# **Currency Swap Basics**

Currency swaps are an essential financial instrument utilized by banks, multinational corporations and institutional investors. Although these type of swaps function in a similar fashion to interest rate swaps, there are some qualities that make currency swaps unique.

A currency swap involves two parties that exchange a notional principal with one another in order to gain exposure to a desired currency. Following the initial notional exchange, periodic cash flows are exchanged in the appropriate currency.

## **Purpose of Currency Swaps**

An American multinational company (Company A) may wish to expand its operations into Brazil. Simultaneously, a Brazilian company (Company B) is seeking entrance into the U.S. market. Financial problems that Company A will typically face stem from Brazilian banks' unwillingness to extend loans to international corporations. Therefore, in order to take out a loan in Brazil, Company A might be subject to a high interest rate of 10%. Likewise, Company B will not be able to attain a loan with a favorable interest rate in the U.S. market. The Brazilian Company may only be able to obtain credit at 9%.

While the cost of borrowing in the international market is unreasonably high, both of these companies have a competitive advantage for taking out loans from their domestic banks. Company A could hypothetically take out a loan from an American bank at 4% and Company B can borrow from its local institutions at 5%. The reason for this discrepancy in lending rates is due to the partnerships and ongoing relations that domestic companies usually have with their local lending authorities.

# **Setting Up the Currency Swap**

Based on the companies' competitive advantages of borrowing in their domestic markets, Company A will borrow the funds that Company B needs from an American bank while Company B borrows the funds that Company A will need through a Brazilian Bank. Both companies have effectively taken out a loan for the other company. The loans are then swapped. Assuming that the exchange rate between Brazil (BRL) and the U.S (USD) is 3.609BRL/1.00 USD and that both firms require the same equivalent amount of funding; the Brazilian company receives \$100 million from its American counterpart in exchange for 360.9 million real; these notional amounts are swapped.

Company A now holds the funds it needs in BRL while Company B is in possession of USD. However, both companies have to pay interest on the loans to their respective domestic banks in the original borrowed currency. Basically, although Company B swapped BRL for USD, it still must satisfy its obligation to the Brazilian bank in real. Company A faces a similar situation with its domestic

bank. As a result, both companies will incur interest payments equivalent to the other party's cost of borrowing. This last point forms the basis of the advantages that a currency swap provides.

### **Advantages of the Currency Swap**

Rather than borrowing Brazilian real at 10% Company A will have to satisfy the 5% interest rate payments incurred by Company B under its agreement with the Brazilian banks. Company A has effectively managed to replace a 10% loan with a 5% loan. Similarly, Company B no longer has to borrow funds from American institutions at 9%, but realizes the 4% borrowing cost incurred by its swap counterparty. Under this scenario, Company B actually managed to reduce its cost of debt by more than half. Instead of borrowing from international banks, both companies borrow domestically and lend to one another at the lower rate.

For simplicity, the aforementioned example excludes the role of a swap dealer, which serves as the intermediary for the currency swap transaction. With the presence of the dealer, the realized interest rate might be increased slightly as a form of commission to the intermediary. Typically, the spreads on currency swaps are fairly low and, depending on the notional principals and type of clients, may be in the vicinity of 10 basis points. Therefore, the actual borrowing rate for firms A and B is 5.1% and 4.1%, which is still better than the offered international rates.

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There are a few basic considerations that differentiate plain vanilla currency swaps from other types of swaps. In contrast to plain vanilla interest rate swaps and return based swaps, currency based instruments include an immediate and terminal exchange of notional principal. In the above example, the US\$100 million and 360 million reals are exchanged at initiation of the contract. At termination, the notional principals are returned to the appropriate party. Company A would have to return the notional principal in reals back to Company B, and vice versa. The terminal exchange, however, exposes both companies to foreign exchange risk as the exchange rate will likely not remain stable at original 3.609BRL/1.00USD level.

#### **Bottom Line**

Currency swaps are over-the-counter derivatives that serve two main purposes. First, they can be used to minimize foreign borrowing costs. Second, they could be used as tools to hedge exposure to exchange rate risk. Corporations with international exposure will often utilize these instruments for the former purpose while institutional investors will typically implement currency swaps as part of a comprehensive hedging strategy.