

CITIC Pacific Hedging Strategy Analysis In 2008

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Abstract. At 2008 CITIC Pacific incurred a huge loss of 51.5 million US dollars from its foreign currency derivatives contracts. The reason for such a huge loss is the misuse of a complex derivative called Knock Out Discount Accumulator (KODA). This article focuses on the mechanisms of such derivatives as well as how such mechanisms make CITIC Pacific take a huge loss. In this article, we find that the cumulative option contract has been widely recognized as one of the most effective hedging strategies against foreign exchange risk. However, the cumulative option entered by CITIC Pacific is unreasonable. We propose some suggestions for the firm to follow in order to help hedge the risk. Besides, what international trade companies can learn from this case is also talked about.

Keywords: Foreign Currency, KODA, Derivatives, CITIC Pacific.

1. Introduction

When conducting international trade, companies tend to use foreign currency derivatives and interest derivatives to avoid potential risks arising from currency exchange rate fluctuation. With proper hedging techniques, such risks can be reduced significantly. But due to the complex nature of modern financial derivatives, misunderstanding contracts can lead to huge losses.

In 2006 CITIC Pacific bought two companies' entire equities from Clive Palmer for \$415,000,000. In this transaction, two companies involved are Sino-Iron and Balmoral Iron. Those two companies have the right to mine 1 billion tons of magnetite resources. The entire project cost CITIC Pacific 4.2 billion dollars. All costs must be paid in Australian dollars. Other than that, 1 billion Australian dollars are needed for daily operation each year. To hedge the currency and interest rate risks, multiple options contracts were signed. But due to the fluctuation of Australian dollars, such contracts signed did not function as a hedging strategy. Instead, a total loss of 12.662 billion Hong Kong dollars was incurred from all the contracts signed by CITIC Pacific.

In the previous studies, Stewart Hamilton and Jinxuan Ann Zhang [1] talked about how organizational structure made CITIC Pacific take losses from such derivatives contracts. Xuan Wang [2] analyzed how KODA (also known as an accumulator), which is a complex financial derivative used by CITIC Pacific in the 2006 transaction, works. Jianfei Leng and Lingfen Zhang [3] analyzed how an internal auditing system can help CITIC Pacific prevent such risks from happening. And Chee Keong Low talked about how regulation should be further improved for cases like the huge losses incurred by CITIC Pacific [4]. It is worth noticing that how the accumulator and foreign exchange forward made CITIC Pacific take huge losses were rarely talked about.

The reason why CITIC Pacific incurred a huge loss of 485 million Hong Kong dollars is the misuse of accumulators in its foreign currency hedging strategies. The accumulator, in its essence, is an option contract that can bring limited profit but unlimited losses. Due to the misunderstanding of such contracts, CITIC Pacific did not take the huge losses could incur when the foreign exchange rate fluctuates into consideration. An important lesson from such failure is that a company should fully understand both gains and risks that will result from any financial derivative contract.

This article's focus is on how the accumulator and foreign exchange contracts made CITIC Pacific lose so much money. In this article, basic operation information and stock analysis will be talked about in part 2. In part 3, we are going to analyze CITIC Pacific's hedging strategy in this transaction

and why such a hedging strategy brought huge losses in this case. At the end of this article, a conclusion regarding companies' measurements of financial derivatives will be reached.

2. Background Information

2.1 Company information

CITIC Is a Conglomerate based in Hong Kong. Its shares are listed on the main board of the Hong Kong Stock Exchange and are a component of the Hang Seng Index. Fifty-eight percent of its outstanding shares are owned by China's state-owned CITIC Group. CITIC Limited previously known as CITIC Pacific. CITIC Pacific buys most of the assets from the parent and issues new shares to the parent, listing most of CITIC Group's assets on the stock exchange. But CITIC Group retains a stake in CITIC Guoan. In 2014, the company changed its name from CITIC Pacific Limited to CITIC Limited. On January 20, 2015, Itochu, a Japanese general trading company, and Charoen Pokphand, its Thai cross-holding subsidiary, announced an investment of about HK \$80 billion in CITIC Shares, the largest investment ever made by a Japanese general trading company. On Jan 9, 2017, a consortium of CITIC, CITIC Capital, and Carlyle's private equity funds acquired an 80 percent stake in the McDonald's franchise in Hong Kong and Mainland China for a total of up to \$2.08 billion[4].

2.2 Business Area

CITIC Pacific Special Steel is the largest special steel manufacturer in China with an annual production capacity of over seven million tonnes. The company has three plants - Jiangyin Xingcheng Special Steel, Xinye Steel, and Shijiazhuang Iron and Steel - located in ideal geographical locations, covering the major special steel markets in eastern, central, and northern China. The major products manufactured are bearing steel, gear steel, spring steel, and seamless steel tubes. These are widely used in a range of different industries, including auto components, machinery manufacturing, oil, petrochemicals, transportation, energy, railways, and shipping.

2.3 Financial Situation

In 2008, a total of 6.3 million tonnes of special steel was produced by CITIC Pacific Special Steel's three plants. Sales closely matched the amount produced. Production and sales were 4% and 3% lower compared with 2007. Demand for special steel products was strong in the first half of the year. However, the global financial crisis led to a slowdown in growth, and demand for steel products declined sharply. This in turn led to a drop in steel prices in the second half of 2008, which was particularly pronounced in the fourth quarter. The profit contribution from CITIC Pacific Special Steel declined 28% compared with 2007, primarily due to the challenging operating environment in the latter part of 2008. During this period, all three plants experienced a sharp decline in product price but were using raw materials purchased earlier in the year at a high cost [5]. Another major factor accounting for the decrease in profit contribution was a provision of HK\$513 million against year-end inventory.

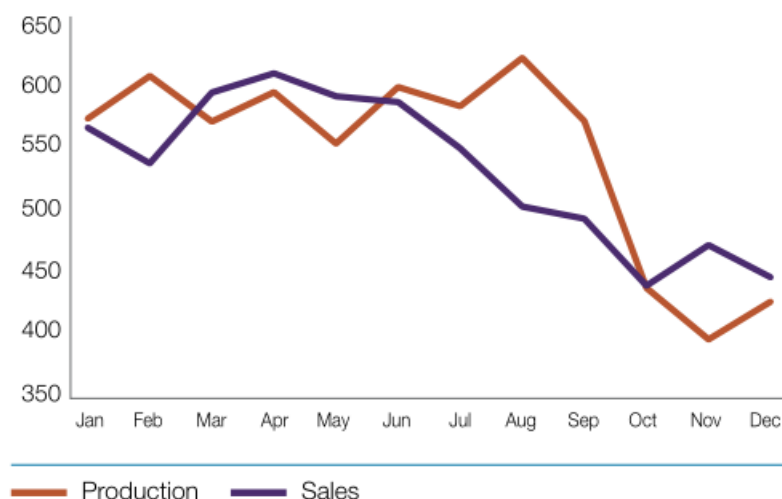


Figure 1. 2008 monthly production and sales volume

As can be seen from the below table, the profitability of CITIC Pacific showed a declining trend in the middle of 2008 compared with the middle of 2007. The marginal profit margin decreased from 25.32% to 15.46%, down 9.86 percentage points, indicating that the company's marginal profit contribution in unit operating revenue decreased and the variable cost is borne by unit operating revenue increased. The operating profit margin fell 7.81 percentage points to 16.81 percent from 24.62 percent, indicating a decline in profit generated by the company's unit of operating revenue. Pretax profit margin also decreased from 27.94% to 19.22%, down 8.72 percentage points, indicating that the profitability of the company's business and investment business decreased, and its contribution to profits decreased. The decline of profitability has a direct impact on the profit level of enterprises and affects the value of enterprises. Additionally, the profitability of CITIC Pacific showed a declining trend in the middle of 2008 compared with the middle of 2007. The marginal profit margin decreased from 25.32% to 15.46%, down 9.86 percentage points, indicating that the company's marginal profit contribution in unit operating revenue decreased and the variable cost is borne by unit operating revenue increased. The operating profit margin fell 7.81 percentage points to 16.81 percent from 24.62 percent, indicating a decline in profit generated by the company's unit of operating revenue. Pretax profit margin also decreased from 27.94% to 19.22%, down 8.72 percentage points, indicating that the profitability of the company's business and investment business decreased, and its contribution to profits decreased. The decline of profitability has a direct impact on the profit level of enterprises, and also affects the value of enterprises.

Table 1. Interim Profitability and Return on Investment Indicators in 2007-2008

	2008 interim	2007 interim	the year-on-year growth rate
profitability			
marginal income ratio (%)	15.46	25.32	-9.86
operating earning rate (%)	16.81	24.62	-7.81
Profit margin before tax(%)	19.22	27.94	-8.72
Return on investment			
Return on equity(%)	7.17	9.71	-2.54
Return on total assets(%)	3.52	5.78	-2.26

2.4 Analysis of stock price

Due to the outbreak of the subprime crisis, the financial crisis spread bigger and bigger, and the European market has been hit hard so that a large number of international capitals had to helplessly again choose the dollar as a safe haven, so cause the dollar to pay high tide, the dollar is not only to

get support, and in July to the dollar has fallen against other major currencies to rise sharply. It also accelerated the bursting of the commodity price bubble, which hit resource-exporting countries such as Australia and New Zealand hard and led to the devaluation of their currencies. CITIC Pacific ended the year with a LOSS of HK \$14.632 billion on leveraged foreign exchange buy/sell contracts on its Australian iron ore project, due to the depreciation of the Australian dollar. Affected by this, On October 21, CITIC Pacific's share price plunged throughout the day. By the close, CITIC Pacific opened at 9.00 and closed at 6.520, down 8.00, or 55.10%, with 7.08 billion yuan wiped off its market value.

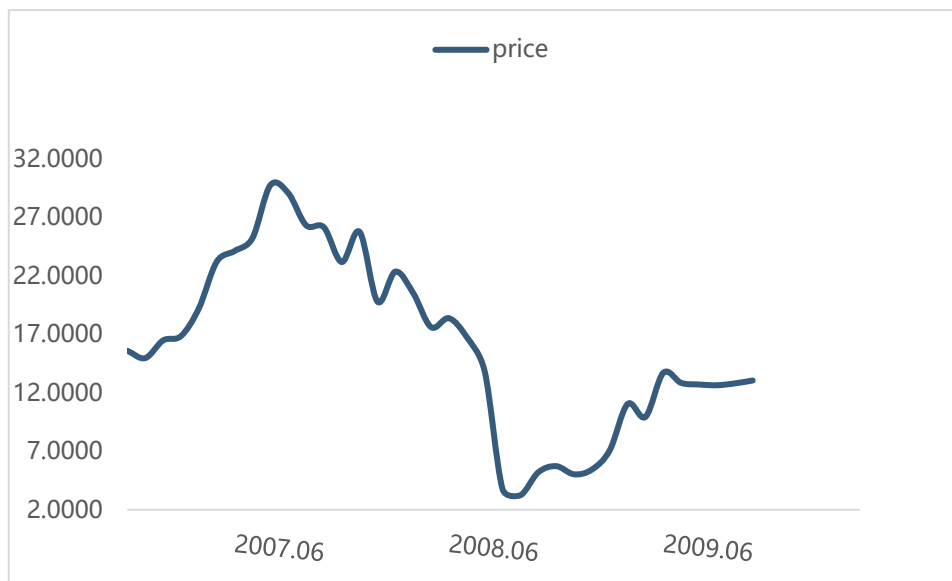


Figure 2. CITIC Pacific Stock Price Chart

3. Hedging Strategies

3.1 Residual Risks

When companies conduct international trade, the most common way is that sellers sell products through short-term credit loans and buyers buy products through deferred payments. Since such transactions are not immediate and direct exchanges of money and products, foreign exchange and interest risks might affect buyers' and sellers' profits.

Assume the following scenario: A USA company needs to do business with an Australian company. The Australian company is the seller, and the American company is the buyer. The current exchange rate of AUD to USD is 0.7. Both the American company and the Australian company are not sure how the exchange rate will fluctuate. If the Australian dollar goes strong, and the rate of AUD to USD becomes 0.8, then the Australian company will receive fewer US dollars than they expected. And the American company will pay more US dollars than they expected.

3.2 Hedging Techniques

The situation stated above is a typical example of how international trade companies can lose money throughout the transaction process. To prevent such things from happening, many international trade companies choose to sign foreign currency forward contracts with banks to lock down a fixed currency exchange rate to prevent losses. A currency forward is a contract that locks in the exchange rate for the buy or sells of a foreign currency in a future time. With such contracts, companies can protect themselves from risks they can't control. Long positions make companies free from the losses caused by price increases in the underlying asset. Short positions protect companies from price decreases [6].

Another more complex hedging strategy involved the use of an accumulator. The accumulator is the shortened form for Knock Out Discount Accumulator (KODA). An accumulator is an option composed of daily long up-and-out call options and short up-and-out put options. Accumulators include two layers, an upward knockout layer, and a downward strike layer. An accumulator allows investors to purchase shares of stock at the strike price, which offers a discount from the current stock price. However, this strike price stays constant even if the stock price drops below it, possibly causing the investor to purchase shares of stock for more than their current value [7-10].

3.3 CITIC Pacific Case

CITIC Pacific signed an accumulator contract to allow it to buy Australian dollars using US dollars from July 2008 to October 2010. This contract enables CITIC Pacific to lock in AUD to USD rate at 0.87. When the contract was first signed, AUD to USD rate was at 0.95, which means that this contract was beneficial for CITIC Pacific. The contract also stated that when the AUD to USD rate is above 0.87, CITIC Pacific can still buy Australian dollars from the counterparty at the rate of 0.87. For example, if the rate of AUD to USD rises to 0.97, then CITIC Pacific can still buy 1000 US dollars with 870 dollars. And CITIC Pacific will get a profit of 100 dollars. However, the contract also stated that it automatically terminated when the profit reached 51.5 million US dollars. Other than that, if the rate of AUD to USD is below 0.87, CITIC Pacific is obligated to buy US dollars with Australian dollars at the rate of 0.87. For example, if AUD to USD is at the rate of 0.57, then CITIC Pacific must buy 1000 US dollars with 870 Australian dollars even though the market rate is 0.57. Therefore, it is easy to draw the conclusion that such contracts can bring huge losses during a bearish market and bring limited profit during a bullish market.

Unfortunately, CITIC Pacific encountered a bearish market shortly after the contract was signed. Due to the Subprime Mortgage Crisis, the AUD to USD rate began to decline after July 2008. As the rate reaches lower and lower, CITIC Pacific had to buy US dollars at a significantly higher rate than the market rate. Three months after the contract was signed, the AUD to USD rate was 30% lower than when the contract was first signed. Eventually, CITIC Pacific lost 12.6 billion Hong Kong dollars. And CITIC Pacific's stock price plunged to 8.44 Hong Kong dollars from 28.5 Hong Kong dollars from 07/01/2008 to 12/31/2008.

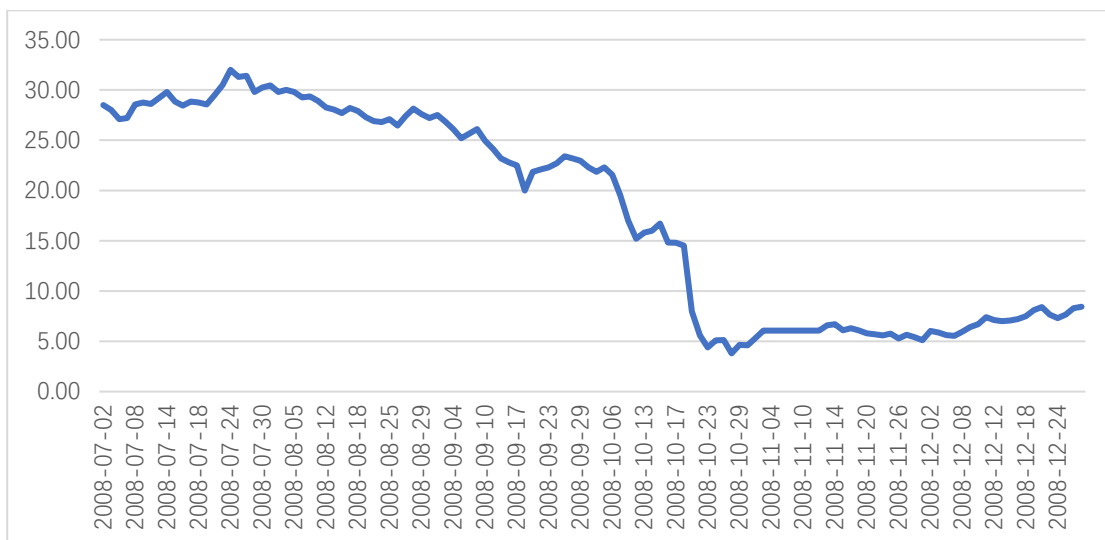


Figure 3. CITIC Pacific's stock price from 07/01/2008 to 12/31/2008

4. Conclusion

CITIC Pacific invested in the Sino-Iron project in Australia in 2006. Due to the need to exchange Australian dollars in the future, CITIC Pacific entered cumulative target callable Australian dollar forward contracts and cumulative Daily Australian dollar forward contracts to hedge against the risk

of further appreciation of the exchange rate. CITIC Pacific only considered the impact of foreign currency appreciation when signing the contract and did not consider the possibility of depreciation of the Australian dollar. In 2008, the global financial crisis forced Australia to cut interest rates and led to the fall of the Australian dollar. On October 20, 2008, CITIC Pacific announced that it had fallen below the locked exchange rate due to the depreciation of the Australian dollar. According to Hong Kong newspaper Wen Wei Po, as the Depreciation of the Australian dollar continued, CITIC Pacific lost HK \$18.6 billion due to accumulated foreign exchange options. This paper analyzes the advantages and disadvantages of CITIC Pacific's hedging strategy through the operation data and stock price changes of CITIC Pacific and provides some suggestions for improvement.

A cumulative option contract has been widely recognized as one of the most effective hedging strategies against foreign exchange risk. However, the cumulative option entered by CITIC Pacific is unreasonable. Citibank Hong Kong Branch, Standard Chartered Bank, HSBC, and Deutsche Bank used their pricing advantages to sign contracts that did not meet the hedging principle. By the time the contract was signed, CITIC Pacific had completely lost. In the best case, CITIC Pacific made a maximum profit of \$51.5 million, but it was already \$100 million in the red when it signed the contract because of the unequal pricing power. Secondly, as the hedging of future foreign exchange demand, it aims to lock the cost of buying the Australian dollar, that is, to minimize the risk of Australian dollar fluctuations. However, the Accumulator contract signed by It aims to maximize profit without any constraint on the risk. In other words, CITIC Pacific's risks are wide open. In addition, Accumulator is not suitable for hedging and is more like a speculative product. In many cases, forward, futures, swaps, and options can also be combined to meet the specific hedging needs of enterprises without Accumulator. Finally, the fundamental reason for the company's loss was that CITIC Pacific failed to timely identify the risks brought by the Accumulator contract and failed to timely avoid and manage the risks. An important lesson from the CITIC Pacific case is that all companies should be fully aware of both the profits and losses that can be incurred from the derivatives contracts they signed.

This article leaves much to be discussed. First, we did not study how to take remedial measures after losses caused by CITIC Pacific derivatives. Secondly, we have not put forward specific implementation measures for the company's risk supervision and governance system. Finally, we did not compare CITIC Pacific's foreign exchange hedging measures with those of other companies in the same industry. We will further study the risk remedy strategy of the company and formulate specific risk management measures according to the internal management system. In addition, we take foreign exchange hedging strategies of other companies as the comparison object to analyze CITIC Pacific's more secure and stable hedging strategies.

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