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Research on Reducing Foreign Exchange Risks by Foreign Exchange Derivatives

——Taking China Foreign Trade Companies as an Example

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Absrtact: With the deepening of international trade, the foreign exchange risk exposure of foreign trade companies is gradually being valued in the international market, and foreign exchange risks are also the main risks that Chinese foreign trade companies need to avoid. This article analyzes the reduction of foreign exchange risks from both the internal and external aspects of the company, focusing on the value-preserving role of foreign exchange derivatives in transactions, and making suggestions for the steady operation of foreign trade companies.

Key words: Foreign exchange derivatives; Foreign exchange risk; Hedging; China Foreign Trade Corporation

1.Causes and potential consequences of foreign exchange risks of foreign trade companies

Foreign trade companies refer to companies that have the right to engage in foreign trade activities. The main business of the company is to earn price differences from domestic and foreign import and export commodities. In the foreign exchange market, foreign trade companies, as customers in the foreign exchange market, become the actual supply and demand side of foreign exchange for the purpose of transaction preservation and other purposes[1]

Floating exchange rates will cause uncertainty in earnings. The difference in the type of currency and the difference in the period of currency exchange may also cause fluctuations in the company's interests. In international economic activities, foreign exchange risk is the risk of changes in the company's profits due to changes in exchange rates[2]. When foreign exchange assets and foreign exchange liabilities are not equal, there will be risk exposure. When there are more foreign exchange liabilities, there will be short naked positions, and vice versa. Foreign trade companies conduct a large number of commodity transactions in the international market, and it is difficult for them to balance their positions in all trading currencies. Therefore, they will inevitably have to face foreign exchange risks.

If there is a naked foreign exchange short position, when the foreign exchange declines, you can benefit from the foreign exchange risk. Otherwise, it will bring losses to the company. The discounted risk caused by the foreign exchange risk will cause differences in the book reconciliation[3], and the transaction risk will make the foreign trade company bear the possible losses. Changes in foreign exchange may lead to changes in trading volume, causing changes in the company's interests for a period of time in the future, and triggering economic risks[4].

2. Internal hedging strategies for foreign exchange risk management by foreign trade companies

Companies facing foreign exchange risks can prevent the company's foreign exchange risks by adjusting the transaction currency and the agreement before signing the contract. Reducing the profit fluctuations that may be caused by foreign exchange risks from within the enterprise, such as: using advantageous currencies, signing value-preserving clauses, etc.

2.1Currency adjustment

In international transactions, it is the safest way to use local currency to denominate. It is not affected by foreign exchange changes and can fundamentally eliminate foreign exchange risks. But this method will transfer the foreign exchange risk to the counterparty, so it is difficult to reach an agreement.

If it is not possible to price in local currency, try to choose hard currency for export business and soft currency for import business. When the exchange rate fluctuates, the value of the hard currency is more stable, the exporter is easier to lock in profits, and the soft currency is easier to depreciate, importer can use the soft currency to control the cost.

In addition, holding hard currency assets and soft currency liabilities can also reduce foreign exchange risk. Compared with hard currencies, the exchange rate of soft currencies remains unchanged or decreases, which reduces debt pressure for corporate liabilities. The hard currency is a relatively better currency to maintain value, which can better lock the company's profit range.

2.2Agreement adjustment

Foreign exchange risks exist for both parties in the transaction. The proportion of the foreign exchange risks that both parties bear can be agreed in advance in the agreement to control the losses that the foreign exchange risks may bring to the company.

It is also possible to add value-preserving clauses agreed by both parties in the agreement, such as: gold preservation, foreign exchange preservation, and "basket" currency preservation. The most common is foreign exchange hedging. Hard currency is used as a hedging currency. The exchange rate fluctuation space is negotiated. If the exchange rate exceeds the prescribed range, the payment will be adjusted to better stabilize interest fluctuations.

3.External hedging strategies for foreign exchange risk management by foreign trade companies

In response to foreign exchange risks, companies can use external management strategies in addition to internal management. After the contract is signed, foreign exchange derivatives such as forwards, options, swaps, etc. are used to hedge foreign exchange risks in transactions. Foreign exchange derivatives can reduce exposed risk positions, ensure the company's costs and profits, and stabilize the company's profit[5].

3.1External hedging strategies for foreign exchange risk: taking the forward as an example

Foreign exchange forward is a non-standardized agreement for over-the-counter transactions. The two parties to the transaction agree in advance on the currency, exchange rate, deadline or period range for delivery at a certain time in the future. According to this transaction at maturity, lock the local currency corresponding to future foreign exchange income, reduce the risk of changes in the company's interests, and increase the possibility of income from fluctuations[6].

In order to prevent the decline of foreign exchange, exporters should actively adopt the strategy of selling foreign exchange forwards. When the foreign exchange payment received by the exporter is being exchanged, it will lead to a reduction in local currency income and a reduction in profits if the relative currency depreciates. In export transactions, it is unfavorable for exporters to expose their long foreign currency positions too much. However, if you do forward foreign exchange with the same currency, the same maturity, the same amount, and the opposite direction, the foreign exchange can be greatly reduced. Long positions reduce the impact of foreign exchange fluctuations on currency clearing. When foreign exchange declines, it can bring benefits from the forward market. Therefore, even if the decline in foreign exchange is not conducive to exports, and the spot market loses money. The forward market can be compensated accordingly[7].

Importers should relatively adopt the method of buying foreign exchange forward to maintain value. When foreign exchange rises, importers will use more domestic currency to purchase, and the cost of purchasing goods will increase. Buying foreign exchange forwards can not only fix the transaction exchange rate in advance, but also reduce the impact of foreign exchange market fluctuations, which is the opposite of the spot market[8].

Fluctuations in exchange rates will cause changes in uncleared payments, which will affect the company's capital budget and risk calculations. However, foreign exchange forwards and spot transactions are in the opposite direction.

Gains and losses are complementary to the spot market. Forward have a significant impact on foreign exchange risks. For exporters, a decline in foreign exchange will result in a decrease in the domestic currency for liquidation, and foreign exchange forward profits. Foreign exchange rises, although foreign exchange forward losses, but the available domestic currency has increased. For the importer, a rise in foreign exchange will make the spot market lose money and the forward market will make a profit, while a fall in foreign exchange will make the spot market profit and the futures market will lose money. Even when gaining benefits, they will bear the losses brought about by the exchange rate, and when they suffer losses, they will also have the returns brought about by the exchange rate. Although foreign exchange forwards can control foreign exchange risks, they lower the upper limit of the income they have the opportunity to obtain. Therefore, this kind of hedging tool is more suitable for companies that adopt conservative management strategies.

3.2External hedging strategies for foreign exchange risk: taking options as an example

Foreign exchange options means that after a foreign exchange option buyer pays a certain fee to the option seller at the beginning of the period, he obtains the right to buy or sell at the price specified in the contract for a period of time, or not to trade. The option seller can only force the opposite transaction based on the option buyer's to fulfill contractual obligations. The foreign exchange option buyer can use the initial option premium to obtain future choices that are more beneficial to his own trading direction. This feature makes it is very suitable to avoid foreign exchange risk[9].

Importers will convert their domestic currency into foreign currencies in a certain period of time in the future. Because worrying about the rise in foreign exchange, importers buy foreign exchange call options and use the cost of option fees to lock in the maximum loss. When the spot exchange rate of the transaction is lower than the agreed price, the right party waives the execution of the option contract and the loss is the option premium. When the spot exchange rate of the transaction is higher than the agreed price, the right party chooses to execute the foreign exchange option contract. If the break-even point is not reached, it will make up for the loss of the option fee; if it is reached, it will start to bring profits to the foreign exchange option buyer. As the spot exchange rate rises, the profitability of the call option buyer also increases. When the spot interest rate rises, although the market exchange rate is not conducive to importers, they can choose to execute the contract to fix the import cost and obtain unlimited benefits after buying foreign exchange call options[10].

Exporters can buy put options and pay premiums to obtain the right to choose whether to sell the goods. When in real-value options, they execute foreign exchange option contracts. When in out-of-value options, they don't exercise. Whether they are in at-value options, the benefits are all the same. Like a call option, the maximum loss is only the option premium, which will not cause a large loss of profit due to the increase in the exchange rate. However, the difference from call options is its maximum profit is the difference between the strike price and the option premium.

The participation of foreign exchange options makes the importer's cost fixed. The maximum cost is the option fee and the amount of currency settled at the strike price. As the exchange rate drops, the cost continues to decline and there is no upper limit on the benefits. The exporter's lowest income is the amount of currency settled at the strike price minus the option premium. As the exchange rate rises, the income continues to rise. The biggest loss is the option premium. When the spot exchange rate does not develop in the direction that the foreign trade company hopes, it will make the foreign trade company lose money, but foreign exchange options can protect the foreign trade company well through fixed the importer's cost and increased the exporter's profit.

3.3External hedging strategies for foreign exchange risk: taking swaps as an example

Swap is a transaction of the same amount, the same currency, and different periods in the opposite direction. Several common transactions are: spot-to-spot swap, spot-to-forward swap, and forward-to-forward swap.

If an export transaction is conducted with the same country, the exporter can first sell the foreign currency, convert it into domestic currency and purchase the foreign currency forwards with the same amount and different maturities. When the forward expires, the foreign currency will be purchased at the agreed interest rate at the time. Although the amount of foreign currency has not changed, this has increased the liquidity of the company's currency and also solved the company's working capital problem. When importing goods, importers need to buy foreign currency first. But there may still be a need to sell foreign currency in subsequent transactions. If the foreign currency depreciates, it will not be conducive to the importer's exchange of domestic currency. So importers can buy foreign currency at sight and sell foreign exchange forwards at the agreed interest rate when they expire. Not only can the agreed interest rate guarantee the cost and the risk of exchange rate fluctuations can be visualized, but it can also actively respond to possible losses caused by the exchange rate and bring more profit opportunities to the importer.

Foreign exchange swaps can be used to trade and deliver future foreign exchange at current prices. The exchange rate can be controlled at the current level. The foreign trade company's exposed positions can be better balanced and the impact of foreign exchange fluctuations on the company can be reduced. Swaps bring convenience to both parties in the transaction, preserve the value of trade activities and avoid foreign exchange risks.

4.Conclusion

When a foreign trade company conducts international currency circulation, foreign exchange risk is a risk that the company should consider first. When a company exposes a position in the market, it will cause uncontrollable risks due to exchange rate fluctuations. Other risks caused by foreign exchange risks will also cause trouble to the company's finance, operations, risk management and other departments.

To deal with foreign exchange risks, foreign trade companies can adopt a two-pronged strategy internally and externally. Before signing, the content of the agreement should be adjusted. After signing, foreign exchange derivatives should be used to hedge the company's exposed position in the foreign exchange market. This can protect the company’s profits, stabilize transaction costs, and play a positive role in the value of the company’s import and export transactions, thereby increasing the company's value.

References

[1] Dong Li, Aipan Zhang,Discussion on the gain and loss of foreign exchange derivatives trading [J]. Metallurgical accounting, 2019 (11): 26-28.

[2] Weilan Chen,Development problems and countermeasures of foreign exchange derivatives market in China [J]. Industry and Technology Forum, 2020 (19): 12-13.

[3] Ping Hou,Problems and countermeasures of implementing risk neutral principle in foreign exchange derivatives business [J]. Hebei Finance, 2019 (08): 59-64.

[4] Ying He, Hui Zhang,International Finance [M]. Shanghai: Lixin Accounting Publishing House, 2019:90-129.

[5] Li Zhu,Study on the risk-neutral issues of foreign exchange derivatives trading [J]. North China Finance, 2019 (3): 71-76.

[6] Greg Gliner.Global Macro Trading:Profiting In a New World Economy[M].Xingquan Futures Co., Ltd. Beijing: China Economic Press, 2016:101-103.

[7] Xiaoyu Hu,How do foreign trade enterprises use foreign exchange derivatives to meet the exchange rate market risk [J]. Financial Theory and Practice, 2018 (2): 103-109.

[8] Liu Yang,Forex Trading Theory, Case, and Practice [M].. Chongqing: Chongqing University Press, 2018:31-82.

[9] Zvi Bodie,Alex Kane,Alan J.Marcus.INVESTMENTS[M].Changyun Wang, Zhang Yongji translation. Beijing: Machinery Industry Publishing House, 2017:306-328.

[10] Yuhuan Zhai,Comparative analysis of foreign exchange derivatives in foreign trade enterprises [J]. Hebei Enterprise, 2020 (3): 80-81.