



FX Hedging: **10** Common Pitfalls

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RISK MANAGEMENT

▶ A Structured Approach to Financial Risk Management

Executive Summary

The design and implementation of an effective FX risk management strategy can be a challenge for many businesses. The extreme level of volatility experienced in the foreign exchange markets over the past couple of years has highlighted the need for large and small businesses to carefully consider their FX hedging requirements, and whether their current hedging programs are sufficient to meet their risk management objectives. This white paper highlights 10 key pitfalls that companies should be aware of when evaluating their current hedging strategy.

FX Hedging - 10 Common Pitfalls

1. Unclear Risk Management Objectives
2. Lack of Structured Hedging Strategy
3. Absence of Appropriate Performance Benchmarks
4. Allowing a "Market View" to Drive Strategic Hedging Decisions
5. Use of Complex Derivatives as Hedging Instruments
6. Inefficient Pricing of Hedging Instruments
7. Failure to Consider Internal Risk Reduction Opportunities
8. Failure to Consider the Impact of Correlations between Exposures
9. Confusing the Currency of Denomination with the Currency of Determination
10. Ignoring Cash Flow Implications

1 Unclear Risk Management Objectives

In order to design an effective FX hedging strategy, it is necessary to know exactly what the strategy is intended to accomplish. While this may appear to be self-evident, the process of determining a company's FX hedging objectives is not always as straightforward as it sounds. Stating a simple objective, such as "protecting the business from FX volatility" may be stating the truth, but it is not specific enough to effectively guide the design and implementation of an FX hedging strategy. Is the goal to protect the balance sheet or the P&L? Should accounting results be prioritised over cash flow impacts? What is the relevant time horizon? These are the types of questions that must be answered to allow the design of an effective hedging strategy.

A company's risk management objectives represent the foundation of its FX hedging strategy. As such, these objectives should be closely aligned with the overall business strategy, and they should be clear, specific and measurable.

2 Lack of Structured Hedging Strategy

The reluctance of many companies to adopt a formal, documented hedging strategy is perhaps understandable, as the need to remain flexible when managing risk in the volatile FX markets is paramount, and formal hedging policies may be seen as cumbersome and bureaucratic. However, lack of a clear (and documented) corporate FX hedging policy can be dangerous for a number of reasons, including:

- Less structure and discipline in the FX hedging process
- Lack of transparency when communicating the hedging strategy to key stakeholders
- Continuity risk in the event of staff changes or absences

3 Absence of Appropriate Performance Benchmarks

With almost any business activity, performance measurement is essential to determine the effectiveness of a chosen strategy. If a company's marketing department designs a new advertising campaign, the impact of that campaign on future sales will be closely monitored to determine whether the campaign should be continued. And just like the decision to launch a new advertising campaign, the determination of an FX hedging strategy is a key strategic decision, which can have a material impact on a company's bottom line. As such, it is important that a system is in place which allows the performance of the hedging strategy to be measured.

The choice of benchmark is also critical, and should be closely linked to the objectives of the hedging strategy. If, for example, the objective of the hedging strategy is to ensure that a company achieves its quarterly budget rate, then the benchmarking metrics must also include the achievement of this objective. If the hedging strategy is designed to incorporate a "market view", then the benchmarking system should include a metric that compares the achieved rate to a relevant passive hedging portfolio.

Failure to implement an effective benchmarking system will usually result in the "success" of the hedging strategy being determined by reference to inappropriate or irrelevant factors. In the absence of an alternative, the default benchmark is often simply the P&L impact of the hedge; if the hedge makes money it is determined to be a success and if it generates a loss it is deemed unsuccessful. Clearly, such an approach is dangerous, and ignoring the relationship between the hedge and the underlying exposure, can lead to poor risk management decision-making.

4 Allowing a “Market View” to Drive Strategic Hedging Decisions

As Neils Bohr, the Nobel-prize winning physicist, once wisely pointed out: “prediction is very difficult, especially about the future”. Despite the relevance of these words to the foreign exchange market, whose movements are determined by a bewildering array of economic, political and technical factors, the focus that many hedging programs place on FX market forecasts can often result in poor FX hedging decision-making.

A well-known example of such a case occurred in 2002, when South African Airways (SAA) received a study from its bankers predicting the USD would strengthen against the ZAR. Convinced that such a move would be damaging for the airline, and understandably seeking to protect themselves from such a scenario, SAA decided to lock in the current exchange rate for the next decade using a series of USDZAR forward contracts. Unfortunately, the bank’s forecast was wrong and the ZAR strengthened dramatically (by almost 30% in 2003 alone). The result was catastrophic for SAA, as the hedges resulted in the airline becoming temporarily insolvent and only government intervention kept the airline operating. Whilst it would be an oversimplification to blame this entire affair on the original USDZAR forecast, it does highlight the need to carefully consider the implications for a hedging strategy should the prevailing market view turn out to be wrong.

While it would be unrealistic and possibly naïve to expect an FX hedging program to be completely divorced from the idea of a market forecast, the key strategic hedging decisions (such as determining the appropriate hedge ratio and hedging time horizon) should be determined by internal business requirements and a consideration of the business’ key risk management objectives, rather than market forecasts. Market forecasting can potentially be of value when making short-term, tactical execution decisions, and also when considering a range of possible market outcomes (i.e. probabilistic rather than deterministic forecasting), but its role in determining a firm’s FX hedging strategy should be negligible. The importance of a firm’s FX hedging strategy means that it should be built on a stronger foundation than a market forecast, which like any forecast, will often be wrong.

5 Use of Complex Derivatives as Hedging Instruments

Undoubtedly one of the biggest and most dangerous pitfalls associated with FX hedging is the use of inappropriate hedging instruments. Often, in an attempt to reduce FX hedging costs, many companies find themselves with a portfolio full of complex (and dangerous) products and features, such as increased leverage, extensions, and barrier options such as “knock-outs”. Such features are most prevalent in so-called “zero cost” structures, and can result in a number of unpleasant consequences, including over-hedging of underlying positions, and losing protection when it is most needed.

As a general rule, FX hedging should increase the certainty of foreign currency cash flows rather than decrease it, and it should increase the transparency of the company’s underlying exposure rather than disguise it. Following this simple approach will ensure that inappropriate hedging structures are avoided.



6 Inefficient Pricing of Hedging Instruments

It used to be that ensuring a fair price on a hedging transaction involved little more than obtaining two or three competitive quotes from different banking providers, and possibly corroborating these prices using a pricing system such as Bloomberg or Reuters. However, one of the important consequences for corporate treasuries of the recent banking crisis has been that the task of ensuring fair pricing on derivative contracts has become simultaneously more difficult, and more important.

The spike in FX market volatility immediately post-crisis resulted in a dramatic increase in spreads on even the most “plain-vanilla” transactions (e.g. the average spread on a big-ticket EURUSD spot trade increased almost 5-fold, from about 1 pip to 5 pips). The impact was even more significant for less liquid currency pairs, and for forward contracts (even the spreads on currency swaps, which used to be negligible, increased dramatically). Perhaps even more important than the impact on FX spreads (which have since begun to narrow), was the impact of the banking crisis on how FX contracts are priced. Spreads that used to be determined primarily by market risks are now impacted by other factors, such as counterparty credit charges and the banks’ own cost of funds. Such factors can increase the variation in FX pricing, and make comparisons between providers more difficult.

In addition, when using more complex hedging structures, the ability to ensure pricing transparency is often even more challenging. Particularly when evaluating zero-premium hedging structures, it can be difficult to interpret the cost impact of adjusting the hedging structures parameters such as strike rates or notional amounts. However, the ultimate impact of such adjustments on a company’s bottom line can be significant.

So, how can corporates try and level the playing field with their banks and ensure fair pricing on hedging instruments? The solution lies in minimizing the bank’s information advantage as much as possible, which involves:

- Accessing up-to-date market information (e.g. spot prices, volatilities etc.).
- Understanding the bank’s pricing model inputs (including the impact of credit scores).
- Possessing the expertise to deconstruct the hedging structure to ensure its component parts are fairly priced. (It is often the case that more complex hedging structures, such as participators, can be more efficiently transacted by purchasing the component parts separately).

7 Failure to Consider Internal Risk Reduction Opportunities

Whilst not strictly speaking an FX hedging pitfall, the tendency of many companies to focus their efforts on external hedging solutions, often results in missed opportunities to mitigate FX risk effectively and efficiently through internal process adjustments. Such opportunities might include:

- Previously unidentified natural hedging opportunities
- Passing on / preventing the impact of FX volatility through pricing adjustments with customers / suppliers
- Including currency clauses within pricing contracts
- Ensuring central co-ordination of hedging policy to ensure risks are not being created through inefficient intra-group hedging (e.g. if two subsidiaries have different hedging policies, intercompany trade can result in the creation of material FX risk, despite the absence of any FX exposure on a consolidated group basis).

It should always be remembered that FX hedging is at best, a temporary solution to a long-term problem, and the most effective (and only long-term) technique to mitigate FX risk is to re-engineer the business processes that generate the risk in the first place.

8 Failure to Consider the Impact of Correlations between Exposures

FX is an asset class that can exhibit strong relationships with other asset classes (often commodities or other currencies). Accounting for these relationships within a corporate FX hedging strategy can be complicated, due largely to the complexity of the relationships between the exposures.

For example, take an aluminum producer, who has an exposure to the CAD (i.e. the cost of running its Canadian plants). If this company were to hedge its CAD exposure, it may inadvertently increase the volatility of company earnings, as the CAD and aluminum prices are positively correlated. Hedging its CAD operating costs would disturb this relationship and the FX hedging program could actually be increasing, rather than mitigating, the financial risk facing the business.

However, relying on such natural “proxy” hedges can also be dangerous. An unfortunate truism regarding correlations and risk management is that asset price correlations tend to break down when you most need them (often during times of high market volatility). As such, while correlations should not be ignored, they should also not be relied upon. Introducing optionality (often through the use of out-of-the-money plain vanilla options) is an excellent method for managing this issue within an FX hedging program. Such an approach simultaneously allows the benefits of exposure correlations to be maintained, whilst protecting against risk of correlation decay.

9 Confusing the Currency of Denomination with the Currency of Determination

The currency of denomination refers to the currency in which a contract is nominally priced, while the currency of determination refers to the currency that determines the real price. An example would be a contract to purchase oil in EUR. While such a contract would not generate an exposure to a USD cash flow (i.e. its currency of denomination is EUR), it would certainly represent an economic exposure to the USD as oil is priced in USD (i.e. its currency of determination is USD). In practice, there are two main situations that can lead to confusion between the currency on denomination and the currency of determination:

1. Commodity exposures where a global market price exists (e.g. oil, aluminum, copper).
2. Contracts that include currency clauses (i.e. the final contract price is subject to a formula which includes an exchange rate component).

If not carefully managed, these situations can lead to “hidden exposures” (i.e. FX exposures which cannot be identified simply by looking at cash flow forecasts) or “false exposures” (i.e. FX exposures which show up in cash flow forecasts but do not represent a true economic exposure). Such risks are particularly prevalent where FX hedging strategy is determined and executed separately from purchasing and/or pricing decisions (a very common situation in most multinational companies). It is therefore essential that the treasury/risk management function educates its business units so that exposures can be accurately reported.

10 Ignoring Cash Flow Implications

To illustrate the importance of the cash flow implications of hedging decisions, it is useful to borrow an example from the world of commodity hedging. The case of Metallgesellschaft AG and its disastrous oil-hedging program is often cited as a typical derivatives related disaster, and culminated in a loss of over USD 1 billion for the German industrial conglomerate. However, the actual derivatives that caused this loss (1-3 month oil futures contracts) were genuine hedges against the company’s underlying exposure (5-10 year fixed price gasoline, diesel and heating oil contracts). However, the mismatch between the short-term nature of the hedging contracts and the long-term nature of the underlying exposure led to huge cash shortfalls when the oil prices plunged and the hedging contracts needed to be rolled. As a result, the hedging program had to be liquidated pre-maturely, resulting in the huge cost to the company.

When designing an FX hedging program, the cash flow implications should be carefully reviewed in advance, to ensure that the hedging program does not create undue liquidity risk for the company. There are at least three scenarios that can lead to such an event:

1. Hedging non-cash exposures (e.g. hedging translation risk)
2. Hedging long-term exposures (the liquidity impact of potential margin calls / roll-overs must be considered)
3. Hedging uncertain future exposures (e.g. a private equity firm hedging its overseas portfolio companies when the disposal dates are unknown)

Such risks can often be best managed either by matching the durations of the hedge with underlying exposure (if adequate credit availability exists), or alternatively using plain vanilla options where the worst-case cash flow impact is known up-front.



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Mr Lester has over a decade of corporate risk management experience, as both a practitioner and a consultant, and has led risk management projects for several multinational companies and private equity firms. Previously, Mr Lester occupied the role of Head of Risk Management for Europe, the Middle East and Africa (FX and Commodities) at Alcan (now Rio Tinto) and has several years of corporate treasury experience with Dow Chemical and Avery Dennison.

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