

# Investment hedging: FX hedging for global fund investments

**Value proposition** | Short-dated FX forwards can be used to help eliminate the FX rate uncertainty that arises between the time a global fund investment is contracted and the time the deal is funded.

## Situation

US-based Global Fund ("Fund"), which has raised US dollar (USD) capital, submits a bid for an overseas asset priced in euros (EUR). The bid is accepted on October 1 and will be funded three to four weeks later. Simultaneously with the acceptance of the bid, the Fund may look to make a capital call for the USDs needed or instead opt to draw down from the capital call borrowing facility closer to the funding date. Either way, the amount of USDs needed will change between the bid acceptance date and the date the transaction is funded.

If the EUR appreciates, more USDs will be needed as the price is fixed in EUR. As a result, the Fund would need to call for more USD capital to close the transaction. This is an undesirable situation, as investors will have paid more for the asset than originally negotiated, eating into internal rate of return (IRR) and other investment performance metrics.

On the other hand, if the EUR depreciates and a capital was made on the bid acceptance date, capital will need to be returned, as fewer USDs will be needed for the acquisition. Economics aside, having to give capital back presents an administrative and operational burden which many times renders the windfall more trouble than it's worth.

## Potential size of FX rate movement

According to the long-term average price for an at-the-money option in the EUR/USD exchange rate<sup>1</sup>, we can assign a 1 in 10 chance that the EUR may move more than 5.2 percent in either direction over a 4-week period<sup>2</sup>.

## Solution

An FX forward is a contractual obligation to exchange one currency for another at a pre-determined fixed rate and specific date in the future.

### Purchase contract

The Fund agrees to pay €50.0M to acquire an asset from a European seller, which translates to \$57.5M according to the spot rate on October 1st, the day the bid is accepted. Funds will be remitted in 3 to 4 weeks.

### Trade details

**EUR/USD spot reference:** 1.1500

**Direction:** Buy EUR / Sell USD

**Notional:** €50.0M

**Contract rate:** 1.1530

**USD equivalent:** \$57.65M

**Tenor:** 4 weeks

Notes: Conservative (i.e. longer) tenors are advisable as it better to draw down the trade early than having to roll it forward, as the latter involves a cash event. Contract rate for buying EUR forward is less favorable than the prevailing spot rate, resulting in a \$150,000 difference between the USD needed for the forward transaction. The pricing of FX forward contracts is derived from three market factors: 1) spot exchange rates, 2) interbank interest rate differentials, and 3) cross-currency basis swap rates. For EUR/USD forwards, because US interest rates are higher than EU interest rates (net of cross-currency basis), the hedger receives a less advantageous rate for buying euro forward versus spot.

## Scenario analysis

The total USDs needed to close an overseas purchase can change materially over a 4-week period, from bid acceptance to deal funding.

According to an objective probabilistic framework, there is a 10 percent chance that on a €50.0M price tag, the price can change by more than \$3.0M in either direction.

However, regardless of where the EURUSD exchange rate should be trading on expiry date, according to the terms of the forward contract, the Fund will be selling \$57.65M in exchange for €50.0M to make the investment.



Source: Data - Bloomberg, Analytics - SVB FX Risk Advisory

## Additional considerations

- In the event the deal were to close earlier than expected, forwards may be drawn down or unwound early without penalty. The Fund would not be exposed to spot risk, only movements in the forward curve. However, the economic impact of forward curve volatility is generally minimal over short horizons.
- A delay in the expected deal close date can be handled by rolling the forward for an additional week, month, etc. as required. A “roll” is a standard FX contract, which does require cash settlement.
- An FX credit line or collateral posting is required to execute forwards. These are small for short-dated tenors.

If you'd like to discuss your specific risk profile, contact Bobby Donnelly at [bdonnelly@svb.com](mailto:bdonnelly@svb.com), West Coast/Central, or Ben Johnston at [bjohnston@svb.com](mailto:bjohnston@svb.com) for East Coast. You can also contact the author, Ivan Oscar Asensio, SVB FX Risk Advisory at [iasensio@svb.com](mailto:iasensio@svb.com).

<sup>1</sup> Assumes an average implied volatility, IV, for the EUR/USD exchange rate of 11.5%.

<sup>2</sup> Projected loss determined by  $IVT \times \text{SQRT}(T) \times Z(.90)$ , IV is implied volatility, T is years, and Z is from standard normal such that  $P(Z < z)$ .

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