Managing Foreign Currency Risk

Global Business Club of Mid-Michigan

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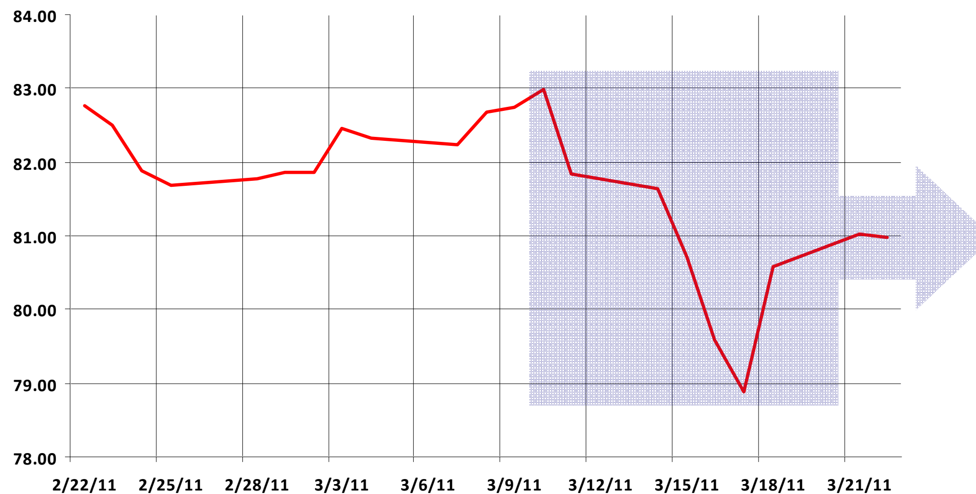
Sources of Foreign Currency Risk

- **Multinational firms are engaged in a broad variety of global activities:**
  - Foreign sales
  - Foreign inputs (costs)
  - Foreign production
  - Foreign competition
  - Foreign investments (i.e., overseas subsidiaries)
  - Foreign currency debt
- **Each of these activities represents a potential channel through which currency fluctuations might affect firm performance**

Consequences of Currency Risk

- **Firms are exposed economically to foreign currency risk in many different ways, including:**
  - **Direct effects** of currency movement on the USD values of non-USD sales revenues, expenses and ultimately *cash flows*.
  - **Direct effects** of currency movements on the USD value of non-USD assets
  - **Indirect effects** of currency movements on a firms competitive position, sales volumes, revenues and ultimately *cash flows.*



This chart illustrates the dramatic and volatile movement in the JPY against the USD in the days after the earthquake.

It represents a 7% appreciation of the currency – why did it strengthen?

Keys to an Effective Risk Management Policy

- **A formal, FX Risk Management Policy provides a solid foundation for the management of currency exposure.**
- **The policy should:**
  - Contain a concise statement of the risk management goal
  - Identify the types of exposures to be managed
  - Describe the hedge techniques and products that may be used
  - Outline the process for determining specific exposures to be hedged and strategies to be employed
  - Summarize the process for monitoring performance of strategies

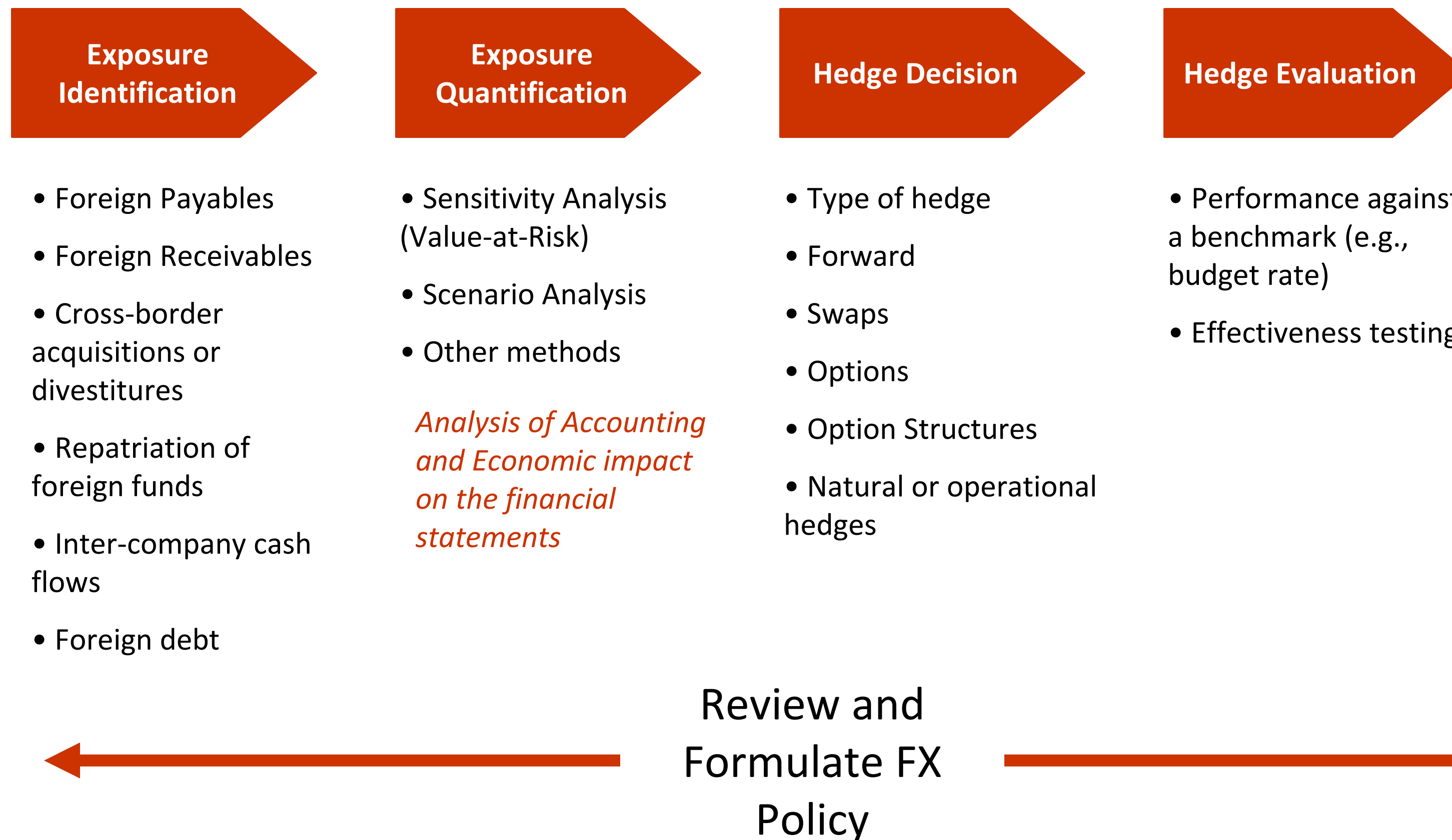
2010 Bank of America Merrill Lynch Risk Management Survey

Specific Objectives	%
Eliminate FX Gains/Losses	74%
Optimize the USD value of cash/budget	36%
Minimize the Cost of Hedging	17%
Minimize Deviations to Budget	30%
Don't Know	3%

Uses Derivatives to Hedge	%
Yes	88%
No	12%

Managing Foreign Currency Risk

The Risk Management Cycle



Topical FX Issues

- **Appreciation of the RMB**
- **USD vs. Local Currency Decision**
- **Sharing Agreements**
- **Emerging Markets**
- **Japan:** Earthquake, Fiscal Year-End and Intervention

Questions?

Appendix:

Foreign Exchange Products

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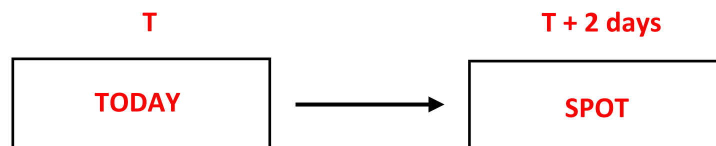
Foreign Exchange Products

Spot Transactions

- A legally binding agreement to sell one currency and buy another for standard delivery, known as the Value Date.

- Value Date
  - Typically the second business day
  - Value/Settlement day change at 5:00pm EST

- Settlement
  - Involves the delivery of currencies to banks in each of the two countries
  - Valid value dates exclude bank holidays in either country



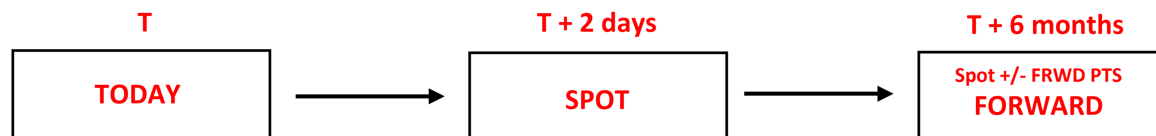
Forward Contracts

- A contract (obligation) to buy or sell one currency against another currency with a fixed notional, a fixed price, and a fixed value date.
- Forwards eliminates exposure to FX rate movements, both unfavorable and favorable.

Example:

Company XYZ imports raw materials from Europe and needs to pay a vendor EUR 500,000 in six months. Wanting to lock in their costs, they enter into a six month forward contract to buy 500,000 euro and sell $767,750 at a rate of 1.5355 (1.5500 spot and -145 fwd pts).

- Need to be certain of notional and date of payment.
- They are locked into this rate regardless of what the spot market does.
- In six months time they will pay USD and receive EUR.
- They have use of funds until the settlement date.
- An FX Credit Facility is required to enter into a forward contract.
- If they are unable to meet contract requirements, forward contract may be cash settled or rolled to a future date – both at prevailing market rates. This could result in either a gain or loss for the Company.



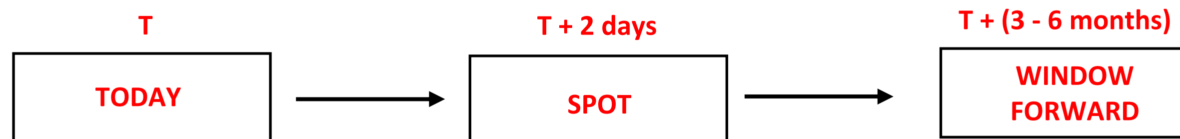
Window Forward Contracts

- The same as a Forward except that all or part of the notional can be “drawn down” from the contract at any time during a window of time.

Example:

Company XYZ imports raw materials from Europe and needs to pay a vendor EUR 500,000 in three to six months. Wanting to lock in their costs, they enter into a window forward contract to buy 500,000 euro, available to them anytime after three months from trade date up to six months from trade date.

- Provides flexibility for when payment date is uncertain.
- May draw down entire notional or in portions throughout window timeframe.
- They are locked into this rate regardless of what the spot market does.
- If they are unable to meet contract requirements, forward contract may be cash settled or rolled to a future date – both at prevailing market rates. This could result in either a gain or loss for Company.
- Accounting efficient – the same rate is applied for multiple transactions.



Non-Deliverable Forward (NDF)

What is an NDF?

- Non Deliverable Forward (NDF): 'net cash settled' contracts.
  - Contrary to deliverable forwards, there is NO physical exchange (delivery) of the principal amounts in a NDF transaction; it is cash net settled.
- Principal amount (notional), contract (forward) rate, maturity date, rate fixing & settlement methodology are agreed at the time of the transaction.

When to use them?

- Demand for NDFs arises due to regulatory issues, liquidity and risk in underlying currencies.
- Regulatory issues (absence of a local forward market due to exchange regulations, only restricted onshore vs. offshore trading)
- Limited local liquidity
- Risk implications with local counterparties
- Risk is limited to market risk & fixing risk
- Settlement constraints due to non available local accounts

Options

- An option gives the buyer the right, but not the obligation, to buy or sell a predetermined amount of one currency for another currency at a pre-specified rate at or before an agreed upon point in the future.
- An option gives the seller the obligation to perform the terms of the option should the buyer decide to exercise the option.
- Unlike forwards, options enable users to participate in favorable currency price movements while still providing downside protection.

- Two types of options:
  - **Call options** - A call provides the right, but not the obligation, to buy the underlying currency.
  - **Put option** - A put provides the right, but not the obligation, to sell the underlying currency.

- Using simple purchased currency option strategies to hedge currency exposure is analogous to purchasing insurance.
- Paying premiums up-front may seem onerous at first, but it is well worth the cost when a catastrophic even occurs that would otherwise cause a serious fiscal loss if the insurance was not present.
- Can buy and sell options to create combination strategies with different risk management characteristics and pricing/cost profiles.

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