ASSESSMENT 1

COMPONENT 1 - WRITTEN REPORT

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Introduction

Multinational companies face exchange rate risks due to exchange rate volatility and exchange rate fluctuations. Managing these risks is crucial, as it can affect the company's profitability, cash flows and exposure to default. Hedging strategies can help multinationals mitigate these risks. By employing hedging strategies, multinationals can protect themselves against large and unexpected movements in foreign currency exchange rates.

Multinational corporations commonly use various hedging strategies to manage their exposure to foreign exchange risks. Forward contracts, options and swaps are some of the most used hedging strategies.

In this report, we will evaluate the various hedging strategies commonly used by multinational corporations to mitigate their exposure to foreign exchange risks, highlighting their functions and using examples to explain how they work.

Foreign exchange risk management for multinational corporations

Foreign exchange risk is one of several risks associated with investments for a multinational company. This type of risk is part of the financial risks, which arise from the financial structure, financial market trends and transactions with third parties, and can arise due to various reasons such as changes in economic policies or political instability (Lowe, Wendell, & Hu, 2002).

Currency risk is related to the currency qualification of the assets we include in our portfolio. When we buy securities denominated in another currency, such as US dollar-denominated bonds, fluctuations in the value of the dollar have a direct consequence on the value of our investments, which always remain denominated in the local currency (Zhang, 2020).

If the dollar strengthens against our local currency, for example, the value of our local currency denominated investments increases, because when we go to sell them, we will need more sterling to buy the same assets. Conversely, if the value of the dollar weakened against the local currency, we would need less sterling to buy the same nominal value of assets.

Therefore, multinationals operating in different countries with different currencies use hedging strategies to manage the exchange rate risk. The main objective of these strategies is to minimise the effects of currency fluctuations on the investment or transaction value.

By hedging strategies, we mainly refer to derivatives, which are constantly evolving financial instruments that keep pace with developments in the financial markets. For this reason,

there are various types, of which the best known are: futures, options, and swaps (Bekaert & Hodrick., 2012).

Forward contracts

A forward contract is a contract that establishes a commitment by two counterparties to fulfil a certain obligation at maturity, in which two parties agree to exchange currencies at a future date and an agreed exchange rate (Bekaert & Hodrick., 2012).

Exchange rate risk management through forward contract trading is straightforward and provides for total immunisation of currency risk exposure; regardless of exchange rate movements over a given period, the company is guaranteed to sell or buy foreign currency at an effective exchange rate fixed in advance.

The buying or selling party to the forward contract fixes the price at which it will buy or sell the foreign currency, and at maturity it will realise a profit if the spot price of the foreign currency is above or below the predetermined price. This situation can be likened to that of an exporter who has fixed the price in foreign currency and who will receive that currency when the payment extension granted to the customer expires (Bekaert & Hodrick., 2012).

For example, consider a US investor who buys £1,000,000 worth of securities in the UK and decides to hold those securities until the end of the year; he believes that Sterling interest rates will fall. The investor wants to hedge against a depreciation of sterling against the dollar and therefore decides to sell Dollar/Sterling futures contracts. If, at the end of the year, the investor's expectations about interest rates and depreciation have come true: the investment in sterling has increased, but there has been a loss in dollars. There was a profit in the market, however, which will cover the loss in dollars (Craing, 2022).

Currency Option

Currency options are derivative contracts that give the buyer the right to buy, called a call option, or sell, called a put option, at a pre-determined price and on a certain date, a specified amount of foreign currency. Unlike futures contracts, options are asymmetrical contracts in that only one party assumes the commitment to satisfy the rights of the counterparty, who instead only enjoys the right to decide whether to exercise the rights implicit in the contract (Bekaert & Hodrick., 2012).

In detail, as regards the operation of a call option on the expiration date, the holder (the buyer) pays the premium to the writer (seller) and enjoys the right to keep possession of the option or to sell it. On the expiry date, he/she may then decide to exercise the option or not (Shanker & Satir, 2021).

Consider an exporting firm in Europe which, anticipating a fall in the euro/sterling exchange rate, decides to hedge against such an event by purchasing a currency put option. Specifically, at the time the contract is entered into, the exchange rate is €1.47/£; the firm

buys a put option, which gives it the right to sell, on maturity, a certain amount of sterling at an exchange rate of €1.51/£. The premium paid is 4% of the spot price at the time the contract is entered into: 0.04 x 1.47 = 5.9 cents €/£.

On the day of expiration, the option is at the money, the strike price is equal to the exchange rate (1.51 €/£), here it is indifferent for the company to exercise the option or not and it still bears a loss equal to the premium.

If, on the other hand, on the maturity date the exchange rate is higher than 1.51 €/£, it is called an 'out of the money' option. The firm does not exercise the option, but sells the pounds on the spot market, in which case two situations can occur.

The first is that the exchange rate is higher than €1.51/£, but lower than the sum of that amount and the premium paid, e.g. it is €1.54/£, so it still makes a loss; The second situation is that the exchange rate is higher than the sum of the strike price and the premium, e.g. it is €1.6/£, so it makes a profit without exercising the option.

Finally, it is assumed that at the expiry of the option the exchange rate is below 1.51 €/£, called an in-the-money option, and the firm exercises the option. Here again, two different situations can occur. The first is the €/£ exchange rate is greater than the difference between the strike price and the premium and less than 1.51 €/£, for example it is 1.48 €/£. In this case, by exercising the option, the company incurs a loss equal to the currency gain minus the premium. The second is that the €/£ exchange rate is less than 1.451 €/£ (the difference between the strike price and the premium), e.g. it is 1.44 €/£ and the firm exercises the option and makes a profit (Pike, Neale & Linsley, 2015).

Currency Swap

Swaps represent an important part of all foreign exchange trading. A currency swap is a sale of currency at a spot rate combined with a repurchase of the same currency at a forward rate on a specified date. A currency swap is, therefore, a contract between two financial traders who exchange over time a stream of payments denominated in two different currencies and is used when an individual wants to reduce the risk of a potential loss or speculate on a likely price change over time (Bekaert & Hodrick., 2012).

The purposes for which this swap strategy is used by multinational corporations is essentially to limit or eliminate the impact that possible changes in the exchange rate may have on financing operations, to create securities obtained from combinations of different characteristics of financial instruments to transform assets/liabilities denominated in a certain currency into assets/liabilities denominated in another currency (Zhang, 2020).

As Mitchell(2023) argues, one of the advantages of this type is that it allows these 'loans' to be taken out in the most convenient currency.

In order to better understand the functioning of this derivative instrument, we propose the example of a European company, indebted in dollars, this will nurture the hope that the euro

exchange rate will remain at a lower value than that of the dollar; but it will be able to neutralise the consequences of this not happening by entering into a swap that allows it to receive payment in dollars. By so doing, in fact, the possible disadvantageous exchange rate, which will penalise him with reference to his previous indebtedness, will be cancelled or limited by the advantages which the same exchange rate will procure him when he receives, in dollars, the sum agreed upon in the swap agreement (Bekaert & Hodrick., 2012).

Conclusion

In conclusion, foreign exchange risk, like all major financial risks, is a risk for multinational corporations.

Multinational corporations adopt strategies using derivatives such as forward contract, options, and swaps, to limit the risk due to currency exchange. Where each of these strategies has its own processes, they may or may not be complicated.

The choice of the most effective hedging strategy will depend on the company's specific situation and risk appetite. It is crucial that multinationals carefully assess their exposure to foreign exchange risks and select the most suitable hedging strategy accordingly to optimise their financial performance and achieve their business objectives.

However, these hedging strategies are effective in mitigating the risks associated with exchange rate uncertainties. However, the effectiveness of such strategies will largely depend on the specific situation and market conditions.

References

Bekaert, G., & Hodrick., R. (2012). *International financial management* (2nd ed.). Boston, [Mass.]: Pearson.

Craing, A. (2022, 08 05). *Three Strategies to Mitigate Currency Risk*. Retrieved 12 27, 2023, from Investopedia: https://www.investopedia.com/articles/investing/041916/3-strategies-mitigate-currency-risk-eufx.asp

Lowe, T. J., Wendell, R. E., & Hu, G. (2002, 02 01). Screening location strategies to reduce exchange rate risk. *European Journal of Operational Research, 136*(3), 573-590.

Mitchell, C. (2023, 03 29). *How Do Currency Swaps Work?* Retrieved 12 27, 2023, from investopedia: https://www.investopedia.com/ask/answers/042315/how-do-currency-swaps-work.asp

Pike, R., Neale, B., & Linsley, P. (2015). *Corporate finance and investment : decisions and strategies* (Eighth ed.). Harlow, England: Pearson.

Shanker, L., & Satir, A. (2021). Managing foreign exchange risk with buyer–supplier contracts. *Annals of operations research, 299 (1-2)*, 1001-1024.

Zhang, X. (2020, 10 15). Multinational Companies' Hedging Effectiveness of Foreign Exchange Risk: A Quantitative Comparison Study. *Fudan Journal of the Humanities and Social Sciences*, 285-302. doi:https://doi-org.ezproxy.uwtsd.ac.uk/10.1007/s40647-020-00305-3