

Foreign Exchange Swaps

Foreign exchange swaps have appeared for some time in the intervention toolkit of many central banks around the world, although their popularity seems to be on the wane. In a Bank for International Settlements survey taken in 1997 (BIS 1997, p. 332), seven of fourteen industrial-country central banks surveyed listed foreign exchange swaps against either the U.S. dollar or the deutsche mark (or both) among the tools used to conduct open market intervention. Of those seven, five—Austria, Belgium, Germany, Italy, and the Netherlands—discontinued foreign exchange operations when they became part of the European Monetary Union. Of the remaining two, Australia and Switzerland, only the latter has used foreign exchange swaps extensively, at some point as its main intervention tool, with the total amount of swaps hovering for years at about 40 percent of the monetary base. This use partly reflected the limited depth of domestic debt markets associated with limited fiscal deficits historically incurred by the Swiss government.

Formally, a foreign exchange (FX) swap is a financial transaction whereby two parties exchange agreed-upon amounts of two currencies as a spot transaction, simultaneously agreeing to unwind the exchange at a future date, based on a rule that reflects both interest and principal payments. When the initiating agent is a central bank, the motivation for undertaking the swap is usually either to affect domestic liquidity or to manage foreign exchange reserves. (Rarely, central banks have been known to use currency swaps for the main purpose of hedging and asset-liability management.)

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As described above, intervention through FX swaps can be thought of as a repurchase agreement (repo) with foreign currency as the underlying collateral instead of securities. When the forward leg of the operation is missing, the transaction becomes formally similar to an outright open market operation with foreign exchange as the underlying asset, and the operation is usually classified as FX “intervention,” rather than a swap. In parallel fashion, a distinction is often made with respect to the scope of the operation: While FX swaps are usually seen as aimed at controlling domestic liquidity, FX intervention is usually seen as aimed at influencing the exchange rate.

By virtue of combining a spot and a forward transaction, FX swaps can also be priced easily, based on available forward quotations and, generally, satisfying the covered interest parity condition. Viewing swaps essentially as forward transactions also highlights requirements for their effective use—namely, price stability, depth of the underlying forward market, and ready availability of quotes—requirements that have led most central banks active in the swap market to undertake operations mostly in U.S. dollars or, until 1998, deutsche marks.

From the viewpoint of central bank risk management, FX swaps are no riskier than standard repo operations, since the central bank is not assuming any of the underlying FX risk, by virtue of the covered nature of the swap position. However, FX swaps have

been used in combination with spot FX intervention in a way that can lead to significant risk-bearing by the central bank: If the central bank uses the foreign currency obtained as collateral in the swap transaction to defend an exchange parity under pressure, it will incur losses if the defense fails before the forward leg of the swap transaction is unwound.

A contributing reason why FX swaps have not been particularly popular as tools for monetary control is that FX transactions normally are settled on the second business day following the trade, in part because the transaction typically involves a transfer of liabilities between central banks—so as to debit the sending party’s account and credit the receiving party’s account—and the two central banks may be in different time zones. This results in a delivery lag equal to at least the time difference plus the difference between each country’s local time for final settlement.¹ This arrangement makes FX swaps ill-suited for swift action and has caused several countries using FX swaps to routinely renew them at maturity, leaving the burden for high-frequency liquidity control to alternative instruments. The relative scarcity of banks sufficiently large and endowed with foreign currency on hand to act as counterparties has also contributed adversely to the diffusion of FX swaps as instruments for liquidity control.

¹Hence, for instance, U.S. dollar/Canadian dollar swaps are normally settled on the first business day after the trade.

References

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