CURRENCY HEDGING – PROTECTING VALUE NOT JUST NUMBERS

by Michael Turner-Samuels, Principal, N&G Financial Management

IN BRIEF

The author of this article says that we should be looking at currency hedging from a third point of view – not just p&l and balance sheet, but also cash flow.

He summarises the reasons, provides a new exposure definition, shows how to establish what a company's base currency is, and how to calculate and analyse net currency cash flow.

Two case studies illustrate where failure to include the results of this type of analysis meant that exposure of the enterprise's value to currency movements had been overlooked and was sub-optimal.

N&G provides specialised cash flow enhancement services and treasury consulting to corporates and venture capitalists. Their products, such as Working Capital Optimisation (WCO™) and net currency cash flow hedging analyses, are delivered using change management techniques ensuring full client involvement in and control over the improvements, resulting in more effective and long-lasting benefits.

AS treasurers, we have some fairly well-defined ways of classifying, measuring and hedging the currency exposures of our corporations. Many manuals and treatises have been written on the subject of corporate currency exposure and how to hedge it. Much good common sense, and a little gobbledegook, is now ingrained in the history and training of our profession.

We have looked at the company's reported results and seen where exchange rate movements create fluctuations, and, with our banking colleagues in the global financial markets, we have developed and used both simple and complex currency instruments and hedging methods to help us manage these exposures.

But in doing all this we seem to have missed something rather important.

The traditional view

Let's remind ourselves of the general ways we look at currency exposure. While different names can be used, the main exposures are usually described as falling within one of these four classifications – **transaction**, **translation**, **economic** and **balance sheet**. Here are the key characteristics of each:

1. ***Transaction*** – when a specific commercial contract has been entered into giving rise to exchange risk. Most commercial contracts carry a risk limited to few months. If the currency moves adversely during the period of exposure, reported sales or costs and hence profits will deteriorate. Hedging this exposure is usually mandatory under a company's risk policies, and often performed by buying or selling the foreign currency forwards, sometimes centrally on a consolidated group-wide basis.

2. ***Translation*** – this relates to protecting the translation rate of the foreign currency profits of overseas businesses. It's hard to do for longer than about twelve months forward, but over this period it can bring some certainty to consolidated profits arising from the results of overseas operations. It requires some judgement as to what future performance will be. Most companies do not engage in translation hedging, usually for one or more of the following reasons: it is 'too expensive' (though it needn't be); it only defers for twelve months the inevitable (generally true); or they don't understand it (yes, it's important not to do things you don't understand).

3. ***Economic*** – this relates to the fact that while a parent company remains invested in an operation with foreign currency net income and/or costs, then the group has an ongoing long-term risk associated with the currency exposure. Despite economic risk often being one the largest currency-based exposures of a group, it is generally not specifically hedged. This is mainly because it is considered too difficult to accomplish. Net cash flow hedging as discussed in this article helps hedge economic risk.

4. ***Balance Sheet*** – changes in the value of foreign currency net assets flow directly into

reported Shareholders Funds (or Equity or similar) in the consolidated balance sheet. In most cases Shareholders Funds has little or no correlation to the company's true value or the shareholders' true equity, but that's how things are reported. Hedging is undertaken by having debt in the foreign currency at a level up to the pre-debt currency net assets. Changes in the balance sheet value of the net assets are offset by changes in the value of the debt. This type of hedging is seen quite often.

But let's step back for a minute and explore what we as treasurers are trying to do here.

Why do we hedge?

What is the point of hedging? A simple question. And I think the answer's petty simple too – we're trying to get more certainty in an uncertain world. We're trying to reduce fluctuations caused by exchange rate movements. We're trying to *manage* the exposure.

Quite right. But let's be the child and ask the question again – why? There can be only one reason for this type of activity in a corporation – we're trying to enhance shareholder value. We're trying to make the company worth more. And in this case we're trying to do it by reducing the risks associated with moving exchange rates, thereby creating more certainty of future performance. For as we all know, *increased certainty* is a key component of increased value.

So that's it – hedging is about protecting and thereby enhancing **value**. We therefore need to look a little more closely at where value comes from.

What is value?

This debate has gone on for decades, and mainly the answer has been identified thus: **the current value of an enterprise is the perceived current value of its future net cash flows.** As treasurers, we usually find this concept easy to appreciate (although isn't it amazing how many businesses don't seem to be run on this basis? But that's another story).

It's worth repeating – value comes from *future net cash flows*.

Look at how share prices fall when analysts revise downwards their projections of future dividends – invariably because they have revised down the future free cash flow projection. Ultimately, everything depends upon net free cash flow – without it a company eventually dies. Meanwhile, what we have been hedging ... the profit and loss account and the balance sheet, but not the net cash flow.

The key problem is that the p&l and balance sheet do not state the amount of cash a business can generate. For instance, the rather important item 'goodwill' is never properly stated therein (a problem with which our dear friends the professional accountants continue to grapple).

It is now widely recognised that the typical p&l and balance sheet do not really tell you about cash flow. Look at the more useful ways we have developed for evaluating a business, such as EBITDA, IRR, NPV, DCF – all are cash flow driven. Look also at the success of management decision aids such as EVA®, or the simpler next-generation version – CVA® by Anelda AB – which are tools to show management the cash flow implications of what they have been doing and what they propose to do.

So the disconnect becomes obvious – hedging balance sheet or profit and loss numbers is not the same as hedging net cash flow. We need a fresh look at what we *should be* hedging to see if what we are *actually* hedging matches up.

A new exposure definition

Hedging currency exposure is about minimising fluctuations in future net cash flows arising from exchange rate movements. If your group has net cash flows generated in a currency foreign to your base currency then the value of the group in the base currency will fluctuate with movements in the exchange rate (whether or not the foreign cash flows are actually exchanged into base currency).

The first thing to be sure about is what your base currency is. This is not always as simple to answer as may first appear. Try this example:

Base currency example

About the least clear situation I have come across was related to an 'Internet hotel' business, i.e. they built secure buildings with extensive computer hardware linked to the global telecoms network by some heavy-duty lines. They then rented out virtual and physical space in the facility for customers to store and access their online data, guaranteeing 99.9 per cent uptime access. Their customers were the likes of banks, ISPs, large corporations, etc.

This business was owned by some US dollar venture capital funds. Its main physical assets were located in centres in euro zone countries with associated euro operating costs. Their vision was to be the highest quality European provider, and they had no plans to expand into the US. Its HQ with the top management and one major facility were in the UK. It had some substantial dollar denominated credit facilities, which it had partly drawn in euros. Their accounts were prepared in dollars, though they recognised that this could be changed if

Table 1 – Net cash flow per annum: sterling/euro

(All numbers in sterling)	2001 forecast			2002 budget			2003 estimate		
	Euro	£	Total	Euro	£	Total	Euro	£	Total
EBITDA									
Changes in W/C									
Net Capex									
Other e.g. M&A									
Tax (Cash)									
Net C/F pre-Interest									

appropriate. The pricing of their services in the market place was historically heavily influenced by dollar-based competitors, though it was moving towards more local pricing for the (mainly euro) countries they were in. The shareholders' preferred exit strategy was a London stock exchange listing denominated in sterling.

Their appropriate base currency? Answers on a postcard please.

Hopefully your company's base currency is rather more obvious, but it's worth a few seconds' thought. Having established the base currency, we then need to calculate the net foreign currency cash flows.

Calculating net currency cash flow

The first thing to do is draw up a table showing your net cash flows per annum in your key operating currencies, before interest payments but after tax. The table might look like this if just sterling and the euro are involved as the major currencies (see table 1).

Some care has to be taken in collating these numbers – sometimes there are significant foreign currency cash flows taking place in UK operations, in which case you can't just rely only upon the overseas operations' accounts. Also cash tax is often not the same as the tax shown in the statutory accounts. Foreign currency debt repayments or planned material acquisitions or disposals must also be included in an appropriate manner.

Forward-looking numbers are required, so some judgement is needed (and no reason to stop at two years out if you can generate longer).

We are only looking here for broad-brush accuracy of the split of the total between the currency elements. There will undoubtedly be required some numbers that cannot be taken straight from the management or statutory accounts (which tells you something about how useful they are), but generally some informed and reasoned judgements will give you sufficient accuracy.

The next thing to do is to average your numbers per currency across the years. If there is a trend over time then some weighting of the average is appropriate. Having got an average for the pre-interest cash flow per currency now put in your net average interest expense (or income) per currency, to give final net cash flow per currency.

A simple example with some numbers might look as shown in table 2.

The example business could be a UK services company with significant operations in Germany. Let's say the company is London listed and that the appropriate base currency is sterling.

Then add on a simple sensitivity analysis to show the effects of exchange rate movements – see table 3.

Now imagine all those equity analysts running their what-if projections, trying to calculate the current value of the company based on its potential future performance and especially its potential future net cashflows. They will see that if sterling appreciates against the euro by 10 per cent then the company is going to be worth some 9 per cent less to its shareholders. They are going to see that this exposure is unhedged. They will mark down the stock for the uncertainty, and of course if sterling does appreciate they'll mark down the stock for the fact.

How can we hedge against these potentially substantial value impacts?

How to hedge

The objective is to *minimise net foreign currency cash flow* and *maximise net base currency cash flow*. The less foreign currency cash flow you have as a part of the total cash flow, the less the impact of exchange rate movements on value. The answer in most real-life cases is to look at the only thing you have got to play with – the currency of the interest expense (or income) on debt (or cash).

Turning back to our example, look at what happens if we

Table 2 – Net cash flow per currency

(All numbers in sterling millions)	3 yr average (2001-2003)		
	Euros	£	Total
Net C/F pre-Interest	24	13	37
Interest		-11	-11
Net Cash Flow	24	2	26

Table 3 – Sensitivity analysis

(All numbers in sterling millions)	3 yr average		
	Euros	£	Total
Net C/F pre-Interest	24	13	37
Interest		-11	-11
Net Cash Flow	24	2	26
Euro + 10%	26.4	2	28.4
Euro - 10%	21.6	2	23.6
Fluctuation			+/- 9%

Table 4 – Impact of changed debt currency

(All numbers in sterling millions)	3 yr average		
	Euros	£	Total
Net C/F pre-Interest	24	13	37
Interest	-11		-11
Net Cash Flow	13	13	26
Euro + 10%	14.3	13	27.3
Euro - 10%	11.7	13	24.7
Fluctuation			+/- 5%

change the currency of the debt and hence the interest expense to euros (assuming for the sake of simplicity roughly similar interest rates) – see table 4.

The net cash flow sensitivity has been nearly halved. This will reduce the current value mark-down due to uncertainty, and will reduce the actual value mark-down if an adverse change actually occurs – a significant enhancement to shareholder value.

Of course real-life examples are rarely quite this simple. As treasury consultants we get asked to undertake currency exposure reviews – often by FDs and treasurers because they suspect that the company is mis-aligned but they haven't quite put their finger on the problem, or they want an independent recommendation to support a proposal to the board. Often these companies do have significant unhedged net currency cash flow exposure, and they also have the means of reducing the exposure, sometimes quite dramatically.

What if the foreign currency net assets are less than the proposed level of foreign currency debt?

This question is sometimes asked by people used to thinking in terms of balance sheet hedging. The thing to remember is that if a business has positive net cash flow in a foreign currency then there is a related foreign currency amount of goodwill or value associated with it. This goodwill asset may or may not be on the balance sheet but it nevertheless exists – it is the value that derives from owning the net currency cash flow. The base currency amount of this value will fluctuate with movements in the exchange rate, impacting on the consolidated value of the parent group.

Generally, this goodwill asset plus the other balance sheet currency assets should be greater than the proposed level of currency debt.

Other considerations

Every case and every company will of course be different. There are often impacts in other areas that can result from making a substantial change in the currency of the company's debt. Part of our analyses are to make sure these are identified and understood, and in some cases the result helps define the limits on the level of change to be made, or can influence the mechanics of the change.

The important point to remember is that, at the end of the day, reducing the net foreign currency cash flow exposure within a consolidated group is good for everybody, from the shareholders upwards.

Indeed, these net cash flow hedging principles are already being used by some of the most sophisticated venture capitalists as the only currency exposure management technique of real value.

Conclusion

There can be no doubt that, alongside the traditional p&l and balance sheet views of currency exposure, treasurers should also obtain a net currency cash flow exposure analysis. The results of this analysis can strongly influence aspects of the treasurer's currency hedging activity, and in particular lead to a change in the currency of the group's debt or cash.

Failure to include the results of a net currency cash flow exposure analysis in currency exposure management decisions means that exposure of the enterprise's value to currency movements has been overlooked, and its management may well not be optimised. □

Case Study 1

This is a major international food manufacturer owned by a venture capital firm. It had substantial operations and hence net cash flows in the euro-zone, the UK and Scandinavia. The base currency was agreed as the euro, and it had significant euro debt arising in part from its leveraged buyout, as well as from the strategy of further investment to build the euro operations. The net currency cash flow analysis we performed revealed that the forecasts showed a negative net cash flow in euros for the next few years with positive cash flows in sterling and various Scandinavian kroner. As a result there was a 20 per cent value fluctuation for each 10 per cent movement of the euro.

The recommendation therefore was to change the currency of the debt into sterling and some kroner, by which they were able to cut the fluctuation by more than half, adding materially to shareholder value.

Case Study 2

A large UK utilities group has expanding overseas operations. This group had a sterling cash pile and no material debt. The agreed base currency was sterling. Our review showed that net foreign currency cash flow was going to be negative for the next few years because of the planned expansion. We showed that holding their cash in the foreign currency would reduce the net foreign currency cash outflow, and the sensitivity to rate changes. No change of ownership of the cash was required, just a change of the currency of the cash and its interest income, through the use of derivatives.

MICHAEL TURNER-SAMUELS

Principal, N&G Financial Management

Michael Turner-Samuels is Principal of N&G Financial Management in the UK.

He previously held a series of senior finance positions within international groups, including Director of Corporate Development at Thorn plc, and Group Treasurer at Thorn and Unigate plc. A member of the ACT and a solicitor, he cut his teeth in the 1980s undertaking a series of global financial restructurings at Massey Ferguson (later called Varity Corporation), which included five years based in North America.

E-mail: michael.turner-samuels@n-g.nu