

Foreign Exchange Swap Transaction

The Situation

You currently have EUR 500,000 in currency available to your firm, sitting in a bank account in Europe, invested at short-term rates. You have a funding requirement of USD 450,000 for three months in the United States and wish to utilize your EUR funds to meet this funding requirement. You do not wish to take any foreign exchange exchange risk on this transaction.

The Product (Foreign Exchange Swap)

A Foreign Exchange Swap transaction allows you to utilize the funds you have in one currency to fund obligations denominated in a different currency, without incurring foreign exchange risk. It is an effective and efficient cash management tool for companies that have assets and liabilities denominated in different currencies. On the near date, you swap one currency for another at an agreed foreign exchange rate and agree to swap the currencies back again on a future (far) date at a price agreed upon at the inception of the swap. In most cases, currencies are initially swapped at the spot rate and the future (far) rate is calculated by adjusting the spot price by the forward points for the length of time the swap transaction runs for.

The Solution

In the situation outlined above, you would agree to sell the EUR to the bank at the spot rate of 0.90. A full exchange of funds takes place on the near date and you would deliver EUR 500,000 to the bank. In return the bank will deliver USD 450,000 to you on the near date (typically but not always the spot date). At the same time you would agree to buy back the EUR and send back the USD in three months time at a spot price of 0.90, adjusted for forward points of $- .0045$, for a forward price of 0.8955. In this case, on the future (far) date the bank would return the EUR 500,000 and you would send the bank USD 447,750

The forward points adjustment is easily explained and calculated. In this case, assume the prevailing interest rate in Europe are 5% and in the United States are 3%. By entering into the foreign exchange swap with the bank you are giving them the use of a currency which they could invest at 5% and in return they are giving you the use of USD which you could only invest at 3%. The purpose of the forward points adjustment is to equalize this interest rate differential and compensate you for 'giving up' or 'receiving' the higher interest bearing currency.

The forward points are easy to calculate and a simple method is outlined below:

Near Date

On the near date the Bank receives EUR 500k and pays you \$450k.

\$450k divided by EUR 500k = Spot Exchange Rate of 0.9000

In the three month period the bank could earn 5% interest on the EUR 500k for three months = EUR 6,250

In the three month period you could earn 3% interest on the \$450k for three months = \$3,375

At the end of the period the bank would have EUR 506,250

At the end of the period you would have USD 453,375

Far Date

\$453,375 divided by EUR 506,250 = Exchange Rate of 0.8955

*Bank returns the EUR 500k to you at the agreed upon rate of 0.8955 and you send the bank USD 447,750***

**** The \$2,250 “gain” you made on the transaction described above is simply the monetized difference between the interest rates in the two countries/currencies. 2% earnings on EUR500k for three months translated back to USD is \$2,250.**

In cases where your surplus funds are in a currency with a low interest rate and your funding need is in a country with a higher interest rate environment, the forward points will be “against you” and the “gain” in the example above would be reversed.

Benefits and Disadvantages

Simple, efficient cross-currency cash management product

Mitigates Foreign Exchange Risk for Financing Transactions

Accounting and Tax issues must be weighed when considering such a transaction.