The U.S. Dollar Rally: Understanding its impact on your business
Agenda

• Introduction and Overview
• The Foreign Exchange Marketplace
• Volatility and Value
• Foreign Exchange Risks, Products and Pricing
• Case Studies
• Next Steps
• Wrap Up and Questions
Foreign Exchange Marketplace

The world’s largest financial market with an estimated $5.0 trillion turned over on a daily basis. Much of this volume is speculation – the balance is trade related. What you all do every day!

- 24 hour market:
  Opens Sunday in New Zealand and closes Friday in New York
- Most liquid market in the world:
  Volume exceeds all global equity and fixed income transactions combined on a daily basis
- Key trading centers:
  Sydney, Tokyo, Frankfurt, London, and New York
- Most commonly traded currencies:
  EUR, USD, GBP, JPY, CHF, EURGBP, EURJPY
- Foreign Exchange is an “Over-the-Counter” (OTC) market.
  Private negotiations (few rules – be careful!)

There are several factors that influence foreign exchange rate volatility:

- Interest rate differentials
- Technical & Fundamental analysis
- Central Bank policy (actual vs. expectation)
- Economic statistics
- M&A transactions
- Politics, etc.
Foreign Exchange Marketplace

Industry Participants

- Hedge Funds: Speculation / Positions... Bets!
- Pension / Endowment Funds: Foreign Investments Need a Currency Deal on Entry and Exit
- Mutual Funds With an International Mandate: EAFE Index or European Bank Fund
- Commercial Banks: Liquidity Provider / Speculation
- Commercial Companies: Receivables / Payables / Acquisitions / Divestitures
- Central Banks: Liquidity / Foreign Exchange Rate Management
- Currency Brokers: Liquidity Provider, No Speculation
- Individuals: Business Needs / Speculation / Travel
There are four currency pairs that are quoted against the USD via what is called the “direct method” – which means $USD per foreign currency.

<table>
<thead>
<tr>
<th>The four currency pairs are:</th>
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<tbody>
<tr>
<td>EUR /USD: $1.1325</td>
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<tr>
<td>GBP/USD: $1.5410</td>
<td></td>
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<tr>
<td>AUD/USD: $.7850</td>
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<tr>
<td>NZD/USD: $.7535</td>
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</table>

If EUR/USD is trading at $1.1325 that means there are $1.1325 USD per one EUR.

- 100,000 EUR = $113,250 USD  
  (100,000 EUR * $1.1325)
- $250,000 USD = 220,750.55 EUR  
  ($250,000 / $1.1325)

If USD/MXN is trading at 15..0000 that means there are 15.0000 MXN pesos per $ USD.

- 15,000,000 MXN = $1,000,000 USD  
  (15,000,000 MXN / 15.0000)
- $650,000 USD = 9,750,000 MXN pesos  
  ($650,000 USD * 15.0000)

All other currency pairs quoted against the USD are done using the “indirect method.” Which means foreign currency per $ USD.
Currency pairs are not always quoted with USD as one of base currencies and can be any combination of direct pairs and indirect pairs.

**EXAMPLE:**

<table>
<thead>
<tr>
<th>PAIR QUOTED IN:</th>
<th>EUR / GBP (direct v. direct)</th>
<th>EUR / JPY (direct v. indirect)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>British Sterling per EUR</td>
<td>JPY per EUR</td>
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</table>

**CURRENT RATE:**

- If the current EUR/GBP rate is .7349, seventy-three and forty-nine hundredth pence is required to purchase one EUR
- If the current cross rate is 133.75, it takes 133.75 yen to purchase one EUR

**TO DETERMINE THIS CROSS RATE MATHEMATICALLY:**

- Divide the EUR/USD rate ($1.1325) by the GBP rate ($1.5410)
- Multiply the two exchange rate pairs together (118.10 and $1.1325)

**RESULT:**

- $1.1325 / $1.5410 = .7349
- 118.10 x $1.1325 = 133.75
Central Bank monetary policy is typically the primary driver of currency value and predictability in rate movements. Any news the market doesn’t anticipate creates considerable volatility when announced.

**Market events in 2014/2015**

- US Fed contemplates tightening monetary policy with QE unwind and market anticipates higher interest rates in 2015
- ECB contemplates Quantitative Easing (QE) as Eurozone growth remains flat
- Bank of Canada announces surprise interest rate cut
- Bank of Japan announces QE policy and concerns of prolonged, stagnate growth
- Swiss Central Bank announces removal of EUR/CHF floor at 1.2000
- Ukraine and Russia in crisis
- Arab Spring and ISIS
- South American turmoil and spill over of Argentine debt
- Oil and other commodity prices fall
- Leadership in Greece and debt obligations
1 Year EUR

20% depreciation

1.2000 was significant
Breaking point
1 Year CAD

Bank of Canada surprises with 25bp interest rate cut
1 Year JPY

Last Price: 118.93
High on 12/05/14: 121.46
Average: 108.25
Low on 07/17/14: 101.18

Graph showing the JPY currency performance over a year.
Swiss Central Bank announces they will no longer support EUR at 1.2000
1 Year CHF
China cooling
The Crude Trade
Rise of the Greenback

USD has appreciated 20% since May 2014
How does Foreign Exchange impact your business?

- Doing business outside your home country creates exposure to currency movements.
- Doing business inside your home country can have foreign currency implications too!
- Global business, regardless of geographic borders, generates exposure to currency swings.
- Unless all exposure is understood and quantified, management decisions put your company at risk for not only margin and profit disruptions, but for share price ramifications as well.

Most companies have some type of direct or indirect FX exposure.

- Importer who agrees to pay in foreign currency
- Exporter who agrees to receive foreign currency
- Acquisitions / divestitures that are off-shore
- Foreign currency bid for offshore business with 50% probability of award
- Competition against foreign companies

FX rates affect virtually every aspect of a company’s business.

- Sales Income
- Labor Cost
- Material Cost
- Capital Purchases
- Pricing
- Margins
- Competition
- Market Share
Foreign Exchange Risks – Volatility

Translation Risk
Translation of foreign currency denominated assets / liabilities into your financial statements.

Economic Risk
Competitive advantages and / or disadvantages resulting from exchange rate fluctuations.

Transactional Risk
Transactions denominated in a foreign currency are settled at a different exchange rate than initially recorded or budgeted.

There is also risk in the price provided by the bank.
Foreign Exchange Risks – Volatility

Sample Transaction Exposures (all cash transactions that need to be converted):
- Payables form imported goods
- Receivables from exported goods
- Royalty payments for patents
- Principal and interest loan payments
- Dividends (pay or receive)
- Potential mergers / acquisitions / divestures

Sample Translation Exposure:
- A Brazilian subsidiary needs to be folded into a US parent company’s financial statements.
- Depending on the exchange rate movement from the previous accounting period there will be a gain or loss.

Sample Economic Exposure:
- Price lists
- Bidding on a one-time transaction
### Foreign Exchange Products

#### Spot Contracts
- The purchase / sale of one currency against another for immediate delivery (any wire transfer).
- Used to pay invoices in other currencies or to convert foreign receivables.

#### Forward Contracts
- The purchase / sale of one currency against another at a set FX rate for a future settlement date.
- Used to hedge a known exposure or risk in the future.
- The currency is typically “delivered” or wired on the settlement date.

#### Swaps
- An agreement involving two separate FX contracts for two separate dates (known as “legs”).
- One leg will be a sale (purchase) and the next leg will be a purchase (sale) of the same currency.
- Used when there is a known need to have to buy (sell) and then sell (buy) the same currency at different points in time (a company may have a EUR payable and a EUR receivable on different dates).

#### Non-Deliverable Forward
- A forward contract for specific currencies that are not freely traded (i.e. China and Brazil).
- These instruments provide a hedge like a normal forward contract but the funds are not “delivered” at maturity.
- The hedge is unwound at settlement and the gain / loss is squared in USD.
Forward Contract Pricing

Forward contracts are the most commonly used hedging tool.

The “all-in” forward rate of exchange includes two components:

The Current Spot Exchange Rate

Forward Points (Plus or Minus)

The interest rate differential in the two countries within the currency pair.

Can be premium or discount.

Will move along with Central bank policy or bond market changes.

Example:

One year EUR/USD forward to purchase 500,000 EUR is $1.1415

- Spot = $1.1325
- One year EUR/USD forward points = + $.0090
- $1.1325 + $.0090 = $1.1415

In one year 500,000 EUR will be wired at a rate of $1.1415 and will cost USD of $570,750
Case Study: ABC Co. manages Canadian expenses via rolling hedge program

**Background:** ABC Co. sources product from a Canadian manufacturer. The company's forecast looking forward is a spend of approximately $5,000,000 Canadian annually, broken down into equal monthly payments. It is ABC Co.'s desire to manage their exposure so as to understand the USD cost looking forward.

**Strategy:** ABC Co. will enter into a rolling hedge program via forward contracts to lock in a portion of their Canadian payables. The approach has the company hedged with a larger percentage of the exposure on the front end or near value dates tiered to a lesser percentage at the far end of the value dates. It is ABC Co.'s goal to always have hedges out 1 year.

**Execution:** Upon entering into the rolling hedge program, ABC Co. locks into forward contracts in the following manner: 80% of forecasted exposure for first 3 months, 60% for following 3 months, 40% and 20%. This provides a net hedge of 50% of the company's annual exposure. As the settle each monthly payment they utilize the maturing hedge and supplement the payment with spot trades if needed. ABC Co. also adds additional forward hedges at this time so as to always be hedge at 50% and out 1 year.

**Outcome:** The rolling hedge program allows ABC to have a baseline USD cost that is known while permitting them to participate in the market.
Rolling Hedge Program Example for ABC Company

*On 6/30/14, the Company initially establishes monthly hedges to cover its forecasted Plan 2014/15 exposure of approximately 416,666.67 CAD per month (5.0 million CAD /yr).

Equals 50% initial coverage of the annual forecasted exposure
On-going Roll Forward and Layering (can be done monthly or quarterly)

- For the next month (as one month drops off) and for each month thereafter, ABC will add to the program to continue covering the next 12 months with a structure that provides for 80% for the next quarter and 50% (via 80%/60%/40%/20%) for the following 12 mos.

Equals 50% on-going coverage of the annual forecasted exposure

<table>
<thead>
<tr>
<th>Month</th>
<th>Initial Hedge</th>
<th>New Layer</th>
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<tbody>
<tr>
<td>Aug '14</td>
<td>CAD 1,000,000</td>
<td></td>
</tr>
<tr>
<td>Sep '14</td>
<td>CAD 750,000</td>
<td></td>
</tr>
<tr>
<td>Oct '14</td>
<td>CAD 500,000</td>
<td></td>
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<tr>
<td>Nov '14</td>
<td>CAD 250,000</td>
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2.5MM CAD (50% of 5.0MM Exposure)
Case Study: Selling Internationally in Foreign Currency

- **Background**: US Contractor follows client to Germany performing store remodels. Client mandates they pay contractor in EUR creating EUR/USD rate exposure.
  - Contract accepted 12/1/14 for 500,000 EUR with payment due 15 days after completion of project.
  - EUR/USD rate on 12/1/14 = 1.2500
  - 500,000 EUR = $625,000
- Work Completed as scheduled 12/30/14 and EUR payment was received on 1/15/15.
  - EUR/USD rate on 1/15/15 = 1.1625
  - 500,000 EUR = $581,250 (-$43,750 loss from contract acceptance)
  - Company decided to wait in hopes the rate would become more favorable, but “stops their loss” at month end and converts the EUR to USD at 1.1290
    - EUR/USD rate 1/30/15 = 1.1290
    - 500,000 EUR = $564,500 (-$60,500 loss from contract acceptance)
- **HOPE IS NOT A STRATEGY**
  - Company could have hedged with a Forward Contract upon acceptance of the bid and locked in the conversion of 500,000 EUR insuring receipt of the $625,000.
Case Study: Hedging Chinese payable with Non-Deliverable Forward

- **Background**: US Manufacturing has sourced several components from China and will pay the invoices in CNY. Although the CNY trades in relatively tight range on a day to day basis, the recent move in the rate has been favorable to US Mfg and they are concerned the rate could go lower by the time they pay their invoice.

- **Strategy**: Because CNY is a restricted currency, US Mfg can’t readily purchase the CNY on the forward market and deliver the currency at maturity. They can, however, lock into a Non-Deliverable Forward which permits them to lock into a future rate to protect from adverse movement.

- **Execution**: Based on the forecasted expenditure in CNY US Mfg enters into a Non-Deliverable Forward Contracts (NDF) to purchase to purchase 1,000,000 CNY to settle in 3 months.

- **Outcome**: US Mfg has hedged their payment in CNY and mitigated the risk of the end payment costing them more in USD upon due date.
Case Study: Hedging Chinese payable with Non-Deliverable Forward

US Mfg hedges 1,000,000 CNY payable today with NDF with a maturity date of 3 months (6/2/15)

USD/CNY NDF rate for 6/2/15 = 6.2050
1,000,000 / 6.2050 = ($161,160.35 cost)

**Settlement of hedge:** one day prior to 6/2/15 (CNY NDF’s settle one day prior to maturity based on fix)
*Assume spot rate is 6.1050 on 6/1/15

US Mfg SELLS back the CNY 1,000,000 @ 6.1050 = $163,800.16 receipt of USD value 6/2

US Mfg is credited $2,639.81 for the gain on the hedge (163,800.16 – 161,160.35)

At the time of the fixing US Mfg purchases the CNY 1,000,000 on the spot market at 6.1050 and pays USD 163,800.16. Applying the gain from the hedge of $2,639.81 the net cost of the CNY is $161,160.35.

**Summary:** Even though there is not a deliverable forward market for CNY the company can mitigate the risk of movement in the currency via NDF’s giving predictability to final USD cost.
Where do we go from here?

- **Fed Policy:**
  - winding down of QE
  - does Fed raise benchmark interest rate in 2015?

- **Europe:**
  - ramping up monthly bond purchases
  - negative rates in Switzerland
  - Greek decision and contagion

- **Commodity prices:**
  - remain low or does crude trade back to recent levels?

- **Conflict:**
  - Middle East
  - Russia and Ukraine

- **China:**
  - growth or lack there of
<table>
<thead>
<tr>
<th>For More Information:</th>
<th>Resources To Help You Succeed:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rick Jones, Managing Partner 513.386.7447 office 513.703.0982 cell <a href="mailto:rick.jones@bbgfx.com">rick.jones@bbgfx.com</a></td>
<td>Bannockburn Global Forex, LLC Discuss FX strategies Hedging options Make simple currency payments</td>
</tr>
<tr>
<td>John Schuermann, Partner 513.745.9866 office 937.238.1686 cell <a href="mailto:john.schuermann@bbgfx.com">john.schuermann@bbgfx.com</a></td>
<td>Clark Schaefer Hackett International Services Group Tax Consulting and Compliance Financial Reporting Advisory</td>
</tr>
<tr>
<td>David Coomer, Principal 937.226.0070 office <a href="mailto:dcoomer@cshco.com">dcoomer@cshco.com</a></td>
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Thank you!

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