OCTOBER 2012

Riding the foreign exchange roller coaster

Corporate finance implications of a riskier currency environment

J.P.Morgan

Published by Corporate Finance Advisory

For questions or further information, please contact:

Corporate Finance Advisory

Marc Zenner
marc.p.zenner@jpmorgan.com
(212) 834-4330

Tomer Berkovitz
tomer.x.berkovitz@jpmorgan.com
(212) 834-2465

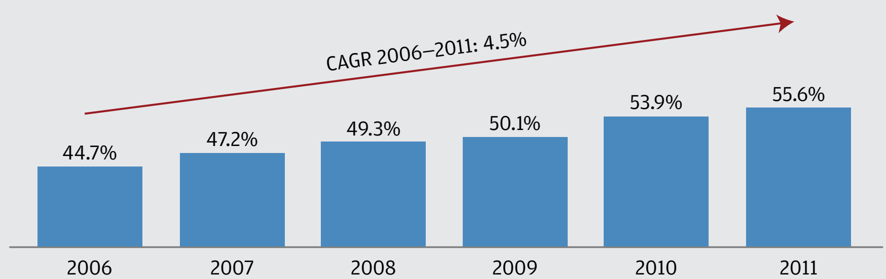
1. Dealing with the currency environment you have (rather than the one you'd like to have)

Slower growth in developed economies relative to emerging markets, advances in transportation and telecommunication infrastructure and lower international trade barriers have led many U.S. companies to expand their offshore operations in recent years. Whether through M&A or organic growth, large multinationals derive a growing part of their revenue from non-domestic markets. For example, for the 25 largest companies in the S&P 100 index, the portion of non-U.S. revenues increased from almost 45% in 2006 to over 55% in 2011. **However, with the benefits of faster growing non-domestic markets come the risks of foreign currency fluctuations.**

Figure 1

Non-domestic revenues are becoming increasingly important for large global firms

Median % of revenue outside of North America[1]



Source: Bloomberg, FactSet
[1] Top 25 S&P 100 companies by market cap

Senior managers and capital market participants are used to dealing with risky operations and changing markets and prices. With ever-expanding non-domestic sales, however, the impact of currency fluctuations in predicting earnings and cash flows becomes paramount.

Figure 2

Increasingly volatile FX environment calls for action

Source: J.P. Morgan

This riskier currency environment profoundly impacts all aspects of corporate finance decision-making, from risk management to dividend policy, capital structure and M&A. To guide senior executives, we provide a roadmap that highlights key challenges and helps users avoid the most common pitfalls of this riskier currency environment.

EXECUTIVE TAKEAWAY

Large global firms realize a growing part of their sales from non-domestic markets, while currency volatilities have increased relative to pre-crisis levels, and the benefits of diversification have diminished. As a result, currency swings will have a greater impact on firm value going forward, unless decision-makers adopt a proactive approach to dealing with this new reality.

2. How do you define your currency risk exposure?

Following the recent (and some would say, ongoing) financial crisis and the flock of associated black swans, senior decision-makers are even more focused on measuring and managing risk. The traditional view is that investors expect higher returns when exposed to higher systematic risk (beta).

We believe that there is another categorization of risk that is useful in the context of currency exposure: "Core versus non-core equity risk." **"Core" equity risk** is a key risk borne by a firm due to the nature of its business; investors would likely choose to have exposure to this particular risk to enhance their returns. **"Asymmetric" risk**, however, creates exposure to a risk that investors are not necessarily seeking out when purchasing a stock. They can be material but are not key drivers of the firm's investment thesis (see examples of core and asymmetric risks in Figure 3).

Figure 3

Core versus asymmetric risk exposures

	Core		Asymmetric	
Definition	Risk fundamental to main business activity		Risk that is not fundamental to main business activity	
Investors' perspective	Investors purchase shares to achieve exposure to the core risk		• Investors do not purchase the stock to obtain exposure to this risk • Investors may penalize the firm more for adverse outcomes than they reward it for favorable outcomes	
Examples	Company	Risk exposure	Company	Risk exposure
	Gas exploration and production	Gas prices	Waste management	Trucking fuel
	Real estate investment trust	Real estate market	Food and beverage	Aluminum prices
	Oil refiner	Crack spreads	Iron ore	Copper prices
	Gold mine	Gold prices	Global corporations	Currency risk?

Source: J.P. Morgan

We believe that for most firms, currency risk falls in the category of "asymmetric" risk. As a result, the growing impact of currency fluctuations is likely to be asymmetric. That is, the perceived shareholder benefit of a favorable currency outcome will be overshadowed by the penalty due to an unfavorable currency outcome. If currency volatility increases, exposure to "asymmetric" risk will be higher and corporate finance implications would likely be more severe.

EXECUTIVE TAKEAWAY

All firms take on risk. Investors select equity investments based on the balance between expected returns and risk. Some firms provide risk exposures that are uniquely attractive to some investors. For most firms, currency risk does not, however, fall into this category. As a result, firms will be more negatively impacted by adverse currency movements rather than positively impacted by favorable ones.

3. A riskier currency environment

3.1. Sustained higher volatility level

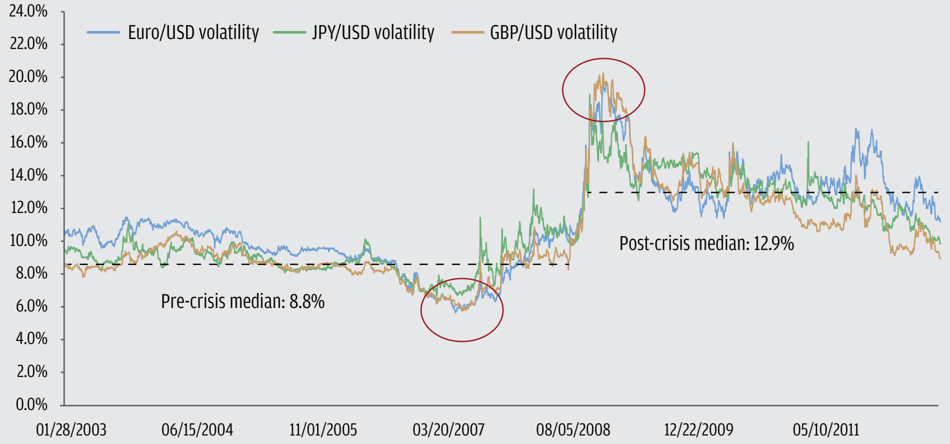
During crises, volatilities of financial assets tend to spike. At the peak of the recent financial crisis, equity volatility (as measured by the VIX index) jumped from a pre-crisis average of about 15% to as high as 80% on October 27, 2008. Following this trend, currency volatilities also spiked during the crisis, from a pre-crisis average of about 9% to about 13%. Despite the significant economic, regulatory, financial systemic and geopolitical risks, equity volatility has dropped back to pre-crisis levels of about 15 to 20%. In contrast, currency volatility has not yet returned to prior levels in all markets (particularly the Euro/USD rate). As one can see in Figure 4 below, currency volatilities have settled at a level that is about 50% higher than that prior to the crisis. The uncertainty around the future of the Euro, concerns about global economic slowdown, the U.S. elections and the fiscal cliff constitute a large part of this volatility.

What does this mean for corporate decision-makers? For firms operating in non-domestic markets, this higher volatility implies more severe shocks to non-domestic revenues and earnings.

Figure 4

Currency volatilities are still elevated in some markets

Expected volatility of foreign exchange rates[1]



Source: Bloomberg

[1] One-year option-implied volatility

3.2. Reduced ability to predict currency volatility

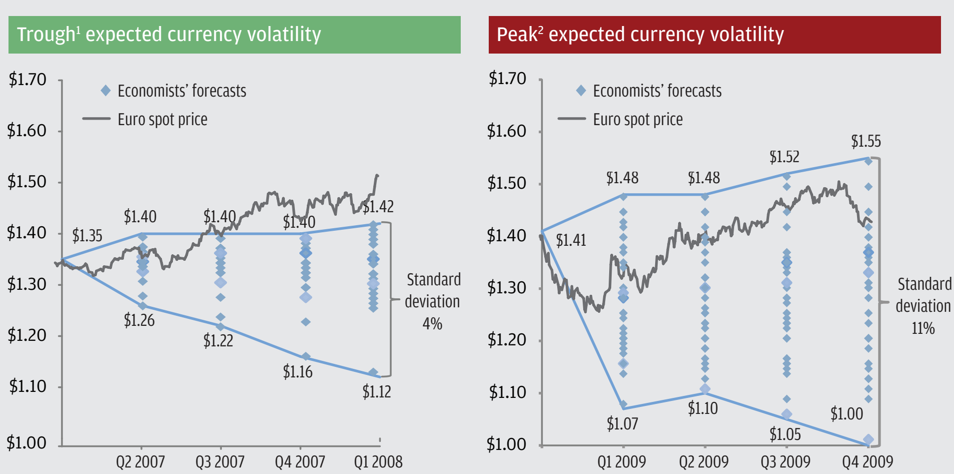
A more volatile foreign exchange environment makes it more challenging to forecast rate changes. In May 2007, when currency volatility was relatively low, most economists had roughly similar forecasts regarding future rates of the Euro. This estimated consensus was wrong. By the end of the third quarter, the Euro already spiked beyond the highest analyst forecast of just four months earlier and a similar trend was recognized during the following two quarters. When currency volatility reached its peak (at the end of 2008), the divergence in economists' views almost tripled. Still, the actual spot rate was close to the highest estimate and significantly away from the median.

What does this mean for corporate decision-makers? Firms often rely on economists' forecasts and the forward curve to budget foreign earnings and cash flows that will be translated into USD. Whether evaluating a new project or M&A opportunity, the ability to forecast USD returns on investments is critical. When realized spot rates are drastically different from the rates used for calculating the expected ROIC, unhedged investments may turn dilutive (from both economic and accounting perspectives), even if the foreign currency cash flows of the project or the subsidiary perform as expected.

Figure 5

Economists' disagreement about future currency rates is growing

Economists' forecasts for the Euro spot price



Source: Bloomberg, FactSet
Note: Standard deviation refers to the average of the four periods' standard deviation of economist forecasts
[1] Trough implied Euro volatility and analyst estimates as of May 8, 2007
[2] Peak implied Euro volatility and analyst estimates as of December 30, 2008

3.3. Greater difficulty in diversifying foreign currency risk

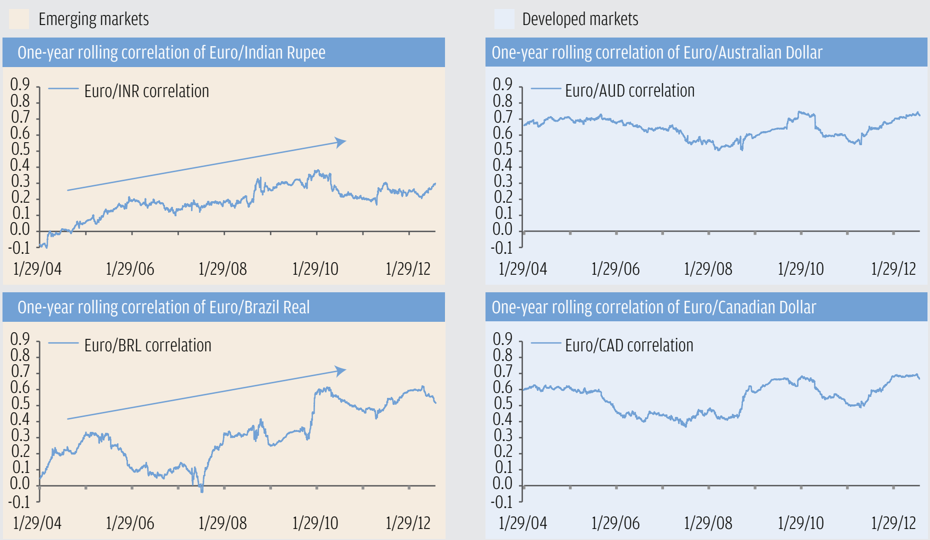
Global companies operating in various international markets often rely on the diversification among different currencies to mitigate the net impact of currency fluctuations on their cash flows. In particular, the correlation between emerging market currencies, such as the Brazilian Real (BRL) and Indian Rupee (INR), and developed market currencies, was close to zero in the pre-crisis environment. Figure 6 shows, however, that in the new currency environment, the correlation between foreign exchange rates of emerging and developed markets has spiked. For example, the Euro/BRL correlation has jumped from zero to 60%.

The increased correlation is a result of several factors. First, integration of global economies and capital markets, combined with innovations in the financial industry, has led to increased correlation between markets. Similarly, the correlation between emerging and developed markets equities has increased significantly in recent years. Last, the use of U.S. Treasuries as a safe haven and more macro-driven investments are driving correlations closer to one.

What does this mean for corporate decision-makers? The value of diversification across different currencies is diminishing, leading more global firms to be more aggressive about hedging alternatives.

Figure 6

Benefits of currency diversification are reduced in today's environment



Source: Bloomberg

EXECUTIVE TAKEAWAY

The new currency environment presents significant challenges to corporate executives. Foreign exchange rates are more volatile and harder to predict. Moreover, diversification offers limited value as correlations have increased.

4. Analysts and equity investors pay attention

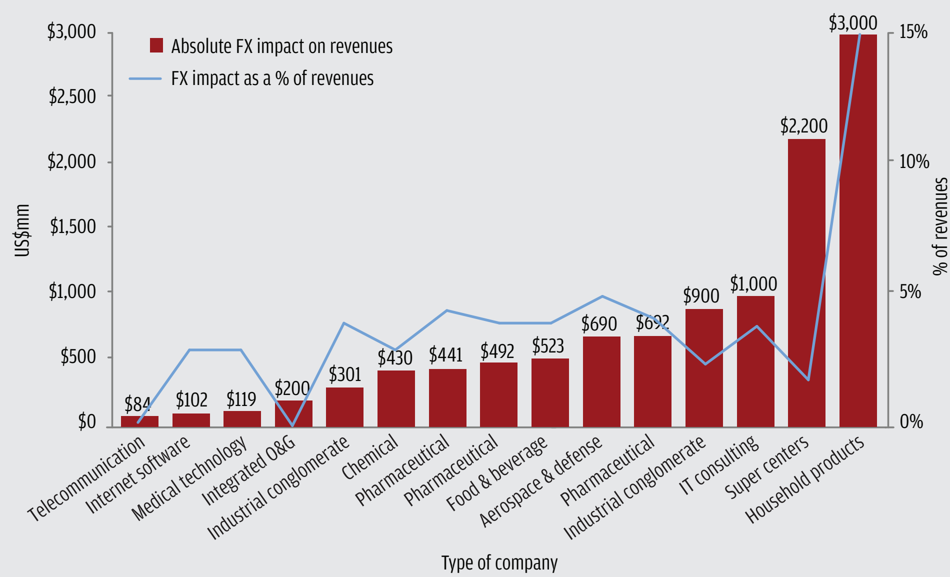
The new foreign exchange environment and its impact on corporate earnings have not gone unnoticed by equity analysts and investors. For some global consumer retail, pharmaceutical and technology companies, the foreign exchange impact on second quarter sales this year was up to 15% of revenues or US$3.0 billion (see Figure 7A). Following this significant impact on revenues, equity analysts are now more focused on FX. For example, in second quarter earnings calls, 34% of multinational companies were questioned by analysts about FX, versus only 23% in the first quarter of 2012 (see Figure 7B).

During the third quarter, investors have returned to "risk on" trades causing the USD to weaken again, which should have had a positive impact on the revenue of U.S. companies that operate globally. The volatility in FX rates remains a major issue, however, and adds to the uncertainty regarding future earnings and cash flows. If currency risk is perceived as asymmetric by investors (as discussed in Section 2), then adverse moves in FX rates will lead to increased investor attention and negative market reaction, while favorable FX trends will not be rewarded because they are not viewed as sustainable drivers of long-term growth.

Figure 7A

Investors are becoming increasingly focused on currency losses

Notable impact of FX fluctuations on Q2 2012 revenues

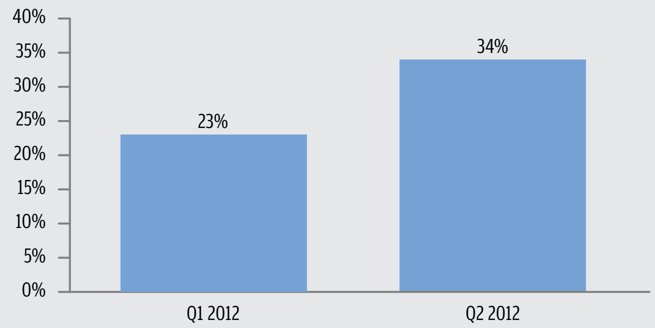


Source: Press releases, Company filings, earnings calls transcripts

Figure 7B

Investors are becoming increasingly focused on currency losses (cont'd)

Multinational firms questioned by analysts about FX[1]



Source: Press releases

[1] According to a review by foreign exchange risk management company FiREapps

EXECUTIVE TAKEAWAY

Heightened uncertainty in the foreign exchange market is attracting the attention of equity analysts and investors, who are concerned about its impact on corporate earnings. Corporate executives, who are already receiving more FX questions from analysts during earnings calls, are currently reexamining their FX strategy in light of this new environment.

5. A roadmap to avoid the most common pitfalls

Foreign exchange rates affect various aspects of a firm's corporate finance strategy. As U.S. firms generate a larger portion of their revenue offshore and the foreign exchange environment remains more volatile and harder to predict, companies should reexamine their strategy. Figure 8 offers a corporate action plan for decision-makers to potentially mitigate risk exposure to the increasing currency volatility.

Companies should measure the impact of FX fluctuations not only on their earnings and cash flows, but also on their leverage metrics, payout ratios and liquidity position. Hedging should be considered, especially if the company believes that FX exposure is asymmetric and non-core to the business. In addition to forward contracts and cross-currency swaps, companies can use option strategies to keep some exposure but protect against tail risk. The application of hedge accounting will also be important in certain situations and companies need to be aware of the rules in order to avoid increasing earnings volatility while hedging economic risk.

Figure 8

A roadmap to avoid the most common pitfalls

Action plan

1. Valuation and earnings	• Assess the potential impact of FX volatility on your company's earnings guidance • Focus not only on net currency exposure, but also impact on top line growth
2. Operations	• Consider USD denominated contracts in foreign countries as a natural offset to FX volatility – Take into account that FX movements will still impact your firm's competitiveness versus local peers
3. Hedging strategy	• Debate de-risking strategies, especially if your company has concentrated currency exposures, limited liquidity and modest flexibility with your credit rating – Recent spike in correlations across currencies underscores the limits of diversification – Centralizing risk can provide a better perspective on company-wide currency exposure
4. Capital structure/ ratings	• Maintain EBITDA cushion within your rating category (and financial covenants) or think about hedging to protect against the impact of FX on leverage metrics • Match the currency mix of your debt to the EBITDA, either through issuance in local markets or synthetically
5. M&A and capital allocation	• Weigh the valuation of foreign M&A targets in both the local currency and the USD – Though theoretically the two methodologies should result in similar valuations, recent market dislocations and practical limitations often lead to different valuations
6. Liquidity management	• Convert excess liquidity (such as trapped offshore cash) to match the currency of your liabilities
7. Shareholder distributions	• Test the sustainability of your company's dividend payments under a downside scenario, taking the impact of FX into account

Source: J.P. Morgan

EXECUTIVE TAKEAWAY

In today's global economic environment, the importance of managing the impact of foreign exchange rates on companies becomes increasingly important. In contrast, the ability to predict currency movements and the use of diversification to protect against adverse rate changes are declining. Many companies are currently analyzing the corporate finance implications of this new environment and reconsidering their FX strategy. We offer a corporate finance action plan that addresses the key factors affecting global companies.

Special thanks go to Jessica Lupovici, Matt Matthews, Allison Greenwald and Noam Gilead for their invaluable contributions in shaping this report. We appreciate Mark De Rocco, Evan Junek, Andrew Kresse, Elizabeth Myers, Fernando Rivas and John Wang for their comments and suggestions. We would also like to thank Jennifer Chan, Sarah Farmer and rest of the IB Marketing Group for their help with the editorial process.

J.P.Morgan