

Discuss on Exchange Rate Risk Management of Overseas M&A

—— In the Case of Haier's Acquisition of GE Appliances

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Abstract: In recent years, more and more enterprises hope to expand foreign markets and circumvent trade barriers by means of overseas M&A. But overseas M&A involves many transaction links, many currencies, and RMB shows bilateral fluctuations. The first difficulty that Chinese enterprises will face is the exchange rate problem. Therefore, the prevention and avoidance of exchange rate risk in M&A business is an important link for enterprises to successfully complete M&A business. In accordance with the case analysis of Haier's acquisition of GE household appliances, this paper constructs a framework of exchange rate risk identification and management, and explores the causes of Haier's exchange rate risk and how to carry out exchange rate risk management in stages. It is found that Haier manages exchange rate risk in three stages, mainly through the combination of financial derivatives and financing methods to avoid exchange rate losses. Finally, we get enlightenment from the case, explore the exchange rate risk management path in overseas M&A, and provide ideas and choices for enterprises to reduce M&A costs.

1. Introduction

Under the background of deepening economic globalization, economic exchanges at home and abroad are frequent and complex, especially the promotion of national "Belt and Road" construction, more and more enterprises focus on overseas mergers and acquisitions (hereinafter referred to as "M&A"). Through overseas M&A, we can not only obtain overseas resources, broaden the domain and scale of business, enhance international competitiveness, but also bypass the barriers set by trade protectionism.^[1] However, with the global wave of M&A, the risk is also increasingly exposed. Since our country introduced floating exchange rate system in 2005, enterprises have to face the complex foreign exchange market environment of two-way fluctuation of RMB, and the large amount of funds invested in overseas mergers and acquisitions will first encounter the problem of exchange between different currencies in each link, and the exchange rate fluctuation intensifies, which makes the uncertainty of M&A costs increase. For enterprises engaged in overseas investment, in addition to facing the strict management of domestic and international government departments, exchange rate fluctuations have become an important factor to consider. Therefore, under this background, when studying the overseas M&A risk of micro enterprises, the M&A risk caused by the change of exchange rate deserves particular attention.

2. Case Summary: Haier M&A GE Home Appliances

Qingdao Haier, a listed company, subscribed the "Equity Asset Acquisition Agreement" with General Electric Company (hereinafter referred to as "GE") on January 15, 2016 in order to carry out the industrial layout in the world. It finally spent about \$5.58 billion to successfully acquire General Electric's home appliance business (hereinafter referred to as "GEA"). The subject matter of the acquisition mainly include non-equity assets, equity assets and related liabilities. The merger has become one of the most noticeable overseas mergers and acquisitions in China's capital market

in 2016. Qingdao Haier directly acquire the overseas assets through cash, which has strong reference significance in the selection of merger and acquisition schemes and the prevention of exchange rate risks.

2.1. Introduction of Acquirer and Acquiree

Haier was founded in 1984 and has many world-class brands. Main business includes refrigerators, washing machines and other home appliances. In accordance with the world's authoritative market research institution Euromonitor's report which showed global brand retail quantities of good-sized home appliances for 2016, Haier's retail quantities accounted for 10.3% of the global market in 2016, ranking first in the world for the eighth time.^[2] Haier's business covers more than 30 countries and territories in the world and faces exchange rate risks in as many as 19 currencies. In order to control exchange rate risks, Haier has set up a wholly-owned subsidiary "Harkin Controls", which specialized in developing, administering and marketing financial risk management products.

GE was founded in 1892, headquartered in Boston, USA, and is the world's largest multinational company providing technology and services. Its main stock-in-trade comprise aircraft engines, power generation equipment, financial services, medical imaging, plastics, etc. As of 2016, GEA have taken up about 90% of the US household appliance market and are known as benchmark companies in the North America. GEA have a strong attraction for household appliance companies that want to enter the international market.

2.2. Merger and Acquisition Process

2.2.1. Preparation for M&A

In 2008, general electric strategic layout, decided to sell home appliances business, haier intended to buy, but the same year the u.s. subprime crisis broke out, and then triggered the global financial crisis, the matter was stranded. Due to violation of US anti-monopoly law, the cooperation between GE and Electrolux was finally stopped in 2015. Haier regained the opportunity. In January 2016, a series of M&A activities were launched, for the sake of better coordinating resources to effectively deal with the exchange rate risks encountered in the merger, Haier gold control on the basis of the integration of Haier's original foreign exchange trading team, the introduction of cross-border banking talent, hedge fund talent and IT experts registered in Hong Kong to set up Haiyunhui micro-enterprise (hereinafter referred to as "HCE") for Haier to control the exchange rate risk in the merger.

2.2.2. M&A Implementation Phase

The schedule of major events in this overseas merger and acquisition activity is as follows:

Table 1 M&A Schedule

Time	Major Events
2015.10.19	Haier enters suspension period to prepare for merger of GEA.
2015.12.18	The Qingdao Branch of the National Development Bank issued a commitment letter of loan intention to support Haier's shortlisting for the second round of bidding.
2016.1.12	Haier and the National Development Bank jointly signed the Letter of Commitment. The amount of loans provided by the State Development Bank shall not exceed 3.3 billion dollars. The loan term shall be five years from the date of the first withdrawal of the loan.
2016.1.14	Haier and GE subscribed "Equity and Asset Purchase Agreement" to purchase GEA-related assets with \$ 5.4 Billion and Haier bid successfully.
2016.3.12	Haier's acquisition of GEA has passed the antitrust review by the US judiciary and entered the implementation phase of the acquisition.
2016.3.14	Haier's board of directors reviewed and passed "Major Asset Purchase Report" and other relevant documents.

Time	Major Events
2016.3.31	Haier's interim shareholders' meeting deliberated and formally passed 12 proposals on major asset purchases.
2016.5.21	Haier's merger and acquisition transactions passed antitrust review by Mexican Federal Economic Competition Commission.
2016.6.3	Qingdao Branch of the National Development Bank remitted \$3.3 billion to bank custody accounts designated by Haier's overseas subsidiaries.
2016.6.6	Haier and GE signed the delivery documents and paid about \$5.58 billion in cash for the merger.
2016.6.7	Haier and GE declared that they had signed the delivery documents, and GEA business department was officially renamed "GE Appliances a Haier Company"

Source: Haier Announcement

Haier in the face of the acquisition of a large number of assets, complex approval procedures, a large number of competitors, only three months to lock in the transaction. Haier and GE formally subscribed the "Equity and Asset Purchase Agreement" on January 14, 2016, to buy GEA for \$5.4 billion. For the purpose of not diluting the existing shares, it was decided to use the combination of free money and dollar loans to make cash acquisitions, with Qingdao Haier as the guarantor and overseas subsidiaries Haier US Appliance Solutions Inc as lenders to the National Development Bank, the term of the loan is five years from the date of the first withdrawal of the loan.^[3] Its own capital comes mainly from the funds raised by the employee stock in the ESOP and the retained earnings of the company. Haier has set up new overseas subsidiaries in the target asset distribution area to take over the target assets. Haier will repay the dollar loan through the profits generated by overseas subsidiaries.

3. A Case Study of Haier M&A GE Home Appliances

3.1. Merger Motivation Analysis

(1) Weak domestic market and improve the global layout. In recent years, competition in the domestic home appliance industry has intensified and the growth rate of market sales has begun to decline. Haier must enter the international home appliance market and push forward the strategic layout of globalization. GEA business accounts for almost 90% of the U.S home appliance market, and its sales channels and brand awareness are deep in Latin America, Canada and other countries. In order to speed up the industrial restructuring, GE decided to sell its home appliance business department, which is a good opportunity for Haier to enter the international market.

(2) Integrate resource advantages and play a synergistic effect. Haier can integrate and share resources in product research and development, purchasing cost, sales channel, supply chain and so on after acquiring GE household appliances, and exert the synergy effect on revenue and cost control.^[4] Haier can use GE's advanced industrial Internet platform "Predix" to improve the processing technology and capacity, so that Haier's market share in Latin America and Canada has rapidly climbed to a leading position and formed brand influence in the world.

3.2. Exchange Rate Risk Identifier

3.2.1. Reasons for exchange rate risk

There are two main direct causes of exchange rate risk: the first point is monetary factor. Haier cross-border M&A GEA involve two currencies, name currency and dollar, and the exchange rate is not fixed, once the exchange rate fluctuations will cause uncertainty of currency value, so there will be exchange rate conversion problem.^[5] GE home appliances delivery of assets and liabilities are denominated in dollars, and Haier's financial statements are measured in renminbi as the standard currency, consolidated statements may be due to exchange rate fluctuations generated a large amount of exchange losses, eroding corporate profit space. The second point is the time factor. Exchange rate risk occurs in a certain period of time, and there is no exchange rate risk in instant trading. Haier from the signing to the final payment interval of about 6 months, the time span is

large, and during this period the RMB against the dollar exchange rate is changing at all times, in the merger amount of \$5.58 billion, exchange rate fluctuations will have a significant impact on Haier cash flow.

3.2.2. Exchange rate risk generation phase

(1) Signing to delivery phase

From the "811 exchange rate reform" to the middle of January 2016, the RMB has been devalued. HCE predicts that the devaluation of the RMB will not change in the next few months. In this case, Haier is likely to suffer losses by using its own funds and dollar loans to make cash payments. Because, in the process of delivery, Haier needs to use its own capital to purchase foreign exchange, this part will be due to the fluctuation of the exchange rate of RMB against the dollar and make the cost of foreign exchange purchase uncertain, and may need to pay more people's currency when paying, resulting in a greater exchange rate risk in this link. A dollar loan is made directly from the loan bank to the lender Haier US Appliance Solutions Inc. overseas escrow account before delivery, and signed to signing to delivery phase, which does not create exchange rate risk.

(2) Financing repayment phase

Haier's dollar loans do n' t create exchange-rate risk until they are paid, but at the repayment stage, it will need to buy the dollar to repay the on a continuous basis after delivery, therefore, exchange rate risk arises from the time difference between financing and repayment, which may lead to related losses once the exchange rate fluctuates.^[6] However, from the payment of foreign currency financing to the repayment period of five years, the longer repayment period to the enterprise buffer can administer the exchange rate risk, to some extent reduce the possibility of loss. After the completion of the acquisition, Haier obtained a large number of overseas assets, accounting for a variety of currencies, foreign currency income accounts for a relatively large proportion of the cost structure, and the mismatch between income and expenditure currency causes the exchange rate fluctuations to have a severer effect on the enterprise's earnings.

3.3. Analysis of Exchange Rate Risk Management

3.3.1. Payment Scheme Design Phase

After judging the trend of the exchange rate at this stage, HCE decided to provide the programme of cash delivery with own funds and dollar loans. Dollar financing reduces RMB exchange funds, ensures that at the time of delivery, direct payment of consideration in US dollars, does not involve RMB transactions, controls exchange rate risk from the source, and avoids possible currency mismatches during the signing to delivery phase.^[7] The capital source of future loan repayment is that Haier's overseas subsidiary itself produces operating cash flow, which cleverly avoids the exchange rate risk when repaying the loan.

3.3.2. Signing to Delivery Phase

At the beginning of 2016, the United States began to implement a tight monetary policy, resulting in strong market expectations for the appreciation of the dollar. If the dollar moves 5 percent against the yuan, the delivery principal of \$100 million will generate more than 30 million yuan of exchange gains and losses, HCE simulation found, so Haier must actively carry out exchange rate risk management. While the offshore RMB will go on falling against the dollar in the first half of 2016, the range will narrow, and it is more likely to stabilize the expected exchange rate around 6.4-6.8. The Haiyun Hui team chose to use 6.6-6.8 Call Spread option portfolio to lock in exchange rate risk for GE home appliance acquisitions, i.e. buy a dollar call option @6.60 while selling a dollar call option @6.80. Haiyunhui team completed the option trading according to the scheme in February-April, the end of May when the option expired, the yuan against the dollar fell slightly relative to the beginning of the year to about 6.55, counterparty to give up the exercise, Haier through the spot buy the dollar, to lock in the cost of M&A transactions. The scheme finally effectively avoids the exchange rate risk, in contrast to the forward locking scheme, saves 0.45% of the financial cost for customers, and saves Haier about 100 million yuan of financial expenses in

total.

3.3.3. Financing Repayment Phase

The financing repayment phase includes the contract signing to delivery stage and the post-delivery stage.^[8] At this stage, for the sake of transferring and controlling risks, Haier launched about 6.5 billion dollars of foreign exchange derivatives business, including currency futures, options, currency swaps, risk-controlled arbitrage portfolio, etc. There are not only a single financial instrument but also some arbitrage portfolio business.

3.4. Suggestions

(1) Enterprises should set objectives for managing foreign exchange risk. Foreign exchange risk management objectives ought to fully think over the accounting cost and decrease the indeterminacy of economic costs as well. Finally, take controlling economic costs as the primary objective of risk management. In accordance with the primary objective, Enterprises select dynamically balanced foreign exchange risk management methods.

(2) Strengthen the awareness of exchange rate risk prevention and reserve talents in exchange rate risk management. In the case of bilateral exchange rate fluctuations, overseas mergers and acquisitions of enterprises will confront intenser exchange rate risks. In the first place, an enterprise needs to raise awareness of exchange rate risk prevention, and then identify possible exchange rate risks in various segments.^[9] Based on its own characteristics, a company has the ability to select effective risk avoidance strategies. For fully identifying risks, enterprises must import talents who have experience in exchange rate risk management. Foreign exchange management professionals accurately predict forward exchange rate. The predicted amount and duration of forward exchange rate will influence the M&A design and thus make a mess of the choice to exchange rate risk management methods.

(3) A diversified exchange rate risk management method can be adopted in overseas M & A. In addition to using financial derivatives to hedge exchange rate risk, enterprises can also combine financing methods and payment methods in M & A design to reduce foreign exchange costs and risks. In the way of financing, we can choose bank loans, set up M & A funds, issue exchangeable bonds, etc. In the choice of payment methods, enterprises should grasp the policy dynamics and their own management needs to try to diversify the payment methods, such as cross-border stock exchange or mixed payment. To reduce the exposure of foreign exchange funds by adopting diversified financing methods and payment methods, and to avoid or transfer the exchange rate risk from the source.

(4) Foreign exchange rate risks should be identified and managed in stages. It is mainly divided into three phases. The first phase is the design stage of the payment plan, which belongs to the prior exchange rate risk management.^[10] It identifies the events that may trigger the relevant exchange rate risk in the future, and then controls the exchange rate risk to an acceptable level from the source. The second stage is from contract signing to delivery, which belongs to the intermediate exchange rate risk management. The third stage is from delivery to repayment, which belongs to the post-event exchange rate risk management. As the merger plan has been confirmed or the merger and acquisition delivery has been completed, In the period of the intermediate and the post-event exchange rate risk management, enterprises mainly make use of financial derivatives to lock in merger and acquisition costs.

(5) Establish a scientific risk management strategy system and reasonably use financial derivatives to hedge risks. For instance, in the stage of unilateral appreciation of the RMB, we can exploit forward settlement, can control the spot exchange rate between the dollar and the RMB in advance, and can obtain certain interest compensation through the swap point; and in the depreciation phase of the RMB, the exchange rate risk may be locked at a lower cost by buying an extra dollar call option. Financial derivatives are the most commonly used exchange rate risk prevention measures, each of which has its own advantages and disadvantages. When using tools, enterprises should first establish correct risk management concepts and not speculate for profiteering. Instead, they should adhere to the principle of hedging. Until fully understanding the

characteristics of financial derivatives, they can choose the most favorable tools for hedging according to the enterprise's operating characteristics, merger duration, cost and income balance.

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