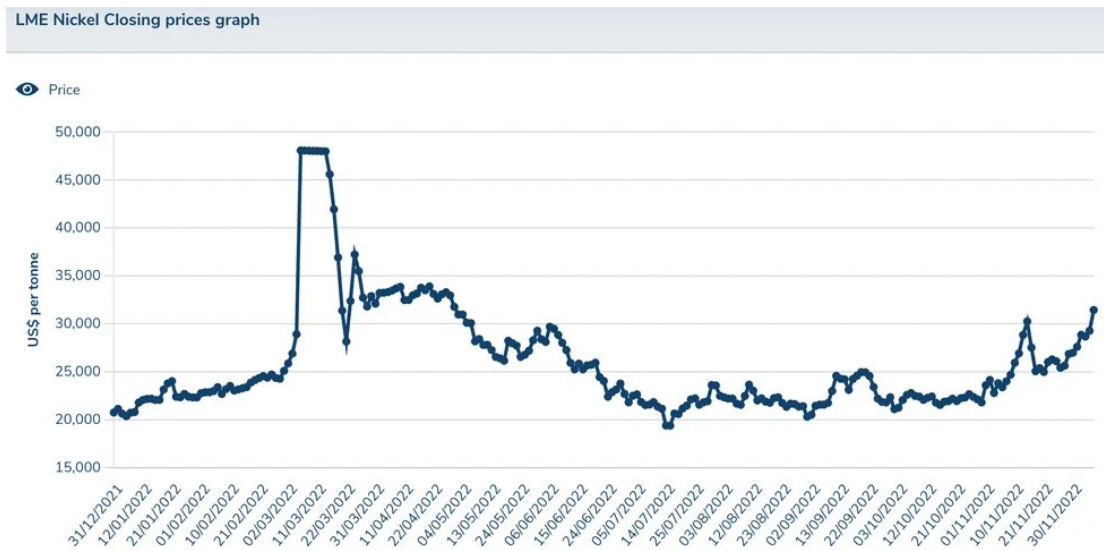


Figure 1: LME Nickel Closing Prices Graph [5]

First and foremost, supply and demand are the most important factor affecting nickel prices. When the supply of nickel exceeds the demand, the price decreases when the demand exceeds the supply. For example, if global electric car production increases and more nickel is needed to produce lithium-ion batteries, then increased demand could push up nickel prices.

Although the geopolitical risks of Russia and Ukraine are the trigger for the abnormal fluctuations in nickel prices, the price surge has gone beyond the fundamentals. Policy changes and global issues can also affect prices.

As nickel is mainly produced in Indonesia, the Philippines, and other countries, policy changes in these countries have a direct impact on the nickel supply, and thus affect the price. For example, if the Indonesian government implemented an export restriction policy that limits exports of nickel mines, then the global supply of nickel could fall, and prices could rise [6].

In addition, global economic conditions and market investor sentiment will also affect nickel prices. For example, during the global economic boom, demand may increase and prices may rise. When market investors expect future demand higher, it could push prices higher.

Overall, the price of nickel is influenced by many complex factors so that it may fluctuate greatly. In this case, the government plays an important role in ensuring the survival of large enterprises by taking comprehensive measures.

### 2.2. Government Measures

The price fluctuations in nickel can put great pressure on the companies involved. To help enterprises, the government reduced the operating pressure of enterprises through financial subsidies. What's

more, the government promoted related technology research and development to improve the efficiency of nickel use and reduce the dependence on nickel. For example, the London Metal Exchange eventually intervened to suspend trading hours after nickel broke \$100,000 to avoid the negative impact of multiple margin defaults. It also canceled the multibillion-dollar multi-position trade, bringing the nickel price back to the previous day's close of \$48,078, a move that bought time for Tsingshan [7].

To reopen trading, the London Metal Exchange (LME) has proposed a solution in which Tsingshan has reached an agreement with those with long positions to close positions. However, this will require Tsingshan to accept billions of dollars, as the price required (about \$50,000) will be more than twice what Tsingshan had bought.

Tsingshan's company rejected the proposal and said the company would not close its position immediately. He insisted that Tsingshan is an excellent Chinese company, its position and management problems, will not shrink back in the face of malicious empty situation. So, Xiang Guangda made a personal guarantee. He promised that the Chinese government and the banks could drive him out if Tsingshan failed to pay its debts.

On March 14, 2023, Tsingshan reached an agreement with the banks. Banks agreed not to pursue Tsingshan's billions of dollars in deposit arrears for a period. Nickel then fluctuated around \$33,000 until falling below the \$30,000 mark in May. In the following weeks, Tsingshan reduced its short position to 60,000 tones from 150,000 tones in early March. Nickel prices fell further in June due to global recession fears, and by the end of June, Tsingshan completely withdrew from its short positions at JPMorgan and several other banks, leaving less than 20,000 tones [8].

### **3. Reflection on Nickel Short Squeeze by Tsingshan**

#### **3.1. Importance of Risk Management**

Risk management is the process of identifying, assessing and controlling threats to an organization's capital and earnings. A comprehensive risk management system help enterprises make informed decisions while facing uncertainty to keep risks under control. Risk management often contains three major steps: risk identification, risk assessment, and risk mitigation. In this case, Tsingshan's suffering is largely due to its negligence in the following risks. They are basic risk, delivery risk, and entering a market before fully knowing it [9,10].

#### **3.2. Analysis of Risks**

##### **3.2.1. Basis Risk and Delivery Risk**

The hedging by Tsingshan can be considered as a typical cross hedging. Cross hedging refers to the use of another commodity futures contract with a higher price correlation to hedge against a specific spot commodity without a futures contract for the same commodity [11]. The main products produced by Tsingshan are nickel iron (with a nickel content of about 10%) and high nickel matte (with a nickel content of about 70% or higher), which do not meet the delivery conditions of LME nickel futures contracts (with a nickel content of no less than 99.8%) [12].

Cross hedging can generate basis risk and delivery risk. Basis risk refers to the risk of deviation between spot prices and futures prices. The reasons for the deviation include a decrease in the correlation between futures and spot prices themselves, as well as the time difference between the settlement time of futures liquidation and the time of spot purchase and sale. Delivery risk refers to the risk of not being able to close a position in a timely manner before the expiration of a futures contract and assuming physical delivery responsibility, without sufficient physical delivery [13]. Under the same commodity category, there are often significant differences in indicators such as

grade and purity among different varieties of goods. Commodity varieties cannot be replaced by each other or have low price correlation. Therefore, compared to using financial derivatives for hedging transactions, using commodity derivatives for hedging is more prone to cross hedging, resulting in basis risk and delivery risk.

By reflecting on the course of the event, it can be seen that Tsingshan did not take sufficient measures in advance to address the basis risk and delivery risk generated by this trading strategy.

Firstly, the large short positions held by Tsingshan indicate that it may not have considered basis risk. When conducting cross hedging, the correlation between the price of the hedged commodity and the hedging instrument should be repeatedly tested, and based on this, the futures short position should be determined and dynamically adjusted according to changes in price correlation [14]. But so far, Tsingshan has not publicly stated how its heavy LME nickel short position was determined, or whether it has made any adjustments to its over position since the rise in nickel prices.

Secondly, Tsingshan did not prepare sufficient inventory for delivery before the expiration of its holdings of futures short contracts. In the process of shorting, it would face significant basis and delivery risks. In the absence of spot goods for delivery, Tsingshan can be forced to close its positions or make cash deliveries, only to bear the losses of futures trading. If Tsingshan can immediately sell the amount of high nickel matte corresponding to its LME nickel short position in the Spot market at the corresponding price, it can make up for the losses in the futures market by earning profits in the Spot market. However, in reality, it is often difficult for large bearish holders like Tsingshan to immediately sell such a large amount of spot goods, due to inadequate stock and poor physical market liquidity. Hence, there is uncertainty in whether the future spot goods can be fully sold, depending on market volatility and the ability of spot buyers and customers to fulfill contracts. In addition, it adds difficulty to determining the time and price to complete the sales.

### 3.2.2. Entering a Market before Fully Knowing It

Based on the incident of Tsingshan, we may observe that Tsingshan wasn't fully aware of the international market. Historically, Tsingshan Group had some experience in hedging domestically. But Tsingshan ignored that there existed gaps between the international nickel futures market and the domestic one. For example, different standards of nickel as well as relationship between countries can both add risks to the trading environment.

From another perspective, the Tsingshan event can provide some lessons for private enterprises. In fact, many private enterprises still suffer from chaotic decision-making system. On one hand, unclear equity results in inconsistent opinions among owners when making decisions [15]. On the other hand, the concentration of equity often indicates dictatorship of the CEO. In private enterprises, the board of directors or the management committee can be a decoration. In Tsingshan's case, it can be observed that many important decisions are made by Xiang alone. Xiang Guangda's leadership proved to be a double-edged sword. He helped save Tsingshan with his persistence, but that one of his decisions put Tsingshan on the edge of bankruptcy, due to his unawareness of the market. He admitted that his trading strategy was flawed, but still implemented it based on his personal belief. Despite the existence of the board, the founder Xiang had the dominant right to make decisions.

After reflecting on the event, the separation of powers is recommended for private enterprises. Power can be segregated into personnel power, financial power, and business power. Xiang may need board members with real rights to collaborate in decision-making process [16], so that the company could know about the market better and make informed decisions.

In conclusion, Tsingshan event highlights the importance of measuring basic risk and delivery risk, as well as investigating a new market. Companies should establish sound risk management practices that execute effective risk control measures involving risk identification and mitigation strategies.



## 4. Conclusion

In conclusion, this paper reviews the whole process of Tsingshan event and comes up with some lessons for enterprises. Hedging tools are widely used in financial markets, but small mistakes in decision making can lead to catastrophic consequences. In Tsingshan's case, Nickel price soared out of control and Tsingshan hardly went bankrupted. With the help of government measures, it struggled to survive eventually. After reflecting on the event, it is advisable to measure basic risk and delivery risk, as well as investigate a new market before entering it. For private enterprises, CEOs are recommended to separate powers and collaborate with board members in decisions making to make better strategies.

Tsingshan event provides a great opportunity for enterprises to reflect on potential problems in their risk management. We look forward to the thriving financial markets at home and abroad in the future.

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