

# LA VIE EN ROSES

**EMERGING MARKETS MAY BE ATTRACTIVE, BUT THEY ARE ALSO THORNY. SATU JAATINEN AND JESSICA JAMES SHOW HOW OPTION HEDGES CAN HELP YOU TO PREVENT BEING PRICKED**

For corporate investors, emerging markets can be said to resemble a rose – they are attractive, yet prickly. While the 2008 financial crisis stalled developed markets, emerging markets continued to offer opportunities and attract most industries with their more affordable cost bases combined with relatively robust local market demand. The post-crisis rebound in the profits and balance sheets of companies based in developed markets after the slump was astounding. Their presence in emerging markets most certainly contributed to this and, since then, the lure of emerging markets has become hard to resist.

Figure 1 (below) illustrates how the emerging-market

revenues of most European large-cap industries grew steadily from 2007 to 2012. In tandem with this, so did their cyclicity with economies in emerging markets. Seven industries moved from being in the 'least exposed' low-left corner in 2007 to the 'significantly exposed' top-right corner by 2012. Then, during 2013, currency markets decided it was time to correct again. The Russian ruble's 28% fall against the euro (EUR) was just one example. The thorny nature of emerging markets had struck again, without warning.

## Profits and balance sheets as pain points

In particular, corporate profits and balance sheets have

suffered as a result of this latest emerging-markets currency turmoil. Many companies increased not only revenues, but also costs in emerging-markets currencies. In this way naturally, or via short-dated FX contracts, many companies succeeded in effectively hedging their operating and debt-financing cash flows. But they often decided against paying an expensive carry cost in emerging markets to hedge their translated local currency profits or equity, however. These balance sheet items tend to have a longer time horizon and are often given less focus than cash flows.

Unfortunately, as figure 2 (see page 55) shows,

typically it is the (long-term) shareholders who end up bearing the risk for unhedged profits, dividends and, ultimately, equity.

## History lessons on hedging Brazilian real exposures

To understand how these attractive yet volatile exposures can be best hedged, we consider a currency that typifies the issues associated with high-yield exposures – the Brazilian real (BRL). Its high interest rates means that forward hedges tend to systematically bleed money, but its tendency to suddenly devalue means that protection is very desirable. Surprisingly, the option market can help to resolve this problem, and could also potentially be used for items such as cash flows or even equity hedging.

We back-tested the performance of forward versus option hedging. We assumed that the hedges are to cover positive exposures to the BRL. In Figure 3 (see page 55), we show the somewhat surprising result for hedging the US dollar (USD) against the BRL.

Here, we have graphed the net hedge cash flows only – for both option and forward hedges. In all cases, the results are in percentages of the underlying notional amount. To create a fair comparison between options and forwards, the option figures include premia, payouts and trading costs. We see that the options have been far less costly hedges than the forward contracts, and that the difference is exacerbated for longer tenors.

**FIGURE 1: EUROPEAN LARGE-CAP SECTORS GRID**

Fitting European large-cap sectors in the emerging-markets exposure grid

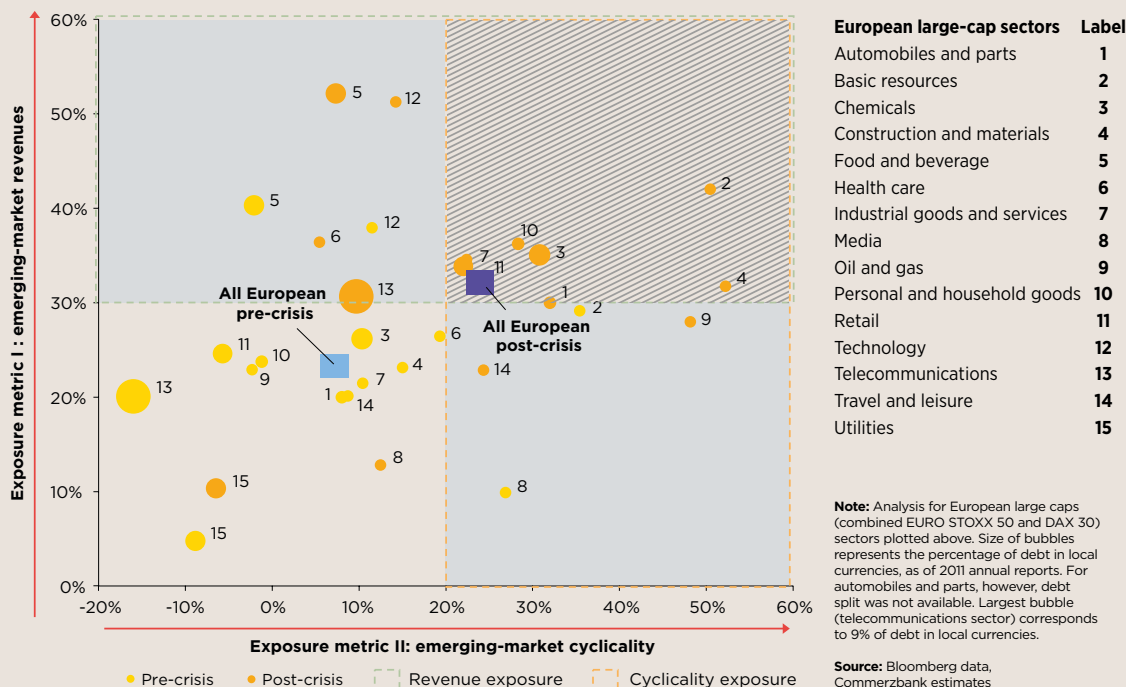
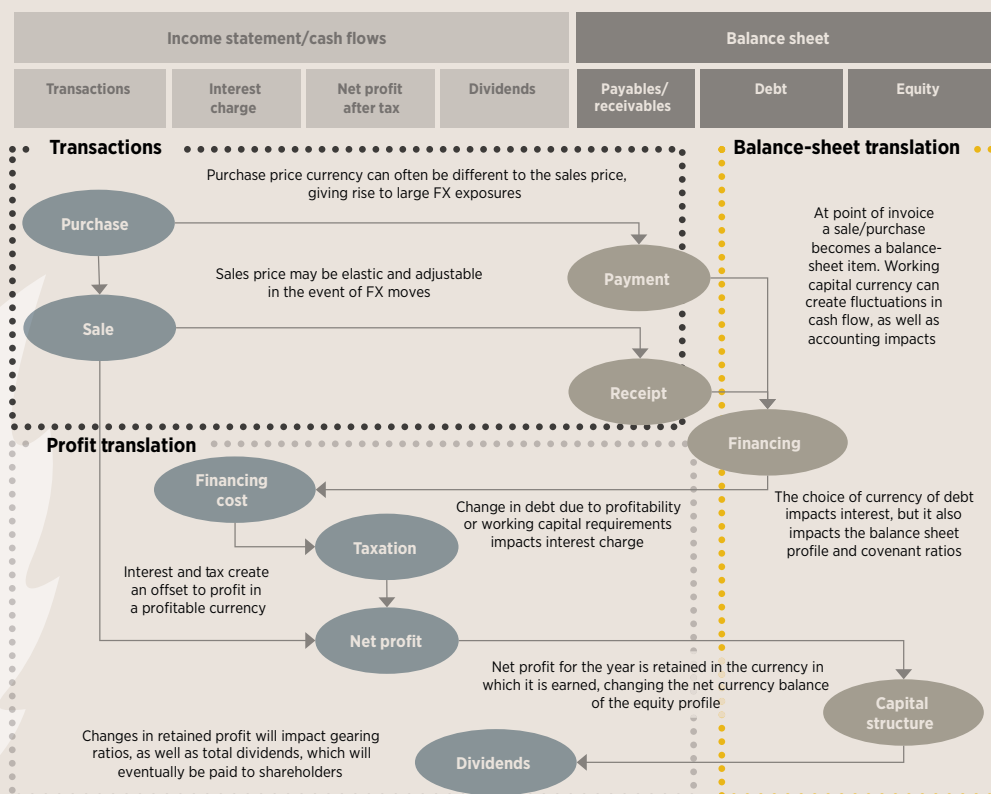


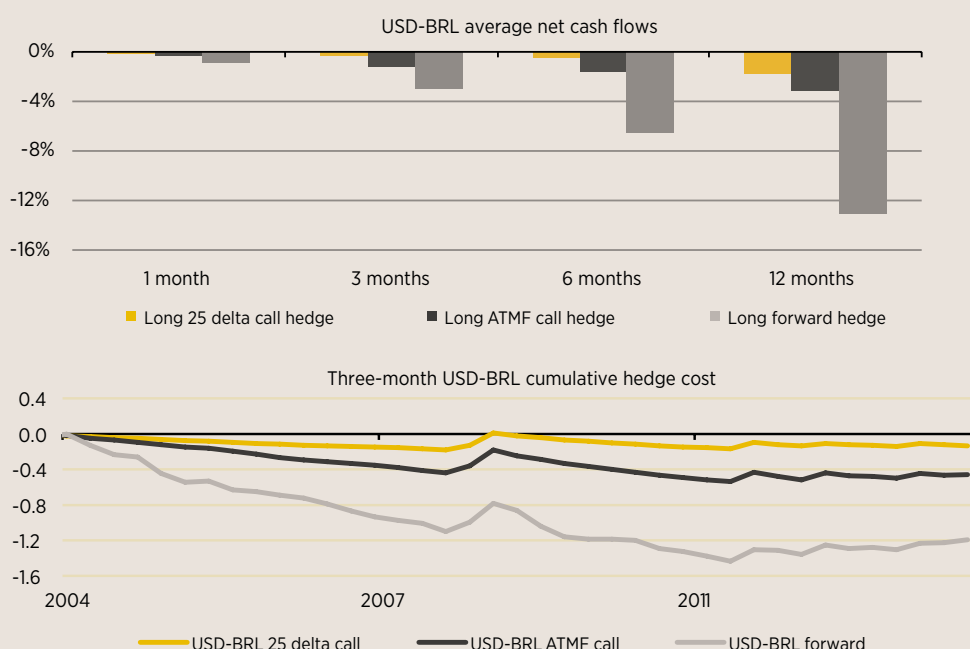
FIGURE 2: SHAREHOLDERS' RISK



But do the hedges deliver protection when needed or are they cheap for a reason? To decide, we look at the 2008 loss periods, where both currencies suffered massive devaluations. We found that the option hedges, particularly the at-the-money-forward (ATMF) options, delivered good protection. For USD-BRL, the option hedge on average costs about a third of the forward hedge, but delivers 90% of the protection level when needed. In all cases, the ATMF option hedge delivers at least 80% of the forward hedge protection. So they truly have been much better value contracts.

How does this happen? It is a fortunate consequence of the carry trade and the premium cost of the option. While the forward contract constantly prices in a devaluation – which only rarely occurs – relatively low option volatility means that it is cheaper to hedge by spending premium than carry. Thus it has historically been possible to protect emerging-market exposures more cheaply than is usually assumed. ↗

FIGURE 3: HEDGING THE USD AGAINST THE BRL



In our next article, we will look at what companies can do in the current situation when most emerging-market currencies have already experienced severe falls, and how to hedge balance sheet items, in particular.



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