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Analysis of Transnational Corporations to Cope with Exchange Rate Fluctuations

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Abstract. Amidst the chaos of war and the pervasive impact of disease, currency exchange rates have entered a period of heightened volatility, presenting formidable challenges to multinational enterprises. The specter of currency depreciation looms large, necessitating a proactive and adaptive financial management strategy to mitigate its adverse impacts. To shield against these threats, companies are compelled to embrace a multifaceted approach, employing a suite of tactics such as engaging in hedging through financial instruments, recalibrating pricing models to anticipate market shifts, and streamlining global supply chains to reduce vulnerability to currency fluctuations. This paper endeavors to dissect these diverse strategies, with the objective of pinpointing the most efficacious approach for multinational companies to steer through the labyrinth of fluctuating exchange rates. The overarching aim is to fortify financial stability and bolster operational robustness, enabling these entities to not only withstand but also thrive amidst the ever-shifting landscape of global economic dynamics. By distilling insights from a comprehensive analysis of available methods, this paper aspires to arm multinational companies with the strategic acumen required to navigate the intricacies of currency volatility, securing their financial well-being and operational integrity in an era rife with uncertainty.

1 Introduction

In recent years, affected by the COVID-19 epidemic, the economies of all countries have been greatly affected. While trying to control the spread of the epidemic, these countries have also introduced fiscal and monetary policies to try to promote economic recovery. The Russia-Ukraine conflict in early 2022, as well as the sanctions adopted by developed countries and regions such as Europe and the United States, have significantly affected the global supply chain and international financial markets, so that the damage is heavy. The global economic recovery is slow and unstable, and inflation is getting more and more intense. The exchange rate changes of various currencies have become an important indicator to reflect the complex changes in the global economy.

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In this era, the variables that determine the market trend are no longer the single economic factors that were considered in the past, driven by the unprecedented supersupply of currencies, the irrational exuberance of asset bubbles and global inflation have been greatly affected, and the exchange rate of the euro against the US dollar continues to fall below parity in 2022, but this is only a microcosm of the global great changes, at the same time, Artificial intelligence technology represented by "ChatGPT" began to show an exponential leap forward. All this happens, the core of economic operation will become more and more complex, and more and more Chinese enterprises in overseas began to "go out" to "go in", in the current country, region, nationality, religion, capital complex interest entanglement stirred, domestic and foreign situation changes, people can not only limited to the economic and financial framework to explore. Only by truly seeing the core variables and basic logic that determine the macroeconomic and political trends can people better understand and prevent the impact and risks brought by exchange rate fluctuations, and then provide a basis for research and judgment for various business management decisions.

By analyzing the problems in foreign exchange risk management, Abor found that almost half of the companies did not have a sound risk management system, which mainly adjusted prices or stored goods in advance by paying attention to exchange rate fluctuations. However, these companies often faced the high price of their final products due to the high investment, and could not retain local customers. The research also shows that the use of hedging technology by Ghanaian firms, an international enterprise, is not effective enough and needs to be strengthened [1]. Cote through studying the relationship between exchange rate fluctuations and trade level, it is found that the increase of risk does not necessarily reduce risk activities; second, in order to avoid great exchange rate risks, people can use hedging technology; third, exchange rate fluctuations may offset some other trade risks; fourth, exchange rate fluctuations can create favorable trading and investment opportunities [2]. Evans made a price distribution model by analyzing the information structure of foreign exchange transactions to study the dynamic changes of exchange rates, and reached two conclusions: one is that the short-term fluctuations of exchange rates mainly come from trading decisions, and the distribution changes relatively slowly under normal trading markets; the other is that the main sources of exchange rate changes are public news [3]. Mendoza studied the uncertainty of the exchange rate and found that such uncertainty may bring great benefits and is easier to use than sustained high inflation [4].

By analyzing the share of Turkish companies' exports in total sales, Serkan finds that there is a strong positive correlation between the exchange rate and the share of enterprises' exports [5]. By studying the impact of monetary policy on exchange rate flexibility, Michael Devereux Charles Engel finds that there is a large degree of local currency pricing (LCP) in industrialized countries. In the presence of LCP, people can use the optimal monetary policy to lead to exchange rate stability [6]. By studying the impact of exchange rate uncertainty on investment level,Darby,Julia,et al determines which industry people will make more profit by investing in according to exchange rate fluctuations, or people should divest or continue to invest, which will make people investment plan more perfect and people can seek more profits from it [7]. By studying the relationship between oil exports and exchange rate fluctuations, Reboredo finds that the overall impact of exchange rate on oil prices is not very large, but it is still necessary for oil exporting countries to pay attention to the US dollar exchange rate policy and inflation [8]. By calculating and estimating the impact between the quantitative exchange rate and bank assets, Dohner and Errell finds that the change of exchange rate is not the only factor that affects US dollar assets [9]. The impact of exchange rate fluctuations cannot be separated from people's lives. Studying this argument is also to improve the losses caused by exchange rate fluctuations, and multinational corporations can also have their own perfect ability to handle exchange rate issues.

2 Conventional strategies of exchange rate movements

Exchange rate fluctuations pose great risks to multinational corporations. Due to exchange rate fluctuations of various countries, currency depreciation may reduce the income or profits of multinational corporations, and a large number of multinational corporations may also go bankrupt. In order to reduce the occurrence of this situation, companies generally make the following decisions to maintain the normal operation of the company:

2.1 Hedging

Hedging includes natural hedging and financial instrument hedging. Natural hedging is mainly about avoiding the extra costs of currency depreciation by unifying the currency.For example, A Japanese company pays a U.S. company a dollar debt every period of time, but over time, the yen depreciates, causing the Japanese company to pay more and more [10]. At this point, a natural hedging plan can be used to reduce losses by swapping yen bonds for dollar bonds. Hedging of financial instruments is mainly to reduce losses by inferring possible exchange rate changes in the future through some financial instruments that can predict the direction of exchange rates.

2.2 Clear trade terms

Multinational companies can choose to determine a clear transaction terms before the transaction is confirmed. It can decide in advance what currency to transact or change the currency of the transaction according to the exchange rate changes during the transaction. For example, before a Chinese multinational enterprise makes a transaction with an American multinational enterprise, both parties can sign a contract to make it clear that some currency adjustments can be made through exchange rate appreciation or depreciation in the future, so as to reduce the risk caused by currency depreciation.

2.3 Purchase exchange rate insurance

Multinational companies can reduce the risk caused by exchange rate by purchasing exchange rate insurance and transferring this risk to the insurance company. Generally, large multinational companies are concerned about their economic development by the government. Therefore, with the help of the government, exchange rate hedging insurance can be set up to help multinational companies develop better, reduce the impact caused by exchange rate fluctuations, and share some of the burden for enterprises.

2.4 Adjustment of operation strategy

When a country's currency depreciates, companies can increase production and exports and reduce imports and purchases. In this way, the original passivity can be changed to initiative, and it can still profit from it. By constantly adjusting the operation strategy, find the operation strategy suitable for the development of the enterprise at this stage, so as to reduce the loss of the enterprise.

2.5 Choose ETFs with good liquidity and low tracking error

When selecting Exchange Traded Funds (ETFs), it's crucial to prioritize those with strong liquidity, which ensures that you can easily buy or sell shares without significantly impacting the market price. Additionally, a low tracking error is desirable, as it indicates that the ETF closely follows the performance of its underlying index, minimizing the deviation between the ETF's returns and those of the index. This combination of attributes provides investors with a reliable and efficient way to gain exposure to a particular market segment or asset class, while also reducing the risk associated with market fluctuations and management errors. By focusing on ETFs that exhibit these qualities, investors can enhance their portfolio's stability and potentially improve overall returns.

3 Programme for managing exchange rate movements in transnational corporations

Incorporate foreign exchange risks into the enterprise management system: enterprises should be fully aware of the impact of exchange rate risks on business operations, incorporate foreign exchange risks into the enterprise management system, and form a prevention mechanism. Before the transaction, the future exchange rate trend is forecasted according to the historical trend of the exchange rate and the future economic expectation, and this prediction is included in the cost calculation of the product. For suppliers with downstream customers, it shall inform customers of foreign exchange risks in a timely manner, and incorporate risk management into contract management when necessary, so as to jointly bear the corresponding foreign exchange risks .

Cooperate with banks to use foreign exchange hedging tools: Enterprises may cooperate with banking financial institutions to use appropriate foreign exchange risk management tools to prevent and reduce corresponding foreign exchange risks. Banks can design appropriate exchange rate hedging plans according to the enterprise's trade background, cash flow situation and exchange time, and achieve the purpose of exchange rate hedging through forwards, swaps, options transactions or corresponding combinations .

Companies will improve the centralized operation of cross-border funds of multinational corporations in local and foreign currencies: People will improve the freedom of cross-border fund operation of enterprises by optimizing and integrating the existing policy requirements on the centralized operation of cross-border funds of transnational corporations, and allow transnational corporations to decide on their own the proportion of foreign debt and overseas loans in accordance with the principle of macro-prudence. This will help improve the efficiency of the use of funds and reduce financial costs .

For example, Disney Company,an American multinational corporation that specializes in entertainment. And the Tokyo Disneyland is an amusement park founded in 1892， The Walt Disney Company provided the IP and copyright but did not build it,the construction and operation were provided by a Japanese company, but Tokyo Disneyland has to pay Walt Disney regular royalties in yen. The consolidated revenue of Walt Disney and its subsidiaries increased by 27% in 1984 and the total entertainment revenue including the royalty increased by 6%. Although the park attendance decreased by 5% in 1984, the total revenue decrease in 1984 can reflect the increase in the publication tax and the increase in the per capita consumption. In 1983, when Tokyo Disneyland opened, Tokyo Disneyland had a yen concession. Anderson was afraid that the park would be affected by the change in the exchange rate of the yen against the US dollar. At that time, the yen concession had exceeded 8 billion yuan, but the yen continued to depreciate. However, according to the forecast for the future, perhaps with the publicity and the joint opening of the new park, there may be more tourists to play, and the future income will increase by 10% or 20%. Anderson was worried about the depreciation of the yen in the future, so he wanted to use hedging methods to deal with the income crisis brought by the depreciation of the yen in the future, including foreign exchange options, futures and forwards. But he is not sure how far he will be prepared to hedge, since most currency moves end within two years. At this time, Tokyo Disney can consider changing the currency that should be repaid, replacing the dollar debt with the yen debt to hedge. But this hedge cannot be used for a long time, because dollar bills must mature in four years, and there is almost no suitable yen swap rate below four years, so it needs to find a long-term hedge bond to allow them to reap long-term benefits. However, this method could not be used because Disney had a high debt ratio due to the issuance of Eurodollar debt, and Disney was not eligible to issue Euroyen bonds. Goldman Sachs suggested that Disney issue ten-year ECU Eurobonds, which could be converted into yen liabilities. At the same time, Goldman Sachs used Industrial Bank of Japan (IBJ), another experienced bank with a AAA rating, as an intermediary to convert dollar liabilities into yen liabilities and make semi-annual yen swap payments on a fixed schedule.

On the other hand, the first thing is that many companies that rely on the purchase of raw materials for processing will be affected by the change of exchange rate. For example, it needs to purchase raw materials from Germany, but the change of exchange rate will change their cost, which is very unfavorable in this highly competitive market, because their income will be compressed. According to big data statistics, the depreciation of RMB is beneficial to foreign companies to a certain extent, and large multinational companies will have a perfect problem analysis and coping strategy. Therefore, such slight changes are more likely to have a drastic impact on small multinational companies. For this problem, multinational companies should cooperate with banks, try to predict future currency changes through the research of some financial instruments and experts, and make a good plan in advance, because it is very beneficial to choose the currency used for transactions and perfectly match the financing instruments and comprehensive hedging instruments.

The second point is to have a long-term vision, The Times change quickly, no one can predict the future market trend, so choosing the right trading currency is the most important thing, multinational companies should recruit experts to summarize the past exchange rate changes to find the best trading currency. Reduce hedging costs and overall exchange rate risk. In many cases, it's safe to do what Goldman did above - trade in the local currency, which minimizes exposure to fluctuations in the U.S. dollar. As things stand, the exchange rate adjustment between the dollar and other currencies will face a more complicated situation before the Fed stops raising interest rates. Multinational companies need to take stable economic development as the starting point and take active measures to avoid the adverse impact of changes in the external market and sharp fluctuations in exchange rates on enterprises.

The third point is that due to the speculative arbitrage characteristics, instability and impact of short-term funds, multinational companies should pay more attention to the market fluctuations and exchange rate to predict changes, which can make many emergencies less sudden because it can be predicted in advance, which will make companies handle things more skillfully and efficiently. At the same time, people must always pay attention to the policy changes of various countries to formulate countermeasures and achieve a win-win situation for the country and enterprises.

Enterprises should make detailed and real capital receipt and payment planning and forecast, and help formulate hedging plans based on actual business development, which can better and efficiently promote enterprises to continuously improve their ability to cope with exchange rate risks. Make it better development and benefits in the future.

4 Conclusion

The Times are constantly changing, the stock market and currency exchange rate are fluctuating, people do not know the future direction of the financial market and various unforeseen surprises, which will affect the survival and profitability of enterprises, predict the future hot markets and which markets have been eliminated by history. This paper focuses on what people must do to understand and judge future market trends in order to solve the problem of exchange rate fluctuations affecting multinational enterprises. It is wise for Goldman to use hedging to deal with the adverse effects of exchange rate appreciation and depreciation between different currencies. However, it has been found that other methods can also be used to achieve the same or similar ends. For example, as described in the article, it is possible to determine the currency used in the transaction before the transaction, and it is also possible to change the currency through the appreciation and depreciation of different currencies. At the same time, many multinational companies also choose to buy exchange rate insurance before trading, so that the company can share their own risk. Its diversified performance can be leveraged to diversify transactions across multiple regions and currencies, thereby reducing dependence on a single currency and thus reducing the impact of exchange rate fluctuations. Companies should find ways to provide more information to outside investors and provide key assumptions about hedging strategies, which could reduce the company's transparency. This allows investors to better understand the currency risks a company is exposed to and how the company is managing those risks. The iterative update of the market is very rapid, people should not blindly predict, but should actively deal with the impact of exchange rate fluctuations on the company, and promote the development of the company through various strategies.

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