

CPD Quiz

March 2010

Spotlight on Currency Risk Management

Question 1

It is important in currency risk management to try to establish the objectives right at the outset. This is particularly true when a company grows from being a small 'owner-manages-everything' business to a more professionally managed structure. With clear objectives the principles can be applied to situations as they arise rather than trying to think through from scratch each time – and, no doubt, resulting in a haphazard series of actions.

The important thing is to be realistic on what can be achieved – so an objective like 'avoid all losses but capture potential gains' would be ruled out. First, it needs to be made clear whether the activity is primarily about risk management or about profit maximisation. Having established that, it helps to specify what form the risk management is going to take, then it becomes clearer how the objectives should be achieved. So 'reduce volatility in reported profit' might be a valid objective, or 'ensure interest cover remains above the covenanted level' might be sensible and achievable, but also points towards what might be thought of as a risk and how risks might be managed.

What is the most likely underlying currency management objective for a small company with a high cash flow and low borrowings that is considering an equity issue in the next year or two?

- (a) ensure interest cover remains above the covenanted level
- (b) reduce volatility in reported earnings
- (c) ensure that the balance sheet is unaffected by currency movements
- (d) maximise reported earnings by capturing all potential currency gains
- (e) don't know

Answer

The right answer is (b) reduce volatility in reported earnings

A company with low debt and high cash flow is unlikely to be focussing its risk management on debt covenants. With an equity issue in the offing it is much more likely to be concerned about the story it will be able to present to equity investors – a story of stable earnings – hopefully stable and growing! It is possible that the balance sheet might be important if the company is, for example, a property company – but an emphasis on earnings is more likely. Maximising reported earnings is tantamount to encouraging the taking of risk positions to try to maximise earnings. This is very close to increasing risk rather than reducing it.

Question 2

Transaction risk and economic risk are both concerned with cash currency risks as opposed to the non-cash nature of translation risk. Transaction risk is the immediate, certain aspect of currency cash flow risk while economic risk normally describes the longer-term more uncertain aspect of the risk. So having issued a currency invoice to a reliable customer, the uncertainty mostly concerns the home currency value of the currency payment when it is received. Relatively less uncertainty concerns whether the invoice will be paid at all – if it really is a reliable customer.

Economic risk relates to the longer term issues of whether the customer will be buying as much from you next year, at what home currency price, and many other questions about what your non-home-currency business will be like next year. A big part of this will constitute the uncertainty surrounding the competitive activity next year – so sometimes the term ‘economic risk’ is used to refer to the rather more limited risk associated only with your overseas competitors.

The point here is that transaction risk and economic risk are essentially the same thing; one relating to the short term and the other to the longer term.

One thing that is fairly certain through all of this is that we can reverse the situation to help understand risks better. We normally think about currency risk from the perspective of the exporter or importer or, more generally, a business engaged in international, multi-currency activity. But what about the domestic business that sees itself only in terms of its domestic market, having no desire or ambition to operate on a bigger scale?

For a purely domestic business making hi-fi amplifiers, which of the following best describes the currency risk that they face?

- (a) there isn't any – there are no currency sales or costs**
- (b) the industry is price insensitive and therefore price/cost doesn't matter**
- (c) there is no transaction risk but there is an economic risk, mainly from Asian currencies**
- (d) there is no economic risk but there is a transaction risk, mainly from Asian currencies**
- (e) don't know**

Answer

The right answer is (c) there is no transaction risk but there is an economic risk, mainly from Asian currencies.

The ‘definitely wrong’ answer is (a) there isn't any. Clearly the competition for the hi-fi amplifiers is relevant, and much of that competition is from overseas. Even if that could be denied, is it credible that any electrical/electronic component would have no non-domestic currency input, almost whatever the domestic currency was? If the main competition to these amplifiers is from the Far East, then the currency risk must emanate from there. A reduction in the value of the Yen (for instance) makes Japanese exports cheaper and therefore more competitive against the UK produced product.

It would be nice to believe that answer (b) was credible – but there are very, very few markets where price really is unimportant.

Question 3

Timescale for currency risk.

The timescale for currency risk management should try to match the timescale for the risk itself. In other words, we need to try to put in place whatever risk management we want at the time when the risk is arising. We make commercial judgements on price and other factors given what we know about the current financial environment, including current exchange rates. As rates change we may gain or lose, and we may wish that we had not made the judgements that we did. Only if we have put effective risk management in place can we be relatively relaxed about rate changes.

Because of this, we need to understand when currency risk arises. Individual large orders (or other transactions) will clearly always be special cases, but for general run-of-the-mill situations our risk management should reflect the ongoing nature of the business rather than specific transactions. As an example, if we invest heavily in a new plant we have made assumptions about future demand for the output of that plant. Where there are significant economies of scale that future demand is very likely to include sales in non-domestic currencies. If that is the case, then

we are committing ourselves to sales in foreign currencies over the long term. Once the commitment is in place we should be thinking about managing the risk that represents. We may not know the exact make-up of sales by currency, but we do know that non-domestic currency will be involved – and, probably, its rough proportion. If we really were making a guess about future demand then maybe we should be concerned with other areas of business management as a priority over currency management!

In a different situation, where we start exporting as a management choice we need to be clear how committed we are to a new market. If, as is often the case, we need to make significant investment in marketing (or other expense) in order to enter a new market, then we will be loathe to back out if rates go against us. That being the case we are there for the long term. How realistic is it to vary our prices as rates change? What is the reaction of customers likely to be? What is the reaction of our competitors likely to be?

A simpler situation is the one where we are providing a one-off service or product where there is a great deal of negotiation regarding the detail of an order. Often this is the case for major capital goods where there is no national market – building a dam for instance. Here, there is unlikely to be any follow-on business, no established price being set, so the situation is a one-off and the risk management should reflect that.

The clearest case of all is the situation when an invoice is issued. The invoice is a request for payment for goods or services – the commitment to provide and the commitment to pay for the goods was already in existence. The invoice is always issued after the risk has arisen – yet it is the first time that a currency hits the financials. Until then, all of the agreements and commercial activity creating the risk has been outside the financial departments. This is where currency risk arises. As we have seen, the time of risk arising depends on the nature of the business,

Imagine a UK supplier of capital goods, involving much detailed negotiation over terms of supply, who also supplies spare parts. Which of the following applies most closely to this business? The currency risk arises from:

- (a) when the contract is signed and the details become firm, spares are irrelevant
- (b) signing of the contract only because spares prices can always be adjusted as rates change
- (c) signing of the contract and from the spares prices, the latter can probably only be varied with that economy's inflation rate
- (d) don't know

Answer

The right answer is (c) signing of the contract and from the spares prices, the latter can probably only be varied with that economy's inflation rate.

An often overlooked factor in understanding risk is the linkage between ongoing cost (spares prices) and initial capital sales. As consumers we always think of the ongoing cost – and might well be put off by perceived high spares costs. Somehow, though, we think that our customers will not take the same view, and that we can vary prices as we wish just because customers are tied in. Unlikely to be true.

Despite the fact that many texts suggest continually monitoring price lists and exchange rates, customers do see the impact. Sales of the capital goods are impacted by perceived cost of maintenance, so if we make our spares expensive in local currency terms we should be prepared for the consequences.

Question 4

A forward foreign exchange contract is a relatively straightforward financial instrument. As with all forwards it combines the cost of buying the underlying asset now and holding it until required. For a foreign currency this entails undertaking the spot transaction now to buy or sell the currency in

question and then deposit the proceeds until the date required. The funds with which to make the purchase must be borrowed. All of the transactions that go to make up a forward contract are therefore: 1. borrowing currency A, 2. exchanging currency A for currency B spot and 3. depositing currency B received. At maturity, the net effect of the three transactions is to adjust the current spot rate by the cost of borrowing one currency and the receipts for depositing in the other currency. This is commonly referred to as adjusting the spot rate by the interest rate differential.

The potential for arbitrage ensures that the forward price must be very close to the price determined in this way – otherwise it would be possible to make a risk-free profit by constructing a forward at a different price to that available in the market.

Ignoring bid/offer spreads, what forward rate would you expect for a one-year forward rate given the following data?

GBP/USD	1.50
GBP 1-yr LIBOR	2%
USD 1-yr LIBOR	1%

- (a) 1.4853
- (b) 1.5147
- (c) 1.4928
- (d) 1.5072
- (e) Don't know

Answer

The right answer is (a) 1.4853

Step 1:	<i>Exchange GBP 1,000,000 for USD 1,500,000</i>
Step 2:	<i>Borrowing cost for GBP GBP 1,000,000 × 2% = GBP20,000</i> <i>So total to repay is GBP 1,020,000</i>
Step 3:	<i>Deposit receipts for USD USD1,500,00 × 1% = USD15,000</i> <i>So total accumulated is USD 1,515,000</i>

Effective exchange rate constructed for 1 yr's time = 1,020,000 / 1,515,000
i.e. GBP/USD for 1yr's time =1.4873

Question 5

One feature of a good currency risk management policy should be that permitted instruments are specified. This is so that a policy judgement can be made about which instruments the company is content for its officers to be dealing in. If there is no specification in the policy, then each time a decision has to be made about hedging a further decision must be made about a wide variety of instruments. Better to make a reasoned decision away from the urgency of making an operational decision. Then the risk committee can incorporate a risk-based view into which instruments it is comfortable to approve given the nature and complexity of the underlying risk and the competence and ability of the staff likely to be involved.

One of the features of the risk-based view that should be taken by the risk committee should be the extent to which the different instruments achieve the objective desired from hedging. For instance, if only forward contracts are used – and they are used in every instance, what is the difference between hedging and not hedging? As has been seen the effect of a forward contract is to “time shift” today’s spot rate into the future. If we always use this time shift, are we effectively just accepting the spot rate? Conversely, should we use options as hedging instruments? Can the results justify the premium paid?

An option gives us the choice of either exercising the instrument at a predetermined price (the strike price) or taking the price available in the market. The forward locks us in, the option allows us to walk away and take the market price – the downside being the premium.

When hedging a currency receipt, how should you choose between an option and a forward contract?

- (a) always use options, they are much better value
- (b) always use forwards, they lock in a known (acceptable) rate
- (c) always use forwards, they carry no premium and are free to enter
- (d) the option is almost always the 2nd best choice, behind either the 'do nothing' or the 'forward' choice, depending which way the spot rate goes. So always choose the option.
- (e) Look at currency forecasts and use a forward if rates are expected to go against you or an option if rates are expected to move in your favour.
- (f) Don't know

Answer

The right answer is (d) the option is almost always the 2nd best choice, behind either the 'do nothing' or the 'forward' choice, depending which way the spot rate goes. So always choose the option.

When comparing payoff diagrams of options, forwards and 'do nothing'. The do nothing is always best when rates move in our favour, because we get the benefit of the move without the cost of the option. When rates move against us the forward is always best because we lack in a beneficial rate. The option is never the best, but it combines the characteristics of the lock-in (the strike price) and the ability to take a market price – but at the cost of the premium. The time when an option is the worst alternative is when rates remain very stable. Under those circumstances the 'do nothing' and the forward are very close but the option suffers from the cost of the premium.

The final thing to bear in mind is the difference between profit maximisation and risk management. We need to think carefully about which of these alternatives generates the least volatility in earnings. The answer is not straightforward – but it is important to think, when discussing options, that it is often volatility that we are trying to manage – not just maximising returns.

Question 6

Another major area of currency risk is termed translation risk. Here the risk is not to real cash flows, although these might become consequentially affected, but to reported accounting figures: asset or liability values, profits or losses.

For a group with subsidiaries reporting in non-domestic currencies the accounts of all subsidiaries must be consolidated into the domestic, or functional currency. As asset and liability values may change from one year to the next, to the extent that the currency mix is imbalanced between assets and liabilities, the shape of the consolidated balance sheet may change. As an example, take a company based in the UK but with an asset-rich subsidiary in another currency. As the exchange rate varies, the assets of the subsidiary may appear to be greater or less in sterling terms. To the extent that the assets are out of balance with liabilities in the same currency, this could cause a shift in the group consolidated balance sheet. As assets shrink, something has to shrink on the liabilities side. With no corresponding currency liability, this shrinkage must be felt in equity. So equity shrinks in the consolidated balance sheet – the real impact is either the direct impact of a fall in book value of equity or the knock-on impact of a rise in gearing – existing debt remains the same but equity shrinks.

A large well-diversified group can ignore the problem – diversification means that as many currencies will be increasing in value against the functional currency as those decreasing in value. So the net impact is likely to be limited. But a smaller, undiversified group might be well advised to pay attention to this otherwise covenants might be breached purely as a result of currency shifts.

When discussing translation risk we often concentrate on the balance sheet and forget the impact on the income statement. International groups consolidate profits and losses as well as assets and liabilities. A rate shift can affect reported profit. This is true even when none of the currency profit has been remitted back to the UK and no cash movement at all has taken place. So translation risk might impact on reported earnings and therefore, potentially, on market values.

Should translation risk be managed?

- (a) no, because no cash flow is involved**
- (b) yes, provided that no cash is paid out to manage a non-cash risk**
- (c) yes, if we are an undiversified group with high debt and tight covenants**
- (d) no, our market value is determined by cash flows not profits**
- (e) don't know**

Answer

The right answer is (c) yes, if we are an undiversified group with high debt and tight covenants

These answers are intentionally grey rather than black and white. Many groups will argue that translation risk is non-cash and so cash should not be used to protect against it. This is a valid reason providing that covenants are not in peril. Once they are then the cash cost of protection might be small beer to the cost of not protecting. Similarly, value being determined by cash flows not profits is true to a certain extent. Few analysts will go to the trouble of getting the raw currency data to be able to look at cash flows before consolidation and then deducing cash flows from that raw data. Most investors will take reported profit and add back non-cash items without giving the currency impact much of a thought.

Translation risk is often the poor relation of currency risks, often ignored or misunderstood. But it pays not to ignore any risk that can, ultimately cause a covenant breach.