KPMG

Analysing the FX risk position

Corporate Treasury

For companies with international operations and significant foreign exchange risks, detailed analysis of these risks is tremendously important. As well as examining the possible effects of FX on earnings, such analysis should in particular focus on foreign exchange exposure – the point of departure for all efforts to control FX activities. Appropriate risk control measures – from risk reduction to exposure management to hedging strategies – can then be identified.

In everyday practice, exposure analysis is often limited to merely adding foreign exchange positions together. Rarely is more in-depth analysis conducted in order to pinpoint specific measures and reveal potential for optimisation. Sadly, the consequences are blatantly obvious: All too often, unexpected FX effects give treasurers a nasty surprise. Common causes include a lack of accurate planning for the maturity profiles of payments in foreign currencies, with the result that specific hedging does not take place. Alternatively, risk horizons are often assumed to be too short or too long. This leads to economic under hedging or over hedging, with all the effects this entails for foreign exchange.

Analysis and visualisation of the foreign exchange risk position

What, then, should be done? What is needed is a 360-degree analysis of the risk position to create transparency about the nature and structure of foreign currency cash flows! Comprehensive analysis lays a solid foundation on which to identify the risk profile. It should cover four distinct dimensions:

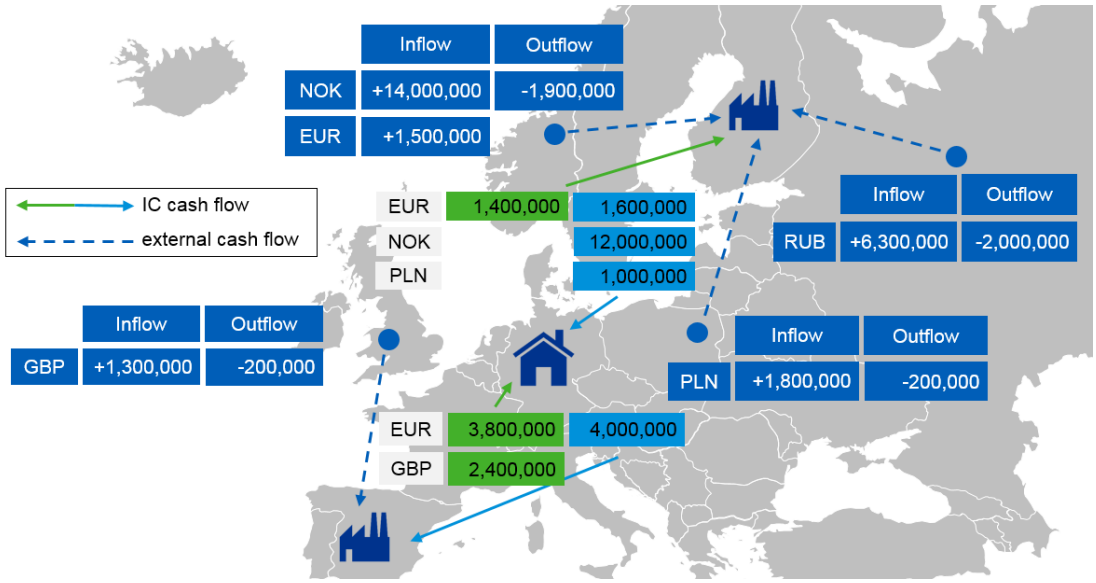
- Nature of the cash flows (e.g. splitting cash flows into the following categories: divisions or product groups, currencies (e.g. by risk content), internal/external and sender/recipient)
- Payment periods (e.g. determining the length of the risk period from which a cash flow results)
- Historical development of the company's payment volume (e.g. identifying anomalies due to a significant increase in recurrent exposures over time)
- Frequency of exposure (e.g. clarifying whether exposures are one-time events or regular occurrences).

The precise number and definition of dimensions must be tailored to each specific company depending on the business model and both external and internal conditions (e.g. data availability and any regulatory changes).

What is known as a "cash flow map" provides a very vivid complement to FX risk position analysis. At a given point in time, a cash flow map visualises internal and external cash flows, breaking them down

by currency within the structure of the company being analysed. A variety of structured information can thus be seen at a glance. For example, the nature of the cash flow – internal or external, the specific currency and/or the sender or recipient – can be seen immediately. In addition, by juxtaposing a current cash flow map with maps from previous reporting periods, it is possible to produce tangible historical comparisons.

The figure below shows an example of a cash flow map based on a fictitious company headquartered in Germany:



What can we learn from this cash flow map? If we look at the payments in foreign currencies made by the Finnish subsidiary and the same subsidiary's intercompany transactions with the German parent company, we first see external cash flows in Norwegian kroner (NOK), Russian roubles (RUB) and Polish zloty (PLN). If these positions are netted, the Finnish subsidiary is left with inflows totalling KNOK 12,100, KRUB 4,300 and KPLN 1,600. Transactions with the German parent company give rise to payables and receivables denominated in EUR, NOK and PLN. In this example, the netting of all external and internal NOK cash flows gives the Finnish company a NOK exposure of KNOK 100. This detailed insight into the risk position of the Finnish subsidiary allows potential for optimisation and alternative courses of action in the context of foreign exchange management to be identified in order to control or mitigate risks within the company. Based on this new overall perspective, it would, for example, be possible to validate the extent to which intercompany transactions could in future be invoiced in euros rather than in a foreign currency. The map also shows that some Norwegian customers pay the Finnish company in euros. One way to optimise the constellation would be to further increase the proportion of external EUR inflows from Norwegian customers, as this would reduce the company's NOK risk position. Both measures would reduce foreign exchange exposure – without the need for expensive hedging instruments.

In this context, it would also be feasible to examine what foreign exchange effects occur in the value chain of a specific product group. All transactions in a product group's value chain that cross the borders of the single currency area could be visualised transparently, thereby highlighting the associated foreign currency effects.

Bottom line

Analysing a company's FX risk position opens up all kinds of possibilities! If highly granular data is used, the information about cash flows can be broken down to a wide variety of levels (to analyse individual divisions or regions, for example). Compared to purely tabular solutions derived from databases, the visualisation of cash flows creates a user-friendly overview which allows anomalies and peculiarities in the structures to be spotted quickly. Based on these insights, solution strategies can be formulated to reduce a company's FX risks. One special benefit is that visualising cash flows makes it easier for the treasurer to communicate with the CFO and other parts of the organisation (purchasing,

sales and controlling, for example), and thus to illustrate the advantages of taking action on foreign exchange management.
Alongside operational risk management, regular and detailed analysis of the foreign exchange position is vital if anomalies in the risk profile are to be identified. Such analysis allows specific control and containment actions to be taken, for example. These in turn can lower foreign exchange risks – and significantly reduce the risk of nasty surprises for the treasurer.

KPMG

Broader horizons for energy providers

Corporate Treasury

Energy providers have traditionally restricted themselves to selling electricity and gas, sourcing the required volumes in a structured manner on wholesale markets (and/or generating it themselves), operating the grid business and, less frequently, engaging in proprietary trading. However, as renewable energy forms (such as wind, photovoltaics and biogas) become ever more widespread, power generation becomes more and more decentralized (thanks to small and micro-installations, "prosumers" and cogeneration plants) and specialized newcomers in particular take up their positions on the market, power utilities' distribution business is coming under ever heavier pressure. As a result, the margins on the traditional sale of energy are eroding continually.

Some players on the energy market have understood that widening their trading strategy to include the short-term market can serve as a useful complement to their existing activities. The short-term market (15-minute intraday trading) comprises the opportunities created by the direct marketing of fluctuating renewables, the optimisation of controllable facilities (such as feed-in from biogas plants and from flexible industrial plants) and transactions to balance out deviations forecast for key accounts on the basis of real-time data. Typical features of this market are extreme volatility due to a dependency on parameters that are difficult to forecast (solar radiation, wind etc.) and serious complexity due to the sheer diversity of products (auctions, simultaneous constant trading of 60-minute and 15-minute products). This level of volatility creates pronounced risks for companies that can only react, but opens up tremendous opportunities for those that can operate proactively on the market. Against this backdrop, moderately to very flexible generation and consumption systems can be marketed more effectively – i.e. with a greater chance of higher yields – provided the risks can be contained appropriately.

The key questions with which the emergence of this new market confronts energy producers are: What quantities should be marketed when and under what conditions on which of the available markets (the futures market, day-ahead market or intraday market)? What risks can a company eliminate by marketing power generation on the futures market? And how does this possibility compare with the opportunities that are thus foregone in short-term trading? The answers depend on the nature of the power plants which are available, how flexible they are and the current market situation, which is constantly changing. A higher margin on forward sales, for example, will prompt the marketing of a larger share on this market, while the expectation of higher volatility in short-term trading would trigger the allocation of volumes on this market.

High volatility and a diverse array of products makes the interplay between different marketing possibilities hugely complex. And this fact takes energy providers into a new dimension of tackling decisions under uncertain circumstances. Risk management must therefore be stepped up, and a clear definition of the adjusted operational framework is needed. Beyond that, the most extensive adjustments can be found in trading. Alongside the introduction of automated and algorithmic trading to facilitate effective action on the short-term market, new valuation and optimisation models are also needed to provide effective support for portfolio management decisions about the allocation of volumes and flexibility. At the same time, these models constantly provide a quantitative decision basis in response to the key questions raised above. In their efforts to eliminate uncertainty, energy providers receive valuable support from KPMG's Commodity & Energy Risk Management specialists.

KPMG

Upgrading the treasury function in SMEs

Six things to look out for on the way up

Corporate Treasury

Clearly defined core banks, electronic trading systems and fully automated payment runs are just a few of the topics major corporations have been tackling for the last two decades or so. And they have tackled them well: These days, managing the complexity of payment streams and exchange rate risks would be inconceivable without a professionally run treasury department. Perhaps the only surprising thing is that this development seems to have bypassed many small and medium-sized enterprises (SMEs). For many of these firms, telephone trading, a bouquet of banking partners and the good old hoard of cash stashed away in a cupboard are still business as usual. This article briefly explains what steps must be taken so that smaller companies too can get in shape for the treasury needs of the 21st century.

- Choice of banking partners: The work of treasury departments often begins with the definition of a global circle of core banks. Experience shows that this can easily save 15-20% off bank charges while delivering a better level of service. It also considerably simplifies downstream coordination and centralisation processes within the system landscape.

- Cash pooling: Without their global cash pool structures, many large companies would these days effectively grind to a halt. The inefficient distribution of cash and chunky buffer stocks in each currency and country are thus a thing of the past. The result? Highly efficient central investment strategies and the availability of liquidity specifically where it is needed. SMEs would do well to follow this example and think about cash pooling if they operate at multiple locations across Europe or even worldwide. Doing so would bring them, too, a step closer to the vision of a "daily financial status at the push of a button".

- Electronic trading platforms: Ten years ago, the majority of daily currency and hedging transactions were handled over the phone. Today, electronic trading platforms dominate the proceedings. Apart from providing a far better pricing structure for individual transactions, platforms such as FXall and 360T also offer automated reporting and validation with regard to market terms and conditions. Different banking partners can also be compared transparently for specific transactions at any time, with the information readily available for the next meeting with each bank.

- Treasury management systems (TMS): The choice of a suitable TMS depends first and foremost on the needs of the company. Having said that, almost all customers will benefit from dovetailing their ERP systems with all external banking processes, as well as from the ability to centralise all treasury data in a single system. At the same time, customers receive convenient and clearly structured reports which, for example, allow changes in market prices to be identified in the balance sheet and income statement. In the future, TMS providers will further optimise the support they provide in relation to third parties, enabling external systems to be docked on and TMS to be used as an open platform. This will give customers greater flexibility, as companies can adjust their processes and methodologies at any time in line with changing exogenous circumstances. Equally important is the fact that modern TMS systems no longer cost the Earth!

- Automated posting of account statements: To this day, many companies still post account statements manually. Thanks to standard treasury management systems, however, this task can be automated very conveniently, saving a lot of time and lending greater stability to processes.

- Bank account management: The aim is to achieve transparency across all enterprise-wide bank accounts and authorisations at any time and in any place around the globe. On a technical level, this can be achieved without difficulty using software as a service solutions. Apart from the benefit of establishing internal control systems, such solutions are also eminently advisable in particular with a view to cyber-crime.

Today, all these measures empower companies to handle their financial transactions much more centrally and much more strictly than was possible only a few years ago. Blind spots and inefficiencies are eliminated, simplifying the decision-making process and allowing better use to be made of available resources.

To inject professionalism into treasury processes and organisations, made-to-measure solutions are now available on the market for corporate customers of every shape and size. Standard TMS systems – available only at enormous expense not so very long ago – can now also be scaled down. Which is good news, as smaller firms in particular often do not need the full spectrum of modern treasury functionality for their business. A global value-at-risk model, for instance, is better suited to large corporations. On the other hand, virtually every business will derive benefits from system-based scheduling, liquidity forecasts, the inventorying of derivatives and loans, an electronic trading solution and a central payment transaction platform.