Example of essay on range forward

Business, Company



International Finance Management

Reference list.

Introduction

Increasing participation in international trade exposes companies to the exchange rate risk. That owes to the possible loss of value in the amounts that are to be received for exports or the increase in the amount that has to e paid for imports. In that respect, companies need to apply strategies to manage the risk through various available techniques. In that view, this report presents a demonstration of those techniques' application with reference to a company involved in payments and receipts of foreign currency. The report presents an analysis of the forward, swap arrangements and futures explaining their application and evaluating their effectiveness for the referred company.

Analysis

- Range forward/Cylinder contract: Evaluation and whether it is an adequate cover

One of the forward contract version is when the nominal amount of the put and the call are equal, and separate exercise prices are chosen so as for the premiums paid to equal the premiums received. Thus, the company would have downside protection below a certain rate that is paid for by giving up the gain on the upside above a given level. That is the version of the zero premiums that is known as range forward. In that view, for a company that has long exposure to foreign currency risk, creating the instrument entails buying a put option on foreign currency for the full amount of the exposure at a given strike price. The option is usually out of money hence being below the forward rate. To finance the cost of buying a put, the company sells an equivalent sized call option at the strike price that is out of money by being above the forward rate on the settlement date. Strike price for that call is chosen such that the premium received by the company exactly offsets the premium it has to pay for the put option. (Wystup, 2006)

In that view, the company does not have a positive of negative net premium expense for those positions. Further, the two options combination entails one being long and the other short. (Copeland, 2008) With the purchase, the contract changes the company's exposure by establishing a floor for the downside loss as well as a ceiling for the upside gain. Thus, the company' is just paying for what it wants in terms of the floor on the possible loss and by selling on the upside at a given level. (Valdez & Molyneux, 2012) The reason for being called range forward is that the company can always move to those options above together or those farther apart in certain ratios given that the premiums remain the same. Moving them closer together indicates that they are getting more for the money and doing that in the way that maintains equal premiums would meet up at the forward rate. That is illustrated on the graph by the short call position and long put position with both having exercise price of the forward rate for the option's maturity. They together create a payoff that is the 45 degree lie the same as the short forward position in the forward contract. (James, Marsh & Sarno, 2012) The forward contract costs the company nothing to enter and has the same maturity payoff as that of the combined options position. By arbitrage, it should be that the two options also costs nothing hence their premiums being the same. In that view, the forward rate for the maturity and the call

as well as put options with the same maturity have an equal strike price. (Frankel, Sarno & Taylor, 2003) The range forward is a variation of the regular forward contract that is primarily used to mitigate the foreign exchange risk. The contract entails taking opposite positions in options. The forwards are set up in a manner that the price of the put options is equal to the call option price. Thus, they are just like the standard forward contract as a zero cost contract providing downside protection while depriving the holders some of the upside.

There are two types of range forward; the short range forward contract and the long range forward contract and they represent the simplest form of options combinations. The forwards are also referred as flexible forward, cylinder option, options fence, zero cost tunnels and mini-max. (James, Marsh & Sarno, 2012) The forward provides the company with the benefit of knowing the worst and best case scenarios up front. Thus, they can manage the risk by utilizing the offered lower, and upper exchange rates cover known as ceiling and floor rates. The range forward provides a combination of the anticipated position in such manner that the foreign currency receivables that are payable in three months time with a reversal. They are unlike the standard forwards that lock in fixed exchange rate for the forward exchange rate. In addition, the buyer effectively pays away all the upside potential to the seller for an equivalent payment when the rates move in opposite. The range forward provides the holders with exposure to spot rates within a set range specified in long calls and short puts. Thus, it floors the downside risk while capping the potential upside. In addition, range forwards are structured such that no premiums are payable upfront. (Allen, 2003)

- Swap arrangement

SWAPs are crucial for financial markets and are derivative contracts that involve exchange or swap of the fixed interest rate for flexible rate payments. In that respect, they are essential tools for investors and companies for hedging and managing risks. Thus, a swap can be defined as an agreement that exists between parties for the exchange of a stream of interest payments with another for a given period. (Frankel, Sarno & Taylor, 2003) They entail exchange of principal as well as interest in a currency for the same in another currency. They are considered as foreign exchange transactions that are not legally required to be shown on a company's balance sheet. (Hull, 2011)

Uses for Swaps

The swaps have become crucial tools for risk managers as well as investors owing to their large number of potential uses.

- Speculation

The fact that the swaps require low capital up front, they provide the fixed income traders with an opportunity to speculate on the fluctuations of interest rates while avoiding the short and long term treasuries positions' costs. (Barron & Lynch, 1989)

- Portfolio management

The swaps allow managers to adjust, add or subtract interest rate exposures as well as offset the risks that are posed by the interest rate fluctuations. By either increasing or decreasing interest rate exposures in different parts of the yield curve by use of the swaps, the managers can either neutralize or ramp up the company's exposure to the changes in the yield curve.

(Copeland, 2008)

- Corporate finance

The companies that have liabilities with floating rates such as the loans that are fixed to the LIBOR can get into swaps and pay fixed or receives floating rates. In addition, companies can also get into swaps to pay at floating rates while receiving fixed rates as a hedge against the falling interest rates. (Copeland, 2008)

- Risk management

Financial institutions are usually involved in large transactions for loans, investments and derivative contracts. Thus, the bulk of the floating rate exposures cancel each other but the remaining interest risk can be offset through the swaps. (Hull, 2011)

- Rate lock and bonds issuance

When companies issue fixed rate bonds, they typically lock the current rate by getting into swaps that give time for them to go out and seek for other investors for the bond. Once they sell the bonds, the companies exit the swap contracts that are worth more hence offsetting the increasing financing cost. (Copeland, 2008)

Comparative advantage

Organizations can receive better borrowing rates than the others in different or the same markets. However, the available financing could not be a suitable one they are looking for. For instance, a company that has access to a lower rate in comparison with the market rate, but may be in need of a floating rate loan. In the meanwhile, another company could gain from the floating rate receipts but has a requirement for fixed rate payments. In that respect, the two companies could get into a swap that would enable them address their particular needs. (Wystup, 2006)

Application

The arrangement entails absolute advantage and comparative advantage depending on the differences in interest rates. Given the following rates In that case Wundermunder Plc has an absolute advantage in both cases as it can borrow at lower rates in UK and US. However, the two companies can benefit if they are involved in a SWAP and utilize the comparative advantage provided by the differences. (Hull, 2011)

Scenario: Wundermunder wants to borrow in dollars and Example in GBP.

Thus, the solution involving a swap arrangement is as follows.

Wundermunder borrows in GBP and Example borrows in dollar and then they SWAP

- Example lends dollars to Wundermunder at $+3\frac{1}{2}\%$ i. e. $5\frac{1}{2}\%$.

- Wundermunder lends GBP to Example at 7% so makes no profit or loss
- Example pays 7% less its profit, so: 7% $3\frac{1}{2}$ %= $3\frac{1}{2}$ % instead of 13%
- Wundermunder borrows at $5\frac{1}{2}$ % but makes no profit so $5\frac{1}{2}$ % instead of 9%

In view of the analysis, the ability of a company to borrow at a low rate is a result of the comparative advantage provided by the possible transactions between the two companies and interest rates. (Breda, 2004)

Requirements/conditions for a swap

- Companies have different comparative advantage in terms of cost of capital. For instance, the comparative cost of borrowing in one market is higher than that of another company. - Each company prefers to borrow from the market where it has a high comparative.

 All the companies must be satisfied in terms of one paying fewer rates and the other receiving an interest rate reduces its interest cost. (Valdez & Molyneux, 2012)

- Futures

Futures are financial contracts that obligate buyers to buy assets or the sellers top sell assets such as financial instruments and physical commodity at predetermined future price and dates. The usually contracts detail the quantity and quality of the assets involved and is standardized to facilitate the trading on futures exchange. Some of those contracts are settled in cash while others could call for physical delivery of the assets. In addition, the futures markets are marked by the ability to use high leverages compared to the stock markets. The futures can be used to hedge against the company's exposure to foreign exchange risk. That can be applied by using the futures to lock in a given rate hence reducing the risk. (Wystup, 2006) Thus, future contracts are legally binding agreements for buying and selling

of assets at specific dates and prices in the future. In respect to the foreign exchange, the foreign currencies are the assets of concern. The parties to the contract enter into an agreement before the exchange date and have a mandate to deposit a collateral. (Valdez & Molyneux, 2012)

In respect to foreign exchange, the futures contract is a transferable contract specifying the price for which a currency can be sold or bought at a future date hence allowing companies to hedge against the exchange rate risk. Owing to the futures contracts being marked by daily market operations, the involved investors can exit their obligations by selling or buying currencies prior to the contracts delivery dates. That is done by closing the current positions. In addition, the futures price is determined when the contracts are signed, and the currency pairs are exchanged on the delivery date that is in the future. (Valdez & Molyneux, 2012)

Uses and benefits

- Hedging

The contract is mainly used for exchange rate risk hedging that is applicable for the company considering that it receives and makes payments in foreign currencies. For instance, if the company was to make payments worth 100, 000 euros in three months time, it could be worried about the possible fluctuation in the euros exchange rate that could increase the cost of the payment the transaction undesirable for the business financial position and strategies. One of the solutions available to the company would be a future contract that locks in the exchange rate for the three months hence fully eliminating the risk exposure. (Allayannis, Ihrig & Weston, 2001) The method has a benefit in that the contracts can be held without the actual holding of the contract up and until the expiry and delivery of the assets. For instance, a company holding a long contract could go short on the same contract and offset their position hence exiting the market position. (Hull, 2011)

Conclusion

In view of the company's involvement in international trade, its is exposed to foreign exchange and interest rate risks, That is because of the possible change in value of the amount that it receives as well as it pays. That,

change in interest rates could result in increased capital cost while change in exchange rate could result to loss in value for exports to increase in cost of imports. Thus, the company needs to apply various risk management techniques that are available for hedging against interest rate and exchange rate fluctuations. Some of those techniques that have been identified and found to be effective include the range forward contracts, interest swap arrangements, as well as futures. In that view, the range forward presents a benefit in that they offset possible loss resulting from exchange rate fluctuations. That is because they involve opposite transactions in terms of put options and call options whose premiums cancels out hence being effective in managing the exposure. On the other hand, the swap arrangement have been identified as suitable where the parties have a comparative advantage hence some can benefit by paying less interest while the other receives an interest hence losing their actual interest cost. In addition, the swaps have been identified as being applicable to various uses that would help the company enhance its financial performance and manage exposures. Finally, the foreign exchange futures have been identified as being useful in managing the exchange rate fluctuations risk as it entails contracts that specify the price and date at which the foreign currency can be bought or sold. Thus, the three methods have been found to be useful and efficient hence can be applied by the company in reducing risks for its international trade and transactions.

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