International Financial Accounting and Policy

Foreign Currency Transactions and Hedging Foreign Exchange Risk

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Foreign Exchange Markets (1945 -1973)

- Ø Exchange rates fixed in U.S. dollar
- Ø U.S. dollar was fixed in gold - U.S. dollar was fixed to gold at $35 per ounce
- Ø March 1973 most currencies float in value

Exchange Rate Mechanisms

Ø **Independent float**
- ü Currency value allowed to move freely
- ü Little government intervention

Ø **Pegged to another currency**
- ü Currency value fixed in terms of a foreign currency
- ü E.g. U.S. dollar
- ü Central bank maintains the exchange rate

Ø **European Monetary System (Euro)**
- ü Twelve countries use a single currency
- ü Floats against other currencies E.g. U.S. dollar

Foreign Exchange Markets

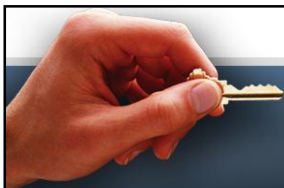
Ø **Foreign Exchange Rates**
- ü Interbank rates
- ü Wholesale prices
- ü Exchange of currencies within Banks

Ø **Published on the internet and in newspapers**

Ø **Reflected as;**
- ü Direct quotes (US $ equivalent)
- ü Indirect quotes (currency per US $)

Foreign Exchange Rates

- **Spot rates**
  - Today's price for purchasing or selling a foreign currency
- **Forward rate**
  - Today's price for purchasing or selling a foreign currency for some future date
- **Premium**
  - Forward rate is greater than the spot rate
- **Discount**
  - Forward rate is less than the spot rate



Foreign Exchange Rates

- **Option contracts**
  - Foreign currency option
  - Gives right, no obligation
  - Trade foreign currency in future
- **Put option**
  - Option to sell the foreign currency
- **Call option**
  - Option to buy the foreign currency
- **Strike price**
  - Exchange rate at which currency will be exchanged when option is exercised

Foreign Currency Transactions

- **Transaction exposure**
  - Exposure to foreign exchange risk
- **Export sale**
  - Sale to foreign customer
  - Later payment
  - In customer's currency
- **Import purchase**
  - Purchases from foreign supplier
  - Payment in the supplier's currency
- **Foreign exchange risk**
  - Change in the exchange rate results
  - Exporter will receive less
  - Importer will pay more than anticipated

Foreign Currency Transactions

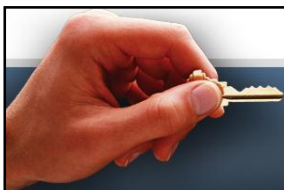
- **Example**
- Joe Inc., a U.S. company, makes a sale and ships goods to Jose, SA, a Mexican customer
- Sales price is $100,000 (U.S.) and Joe allows Jose to pay in pesos in 30 days
- The current exchange rate is $0.10 per 1 peso
- Joe plans to receive 1,000,000 pesos ($100,000/$0.10)

- Joe has foreign exchange risk exposure because he may receive less than $100,000.
- Suppose the peso decreases such that in 30 days the exchange rate is $0.09 per 1 peso.
- Joe will receive 1,000,000 pesos which will be worth $90,000 (1,000,000 x $0.09) and Joe receives $10,000 less due to exchange rate fluctuation.

Accounting for Foreign Currency Transactions

Ø **One transaction perspective**
- ü Treats sale and collection as one transaction
- ü Transaction complete when foreign currency received and converted
- ü Sale is measured at converted amount
- ü Not allowed under IAS or U.S. GAAP

Ø **Two transaction perspective**
- Ø Two transactions as Sale & Collection
- Ø Sale based on current exchange rate
- Ø Exchange rate changes - Collection for different amount
- Ø Difference considered as a Foreign exchange gain or loss
- Ø Concepts are identical for purchase transaction
- Ø IAS 21 and FASB 830 require two-transaction perspective



Accounting for Foreign Currency Transactions

Ø **Gain or loss – export sales**
- ü Export sale - asset exposure
- ü If foreign currency appreciates - foreign exchange gain
- ü If foreign currency depreciates - foreign exchange loss

Ø **Gain or loss – import purchases**
- ü Import purchase - liability exposure
- ü If foreign currency appreciates - foreign exchange loss
- ü If foreign currency depreciates - foreign exchange gain

Accounting for Foreign Currency Transactions

- **Export sale**
- February 1, 2012, Joe Inc., a U.S. company, makes a sale and ships goods to Jose, SA, a Mexican customer.
- Sales price is $100,000 (U.S.).
- Jose agrees to pay in pesos on March 2, 2012.
- Assume spot rate as of February 1, 2011 is $0.10 per peso.

- Joe, Inc. records the sale (in U.S. $) on February 1, 2011 as follows:

Accounts Receivable	Dr	100,000
Sales	Cr	100,000

- On March 2, 2011, the spot rate is $0.09 per peso.
- Joe Inc. will receive 1,000,000 pesos, which are now worth $90,000. Joe makes the following journal entry

Cash	90,000
Foreign Exchange Loss	10,000
Accounts Receivable	100,000

Hedging Foreign Exchange Risk

- **Hedging**
  - Protects from exchange rate fluctuations
  - Foreign currency forward contracts
  - Foreign currency options

- **Foreign currency forward contract**
  - Buy or sell foreign currency
  - Future date

- **Foreign currency option**
  - Right to buy or sell foreign currency
  - For a period of time

- **Hedge accounting**
  - Used to hedge an exposure
  - Highly effective In offsetting changes in Fair value

Hedging Foreign Exchange Risk

- **Hedging – Example 1**
  - Previously, Joe Inc. lost $20,000 without hedging as the peso fell from $0.11 to $0.09.
  - The loss was ($0.11 - $0.09) x 1,000,000 pesos.
  - Joe could have purchased a foreign currency forward contract on December 1, 2010.
  - Under the contract, Joe would have agreed to sell 1,000,000 pesos for $0.105 on March 2, 2011.
  - In this case, Joe would have collected $105,000 rather than $90,000.
  - Instead of a $20,000 foreign exchange loss, Joe would have paid a $5,000 premium on the forward contract.