



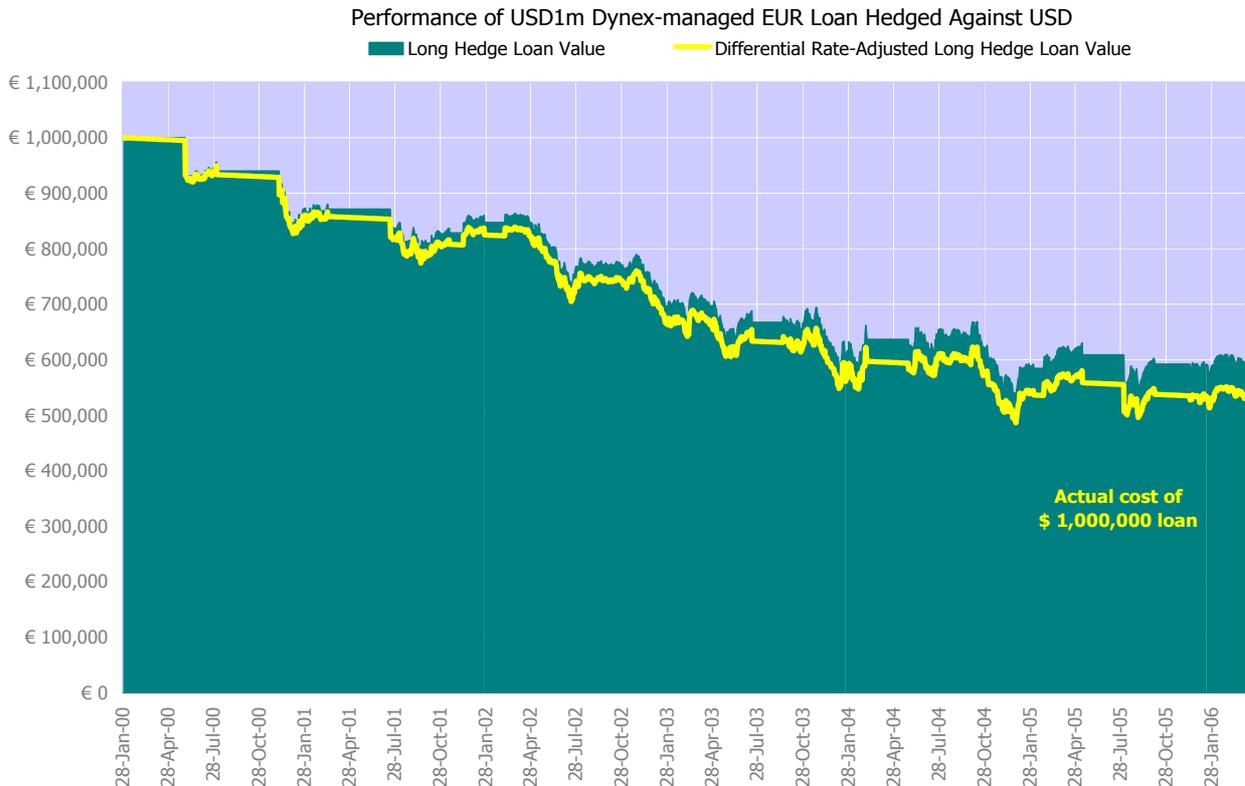
Currency Portfolio Management

Dynamically Hedged Debt Financing

Currency hedging requirements arise whenever financing needed in local currency is arranged by borrowing in a foreign currency at lower interest rates.

A real estate developer, for example, might be seeking financing of 100 million euros by borrowing the equivalent amount in Swiss francs. He can do so advantageously, because the interest rate applied to his Swiss franc loan is about 1.5% lower than the interest rate applicable to a euro loan (10-year euro bond rates being 4.6% versus Swiss francs rates of 3.1%). However there is the risk of the Swiss franc moving up against the euro, thus increasing the borrower's repayment cost.

This currency risk can be hedged by taking a short position in the home currency versus the loan currency. If this short position is constant over time, then this is "static" hedging. If it is changed over time, then the hedging strategy is called "dynamic".



This is an existing sample of 6-year EUR dynamic debt management performance for a U.S. borrower. A similar sample involving euro and Swiss franc is shown further below.

Static hedging

The Swiss franc borrower has to pay back his loan in Swiss Francs and is therefore concerned about a rise of the Swiss franc in relation to his home currency (euro). In dealer jargon, he is concerned about a rise in CHF/EUR, or - equivalently - concerned about a drop of EUR/CHF over the life time of his repayment period.

He can avert such currency movement risk by selling EUR/CHF at the loan expiry forward rate. Unfortunately, the pricing of such a forward "static hedge" transaction would reflect the interest rate differential between EUR and CHF and thus erase the advantage of borrowing at lower rates in the first place.

An alternative to static hedging is dynamic hedging, whereas a skilled currency manager varies the hedged portion dynamically between 0% and 100%.

Dynamic hedging

A currency manager who has a successful track record in producing alpha returns (e.g. straight profits) from exploiting up as well as down movements in the EUR/CHF exchange rate, by going selectively long EUR/CHF (buying EUR/CHF) and short EUR/CHF (selling short EUR/CHF), may also apply his skills to satisfying the hedging needs of the CHF borrower.

Dynamic hedging, cont'd

Say the currency manager is given a 100 million euro trading line (his maximum allowed euro exposure in any of his overnight positions). He might then typically achieve an annual average profit of, say, 5 million euro. Such profits may consist, for example, of 3.5 million euro achieved from all long EUR/CHF trades and 1.5 million euro achieved from short EUR/CHF trades. A long euro trade is a trade that is initiated by buying a certain amount - but never more than 100 million - of EUR/CHF and exiting the position by selling it subsequently at a profit or loss, as the case may be. A short EUR/CHF trade is a trade that is initiated by selling a certain amount - but never more than 100 million - of EUR/CHF and exiting the position by buying it back subsequently at a profit or loss, as the case may be.

At first glance it seems that the manager should only use his short EUR/CHF trades and apply them to the hedging account of the Swiss franc borrower. In the above example the account would benefit at the tune of 1.5 million euro in profits thus reducing its borrowing cost.

Yet he can do better than that, by agreeing with the client the following hedging schedule:

- If the manager goes short EUR/CHF for his managed currency portfolio "alpha" clients, then he shall go short 100% (e.g. 100 million EUR/CHF) in the dynamic hedge account.
- If the manager carries no EUR/CHF position for his "alpha" clients, he shall go short 50% (e.g. 50 million EUR/CHF) in the dynamic hedge account.
- If the manager goes long EUR/CHF for his "alpha" clients, he shall carry no EUR/CHF position in the dynamic hedge account.

In doing so he can convert the 1.5 million average annual profit available from using only EUR/CHF short signals, to 2.5 million euros. In all fairness it must be stated that the reverse may hold true if the hedge were required the other way (e.g. if Swiss interest rates were rising to exceed euro rates), but the above strategy exploits both situations, the currency managers profits from trading long EUR/CHF as well short EUR/CHF, as opposed to using only the sell or only the buy signals of the manager's strategy.

Dynamic hedging constraints

DynexCorp's trading models are known to be profitable in the long run. A hedging client might thus choose to follow these models with leverage *higher* than 1:1 in order to generate a higher return. In this case, the fluctuations of the hedging account would also be higher than otherwise. A strategy that exceeds certain limits of leverage can no longer be termed a hedging strategy, it is rather active FX speculation.

Performance of the dynamic hedging portfolio

First, the performance of the portfolio alone is considered. Next, this performance is treated with the bulleted hedging strategy cited above. DynexCorp has the tools to analyse the historical performance of trading model portfolios (see illustration).

