MARCH 2015

Who’s worrying about FX?

Corporate finance strategies for a strong U.S. Dollar environment

J.P.Morgan

Published by Corporate Finance Advisory

For questions or further information, please contact:

Corporate Finance Advisory

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

Mark De Rocco
mark.de.rocco@jpmorgan.com
(212) 270-2153

Ram Chivukula
ram.chivukula@jpmorgan.com
(212) 622-5682

1. Introduction

Since the summer of 2014, **the U.S. Dollar (USD) has appreciated over 25% against a basket of currencies.** The USD is now at a 12-year high (Figure 1). Foreign exchange rates often make large and sudden moves, but the size and speed of this recent shift seems to have caught many executives and investors by surprise.

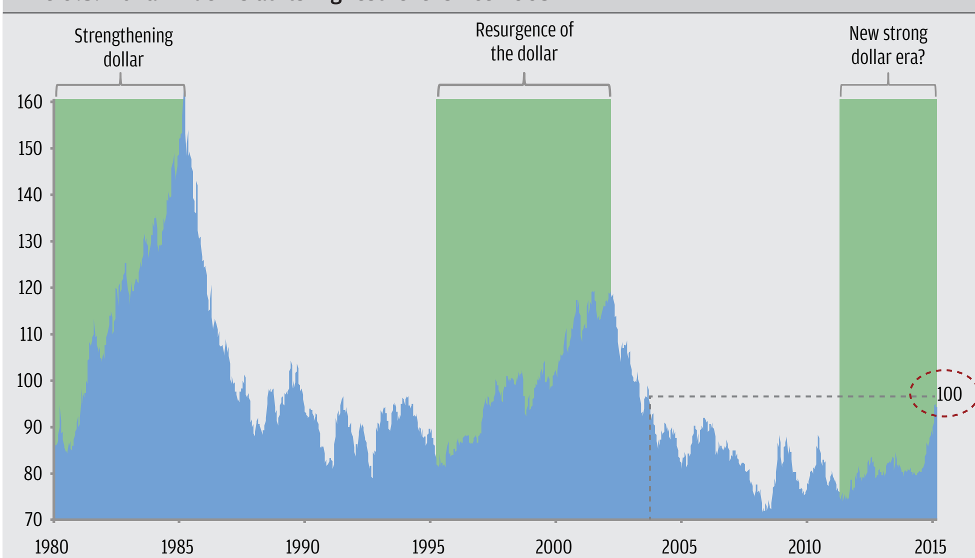
Most observers attribute the strength of the USD to the comparative strength of the U.S. economy. A relatively strong U.S. economy should be good news for U.S. residents and U.S. firms. Ironically, however, a strong USD also impacts many U.S. firms negatively by lowering the value, in USD, of their non-USD earnings. It may even make them less competitive and less profitable even if all their sales and expenses are in the U.S., which can occur when U.S. companies face foreign competitors domestically. Whereas exchange rate movements have always been a concern for corporate executives globally, they have taken on increased importance for U.S. executives today, with over half of S&P 500 revenue derived from outside the U.S.

In this report, we:

- Explore how, and to what extent, foreign exchange rate movements impact U.S. firms
- Describe how firms have traditionally approached currency risk management
- Review how perspectives on forecasting and diversification have evolved
- Provide a roadmap to guide senior decision makers as they assess and manage their foreign exchange exposure, especially with regard to the ramifications of continued USD strength

Figure 1

The U.S. Dollar Index is at its highest level since 2003



Source: J.P. Morgan, Bloomberg as of 03/15/2015
Note: The U.S. Dollar Index indicates the general value of the USD by averaging exchange rates between the USD and major world currencies

Overall, we believe that firms cannot rely on just one set of tools to manage foreign exchange exposures. We also believe that **it is not too late to engage in a comprehensive currency risk management program.** Firms with profitable businesses in non-USD jurisdictions, undoubtedly a "good problem" to have, may find even the full battery of protective mechanisms insufficient to provide the "perfect hedge" over the long term. Still, a combination of derivatives, capital market transactions and operating adjustments can buffer firms from the most significant currency shocks.

While we focus on the USD strength in this report, our recommendations are naturally relevant for any firm based in a market with an appreciating currency.

EXECUTIVE TAKEAWAY

The USD has appreciated by over 25% against a basket of foreign currencies this past year. While such movements are always possible, the speed and magnitude of this USD strength was not widely anticipated. The business ramifications of a strong USD are far-reaching and not always well understood. We provide a road map for senior decision makers who seek to create shareholder value despite the erosion of their non-U.S. earnings or their reduced competitive position both overseas and domestically. We believe that firms should not rely on diversification or just one currency management mechanism to protect themselves against currency shocks. Instead, this environment warrants a review and potential adoption of an entire battery of currency risk management tools.

2. The impact has been widespread, is expected to continue, and is drawing investor attention

Severe movements in foreign exchange rates can adversely impact firms through a number of channels. These impacts can manifest themselves in all aspects of a firm's financial profile, from the top-line all the way down to the bottom-line, with lots of impact in between. As seen in Figure 2, this is playing out today for firms across all sectors. In fact, in the most recent quarter, a large number of U.S. firms not only announced significant foreign currency-induced headwinds in their quarterly results, but also **mentioned that these headwinds would impact their guidance for the coming year.**

Figure 2

The sharp rise in the USD is denting corporate profitability

The widespread impact right from top-line to EPS...

"This 15% decrease **[in revenue]** is mainly linked to the US$ foreign exchange vs. functional currency in each region"
-Industrial services firm

"**Gross margin** contracted 80 basis points...due to higher material costs and negative impact from foreign exchange rates"
-Consumer durables firm

"The results include a 1.5% negative impact to **EPS** from foreign exchange"
-Consumer staples firm

...isn't going away any time soon

"Total revenue for the year is **projected to decline 1 to 2 percent** due to the impact of foreign currency translation"
-Industrial manufacturing firm

"Because of the recent significant volatility in the foreign exchange rates markets and the impact of those rates on our 2015 GAAP financial guidance, we are going to highlight **the impact of the FX assumptions on that guidance**"
-Medical technology firm

Source: J.P. Morgan, earnings call transcripts, news articles

Some firms communicate their results to the market not just based on GAAP or IFRS, but also on a constant-currency basis (in which exchange rates are assumed to remain unchanged) to shed light on the economic growth of the business. While the latter approach provides details on what would have happened to revenue and earnings had exchange rates not moved, it is precisely this kind of risk that is the focal point for many investors today and which has been **garnering increased analyst attention** (Figure 3).

In Q4 2014, 25% of the North American firms tracked by FiREapps reported negative foreign exchange rate impacts. The total impact to revenue that they reported increased nearly 4 times from the previous quarter. Strikingly, **63% of those firms fielded questions from analysts about exchange rates,** up from 46% in the prior quarter and 23% in the quarter before that. Given the continued strengthening of the USD over the last quarter, this number is likely to remain high, if not increase further, in the coming quarters.

Figure 3

Rise in reported foreign currency impact and analyst focus on FX-related challenges

	2014 Q2	2014 Q3	2014 Q4
Total FX impact to revenue:[1]	$(1.2bn)	$(4.0bn)	$(18.7bn)
Percentage of firms reporting negative FX impact:	16%	24%	25%
Percentage of firms fielding questions about FX:	23%	46%	63%

Source: J.P. Morgan, FiREapps 2014 Currency Impact Report; data shown is for the 846 publicly traded North American companies tracked quarterly by FiREapps
[1] Captures only amounts explicitly quantified by firms

EXECUTIVE TAKEAWAY

The recent surge in the USD has challenged firms from the top-line all the way down to the bottom-line. Not surprisingly, equity analysts and investors are increasingly questioning management to understand how FX movements will impact future results and how management intends to address pressures arising from currency fluctuations.

3. Exchange rates impact firms through many channels

Variation in foreign exchange rates affects firms' profits and economic values both **directly and indirectly** (Figure 4).

Direct exposure:

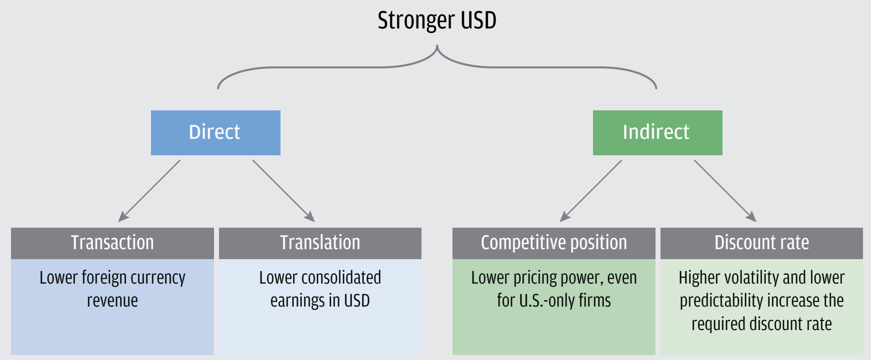
- **Transaction:** Direct transaction exposure tends to be well understood. It typically originates when a firm has revenue in one currency and expenses in another. For example, a firm may have EUR denominated revenue and USD costs. When the USD appreciates relative to the EUR, USD earnings will drop, all else being equal.
- **Translation:** Translation exposure is the effect on consolidated earnings from the conversion of a foreign subsidiary's earnings into the parent company's functional or consolidated reporting currency. While earnings translation does not involve cross border cash flow, it does not mean that there is no valuation impact. For example, if the USD value of earnings and cash held in a foreign currency declines, the value of the firm will likely decline, all else being equal.

Indirect exposure:

- **Competitive position:** Indirect exposures take many forms. For example, the strengthening of the USD can result in the loss of pricing power for U.S. firms relative to foreign competitors. Even U.S. firms with 100% U.S. operations and without any non-USD business may suffer from USD strength if it has foreign competitors in its domestic markets. This may arise because, among other factors, their labor is now more expensive relative to overseas labor. In such a situation the firm may maintain pricing and suffer market share losses, or adapt pricing and suffer margin compression.[1]
- **Discount rate:** The increased volatility and decreased predictability from exchange rate dislocations may ultimately lead to a higher cost of capital. With a higher discount rate, all else being equal, the firm's value will likely decline.

Figure 4

The impact of a stronger USD



Source: J.P. Morgan

EXECUTIVE TAKEAWAY

Foreign exchange rate movements have material corporate finance implications for firms through both direct and indirect channels. Firms with global operations could suffer from both direct and indirect exposure. Interestingly, even firms with purely domestic operations can suffer via indirect exposure if their competitive position is reduced relative to non-USD producers/manufacturers.

[1] Many global U.S. firms leave their overseas profits offshore for tax reasons. As a result, they pay dividends and repurchase shares primarily out of domestic free cash flows. To the extent these firms have no such indirect exposure, their domestic free cash flows (and thus their ability to pay dividends and repurchase shares) would be largely unhindered by the strengthening of the USD

4. How do firms usually deal with FX risk?

To the extent possible, firms will look to create natural offsets to FX risks. For residual exposures, firms typically employ financial solutions such as derivatives and capital market-based approaches as their first line of defense against exchange rate movements. Constraints within organizations, however, usually preclude them from fully hedging all exposures via derivatives. In such cases, **firms may rely on currency and geographic diversification to mitigate unhedged foreign exchange exposure.**

While the combination of these techniques has generally worked well for firms, drawbacks have emerged from the recent volatility in the FX markets. Averaging into hedges over time and extending hedge horizons can reduce volatility when viewing results from quarter to quarter. However, derivatives have limited lives, giving rise to a "**rollover risk.**" Rollover risk arises when existing derivatives mature and new derivatives are purchased at the new rates reflecting USD strength. Hedging therefore doesn't eliminate risk, but a disciplined risk management program can reduce volatility in results.

The risk management process is complicated by the difficulty in forecasting exchange rates. Some market participants rely on forecasts from economists' models, for budgeting purposes which is central to corporate planning. This reliance may create a false sense of security if and when **actual rates deviate materially from forecasts, as we experienced this past year.**

As of Q2 2014, analysts provided a wide range of estimates for the USD relative to various currencies at year end (Figure 5). Despite the wide range of estimates, the USD ended the year stronger than even the highest estimate in many cases, highlighting the "surprising" and material strengthening of the USD relative to most expectations. As an example, economists were forecasting that at year-end, one would need 1.43 to 1.25 USD to purchase one Euro (EUR). As of the end of December, that rate was 1.21, and it has since continued to drop to below 1.10 USD for one EUR. As we show in the figure below, this pattern was similar for the Japanese Yen (JPY), the Mexican Peso (MXN), the Russian Ruble (RUB) and many other currencies not shown in this figure.

Figure 5

The rise in the USD has been steeper and swifter than expected

EURUSD forecast as of June 2014		EURUSD as of December 2014	USDJPY forecast as of June 2014		USDJPY as of December 2014
High	$1.43	$1.21	High	¥120	¥120
Low	$1.25		Low	¥95	

USDMXN forecast as of June 2014		USDMXN as of December 2014	USDRUB forecast as of June 2014		USDRUB as of December 2014
High	Mex$13.47	Mex$14.74	High	₽38.31	₽60.22
Low	Mex$12.00		Low	₽33.33	

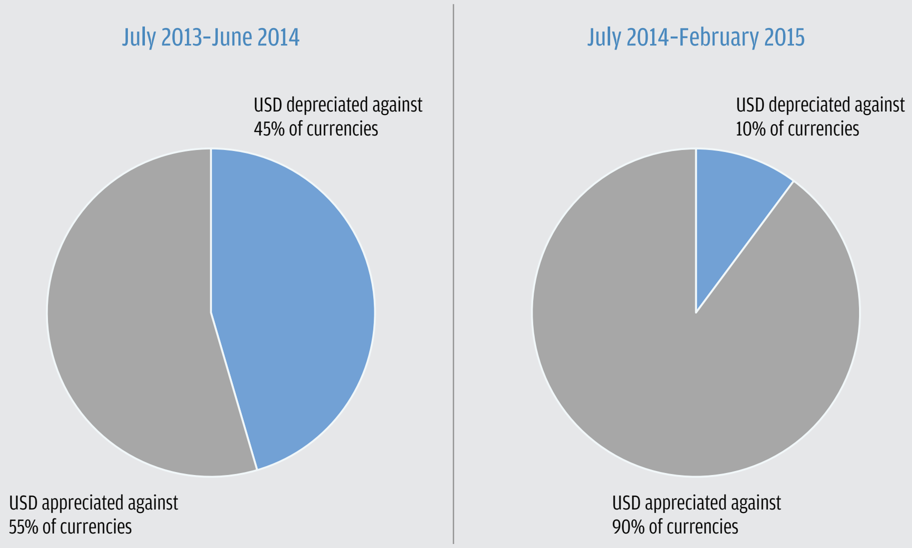
Source: J.P. Morgan, Bloomberg, FactSet
Estimates are those of 60+ economists surveyed by Bloomberg

Many global firms have traditionally relied on diversification to mitigate their unhedged direct exposures to various currencies. With diversification, the strengthening of the USD against one currency would be offset by the weakening of the USD against another currency.

During the recent extreme market movements, as well as during the financial crisis, diversification provided limited benefit as almost all currencies weakened in tandem versus the USD. In the 12 months prior to the start of its recent rise, the USD appreciated versus 55% of 177 currencies worldwide and depreciated against the rest (45%). Since last summer, however, the performance of the USD has been markedly one-sided, appreciating against 90% of currencies worldwide.

Figure 6

Since last summer, the USD appreciated against 90% of currencies



Source: J.P. Morgan, Bloomberg

Source: J.P. Morgan, Bloomberg

EXECUTIVE TAKEAWAY

For many firms, derivatives are the first line of defense against FX exposure. Derivatives can easily and quickly be implemented, unlike operational strategies which can take years to adapt. They can also reduce volatility on quarter-to-quarter comparative results. On the other hand, derivatives have finite lives, and as they roll over, firms will enter new derivatives at less attractive entry points. U.S. firms that were relying on diversification across currencies to soften FX blows learned that diversification benefits evaporate when almost all currencies simultaneously depreciate against the USD.

5. What to do now?

Despite applying a well-thought-out FX risk management program, paradigm currency shifts may still adversely affect firms, which is exactly what we experienced this past year. The recent market movements were particularly noteworthy for their speed and breadth, catching many corporations by surprise. Indeed, all the S&P 100 firms that disclosed foreign exchange-induced headwinds in Q3 2014 (and therefore presumably kept their eyes on exchange rates during 2014's fourth quarter) also disclosed foreign exchange-related challenges in Q4 2014.[1]

In this light, the natural question is "What to do now?" All firms will continue to face currency-induced exposures of one kind or another. Short of exiting an international business, firms will have to live with FX volatility. And even then, as discussed, purely domestic firms often remain indirectly exposed to FX shocks.

We provide a **roadmap for ways in which companies can control—and potentially even capitalize on—the current market environment** of volatile foreign currency exchange rates (Figure 7). Clearly, no single alternative is a panacea. As a result, we encourage firms to consider the alternatives below not in isolation but in conjunction with each other. A disciplined approach might involve financial hedges to manage short term currency fluctuations, coupled with pricing contracts, so that they automatically adjust upon paradigm currency shifts. However, consideration should be given to pushing the FX risk to customers; if they are exposed to FX risk and don't hedge they may be unable or unwilling to buy products or services from the U.S. company.

Financial strategies

- **Derivatives:** Can often provide the first line of defense to firms because they are intuitive and easy to execute. There are a number of alternatives, from forwards and plain vanilla options to complex instruments such as knock-ins/outs. A shortfall of derivatives is that the period of hedging is limited to the life of the derivative.

  If derivatives qualify for hedge accounting, then mark-to-market changes in the value of a derivative hedge will not create volatility in earnings. To the extent such accounting cannot be applied (such as when derivatives are used to mitigate earnings translation risks), some firms use "non-GAAP measures" to report an "adjusted EPS" in which unrealized gains/losses on hedges are backed out of earnings.

- **Capital markets:** As U.S. firms continue to grow globally, raising debt in local markets (or swapping home currency debt) can help lessen currency-based asset/liability mismatch.[2] This approach can also be a strategic tool for firms looking to take advantage of the low interest rates available in many developed market currencies, such as the EUR and the JPY.[3]

[1] Based on earnings call transcripts as of January 31, 2015

[2] For further details on this alternative, please refer to our July 2014 report "Lowering risk and saving money: A CFO's roadmap for foreign currency debt issuance" located at http://www.jpmorgan.com/directdoc/JPMorgan_CorporateFinanceAdvisory_LoweringRiskandSavingMoney.pdf

[3] In addition, unlike the U.S. corporate bond market, EUR-denominated bonds are marketed over the continuous Euro swaps curve, not only allowing issuers greater flexibility in issuing "off-the-run" maturities, but also allowing firms to smoothen their maturity profile

Operational strategies

- **Pricing:** Adjusting the pricing of a company's products or adjusting its expenses can help mitigate the impact of foreign currency movements. In some industries, firms can build adjustments into their contracts, or simply denominate the contract in their home currency. However, in many consumer-oriented industries in particular, firms do not have this choice and thus must carefully navigate between price adjustments and market share losses. The elasticity of demand and the currency of their competitor's expenses will dictate how attractive this strategy can be. A key benefit of this approach is that it can be applied in countries whose financial markets may be too limited for financial or derivative alternatives to be implemented effectively. Although, as mentioned earlier, the ramifications of pushing FX risk to customers should be thoroughly evaluated.
- **Production:** Developing or expanding production in core end-markets helps mitigate currency shocks by better matching expenses to revenues. Most large global firms have used this approach over the last few decades, producing locally rather than exporting to the end-markets. There are, however, a few limitations to this approach:

  (1) Sufficient time is needed to set up local production

  (2) The end-market needs to be large enough to permit sufficient scale and efficient and cost-effective production

  (3) The end-market needs to have a labor force with the right skill-sets for efficient production

  (4) Local production may expose more capital to political risk. And while it is not a limitation, companies should not forget that if local production is effective and local cash flows are generated, a (hopefully large) residual FX cash flow will now exist that would likely need to be hedged financially

Strategy and currency risk management

- **A strategic hedging approach:** Production decisions are, by their very nature, long term and strategic in nature. In contrast, financially oriented risk management lends itself to tactical implementation. Even if such tactics are possible, recent history suggests that it can be imprudent to try either to time the market or to make a bet on the direction of future exchange rates. Accordingly, we recommend that hedging programs be established strategically, that is, with a long-term perspective in mind. In this process, it is critical to keep the board informed of how such disciplined programs, where hedges are averaged into over time, will be effective in reducing FX volatility. Moreover, management teams should make clear to the board that hedging programs should not be viewed as a source of corporate profitability on a standalone basis.
- **M&A opportunities**: A strong USD may generate acquisition opportunities in both directions. U.S. firms may use their 'trapped cash' (often kept in USD) to purchase overseas assets and diversify their supply chain globally, thereby capitalizing on pressured (in USD terms) valuations abroad. This last benefit is particularly relevant today, given investors' expectations for growth and their applause over strategic acquisitions. Acquiring foreign firms, or even just assets, helps satisfy this investor demand and positions firms to ride the coattails of the global recovery. While data is limited, as this is still a developing trend, all signs indicate that firms are actively looking to capitalize on this opportunity. By the same token, non-U.S. firms could judge that the U.S. economy will continue to outperform, and, consequently, elect to be more aggressive in purchasing U.S. assets, despite the strength of the USD.

Figure 7

Corporate finance strategies for a strong USD environment

		Strategies	Benefits	Considerations
Financiale	Derivatives	■ Employ forwards at no initial premium ■ Buy options, with ability to finance premium if necessary	↑ Derivatives are easy to understand and execute ↑ Option-based hedges provide flexibility	↓ Period of hedging is limited by life of derivative ↓ Hedge accounting is not always available ↓ Forwards can require "writing a check" at maturity, purchased options require payment of premium
	Capital markets	■ Raise financing in local markets ■ Swap USD debt to foreign currency	↑ Longer-term and off-the-run alternatives are available ↑ Many global debt markets continue to have ample liquidity	↓ Potential liquidity risk can arise at maturity ↓ Accounting treatment may not provide desired results
Operational	Pricing	■ Revise pricing in select markets ■ Renegotiate purchase, supply and labor agreements	↑ Price adjustments for FX volatility can be built into contracts to automatically come into effect ↑ Can be available even in countries without developed financial markets	↓ Costs associated with implementing multiple pricing strategies ↓ Not possible if elasticity of demand is high ↓ Pushing FX risk to customers may result in lost sales/margins
	Production	■ Develop production capacity in low-cost and/or undervalued regions ■ Acquire undervalued/distressed assets overseas	↑ Achieve global supply chain diversification ↑ Potentially mitigate trapped cash problem	↓ Only execute after evaluating long-term production needs ↓ Such decisions are potentially irreversible ↓ Transportation/distribution costs to move product from remote location

Source: J.P. Morgan

EXECUTIVE TAKEAWAY

Significant currency changes impact most aspects of corporate finance including capital structure, distribution policy, M&A strategy, liquidity, earnings and risk management. Firms have several corporate finance alternatives to navigate the choppy waters of foreign exchange markets. Decision makers should consider the full menu of choices and employ a combination of them to optimize results. Proactive management of foreign currency risk will not only help enhance shareholder value, but also help keep activists and other vocal investors at bay by demonstrating that a company is "ahead of the curve."

Notes

We are extremely grateful to Matt Matthews and Brad Tully for their invaluable contributions to shaping and completing this report and Jessica Lupovici for her comments and suggestions. We also thank Jennifer Chan, Siobhan Dixon, Sarah Farmer and the Creative Services group for their help with the editorial process. We are particularly thankful to Raghav Pillay for his research assistance and Catherine Guan for her tireless contributions in completing this report.

J.P.Morgan