# INTERNATIONAL FINANCE

# FOREIGN EXCHANGE RISK MANAGEMENT

## FOREIGN EXCHANGE RISK MANAGEMENT

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# FOREIGN EXCHANGE RISK AND EXPOSURE

- **Foreign exchange risk** arises from unanticipated changes in exchange rates which give rise to the probability of incurring a loss.

- **Foreign exchange exposure** this is a **potential** for **firm's profitability**, **net cash flow**, and **market value to change** because of a change in exchange rates. Simply, foreign exchange exposure is a measure of how much the domestic **currency value of foreign assets and liabilities rises or falls** as a result of changes in the exchange rate.

    - Profits, cash flows, and market value – are the key financial elements of how we view the relative success or failure of a firm. The first two – profits and cash flows – largely give rise to the third, market value.

- Hence, an important task of the financial manager is to measure foreign exchange exposure and to manage it so as to maximize the profitability, net cash flow, and market value of the firm.

# TYPES OF FOREIGN EXCHANGE EXPOSURE

**Transaction Exposure**

**Operating Exposure**

**Translation Exposure**

## ❑ TYPES OF FOREIGN EXCHANGE EXPOSURE

### ➢ Transaction Exposure

- *Recall from lecture one Transaction Risk -It is the risk that currency exchange* ***rates will fluctuate after a firm has undertaken a financial obligation***.

- Transaction exposure **measures change in the value of outstanding financial obligations that one has undertaken prior to a change in exchange rates** but not due to be settled until after the exchange rates change.

- Thus, it deals with changes in cash flows that result from existing contractual obligations.

## ❑ TYPES OF FOREIGN EXCHANGE EXPOSURE

### ➢ Operating Exposure

- *Recall from lecture one Operating Risk– It is a **risk of changes in the future cash flows** of a company as a result of unexpected changes in foreign exchange rates (FX).*

- Operating Exposure measures the extent to which currency fluctuations can alter a company's future operating cash flows, that is, its future revenues and costs.

- Any company whose revenues or costs are affected by currency changes has operating exposure, even if it is a purely domestic corporation and has all its cash flows denominated in home currency. Also called economic exposure, competitive exposure, or strategic exposure.

- One measures the **change in the present value** of the firm resulting from any change in expected future operating cash flows of the firm. The change in value depends on the effect of the exchange rate change on **future sales volume, prices and costs**.

## ❑ TYPES OF FOREIGN EXCHANGE EXPOSURE

### ➢ Transaction and Operating Exposure Difference

- Transaction exposure and operating exposure exist because of unexpected changes in future cash flows. The difference between the two is that:

Transaction exposure is concerned with future cash flows already contracted for.

Operating exposure focuses on expected (not yet contracted for) future cash flows that might change because a change in exchange rates has altered international competitiveness.

These two together are sometimes referred to as economic exposure

## ❑ TYPES OF FOREIGN EXCHANGE EXPOSURE

### ➢Translation Exposure

- *Recall from lecture one Translation Risk– It is a risk of gain or loss arising* ***while translating the assets and liabilities of a foreign subsidiary into the parent company's currency.***

- It occurs due to conversion of foreign currency payables and receivable into the domestic currency. This kind of exposure arises, for example, from (i) a foreign currency asset or a liability that is already recorded on the balance sheet and (ii) a contract or an agreement involving a future foreign currency cash flow.

- It has a risk for accounting-derived changes in owner's equity to occur because of the need to "translate" foreign currency financial instatements of foreign subsidiaries into a single reporting currency to prepare worldwide consolidated financial statements.

# MANAGEMENT OF FOREIGN EXCHANGE RISK

## MANAGEMENT OF FOREIGN EXCHANGE RISK

### ➢The Concept of Hedging

- Many firms attempt to manage their currency exposures through hedging.

- Hedging is the taking of a position – either **acquiring a cash flow, an asset, or a contract** (including a forward contract) – that will rise (or fall) in value and offset (or rise) in the value of an existing position.

- Therefore, **hedging protects the owner of the existing asset from loss**. **However, it also eliminates any gain** from an increase in the value of the asset hedged against.

## ❑MANAGEMENT OF FOREIGN EXCHANGE RISK

### ➢The Concept of Hedging

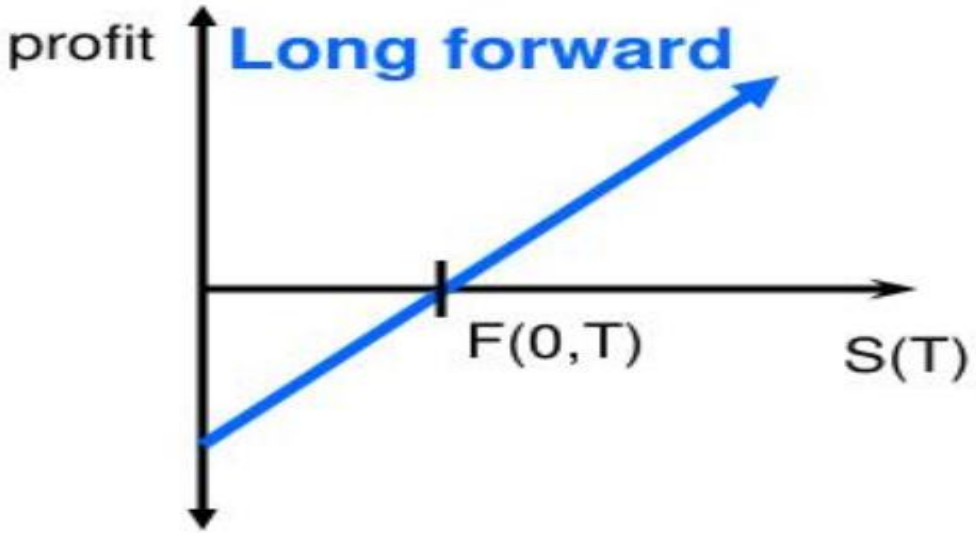
- The question remains. **What is to be gained by the firm from hedging?**
- The value of a firm according to financial theory is the net present value of all expected future cash flows. This is uncertain as these cash flows can be altered by exchange rate changes. **A firm that hedges its currency exposures reduces some of the variance in the value of its future expected cash flows.**
- Therefore, currency risk can be defined roughly as the variance in expected cash flows arising from unexpected exchange rate changes.

## ❑MANAGEMENT OF FOREIGN EXCHANGE RISK

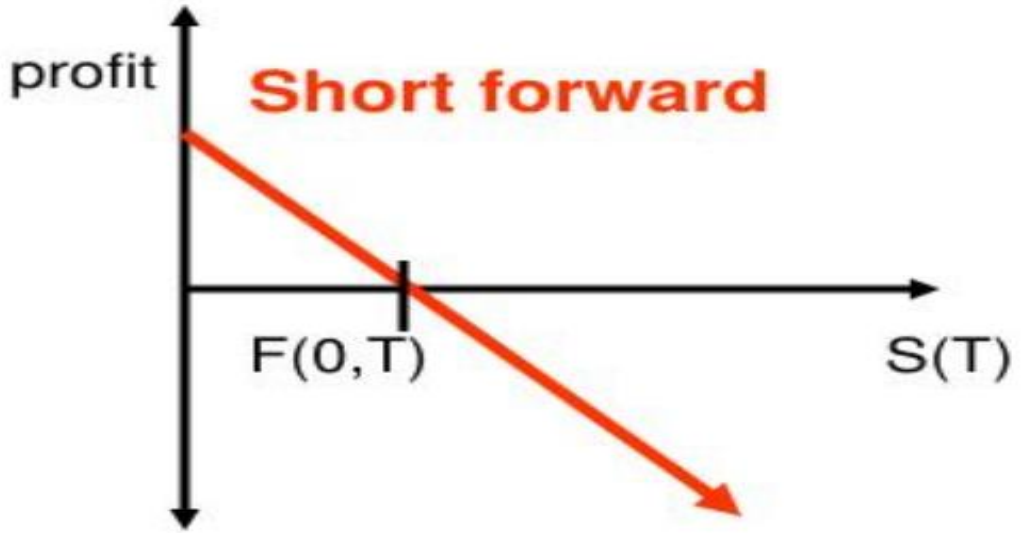
### ➢Why Worry about Foreign Exchange Risk?

- The **decision to hedge or not to hedge** foreign currency position **is basically a speculative decision**. It all depends on the expected spot rate of the movement of the exchange rate between the point in time when the decision is taken and when its effect materializes.
- Remember that, if the decision to hedge is taken, some costs may be incurred up front, such as the premium paid to acquire an option.
- If the decision to hedge the position is taken, and
  - > The exchange rate moves in a favorable direction (e.g. the foreign currency appreciates when the position involves receivables), then some possible gain has been lost. The gain would have been made by leaving the position un-hedged.
  - > On the other hand, if the decision not to hedge is taken and the exchange rate moves in an unfavorable direction (e.g. the foreign currency appreciates when the position involves payables), then some loses are incurred. These losses would have been avoided by taking a decision to hedge.

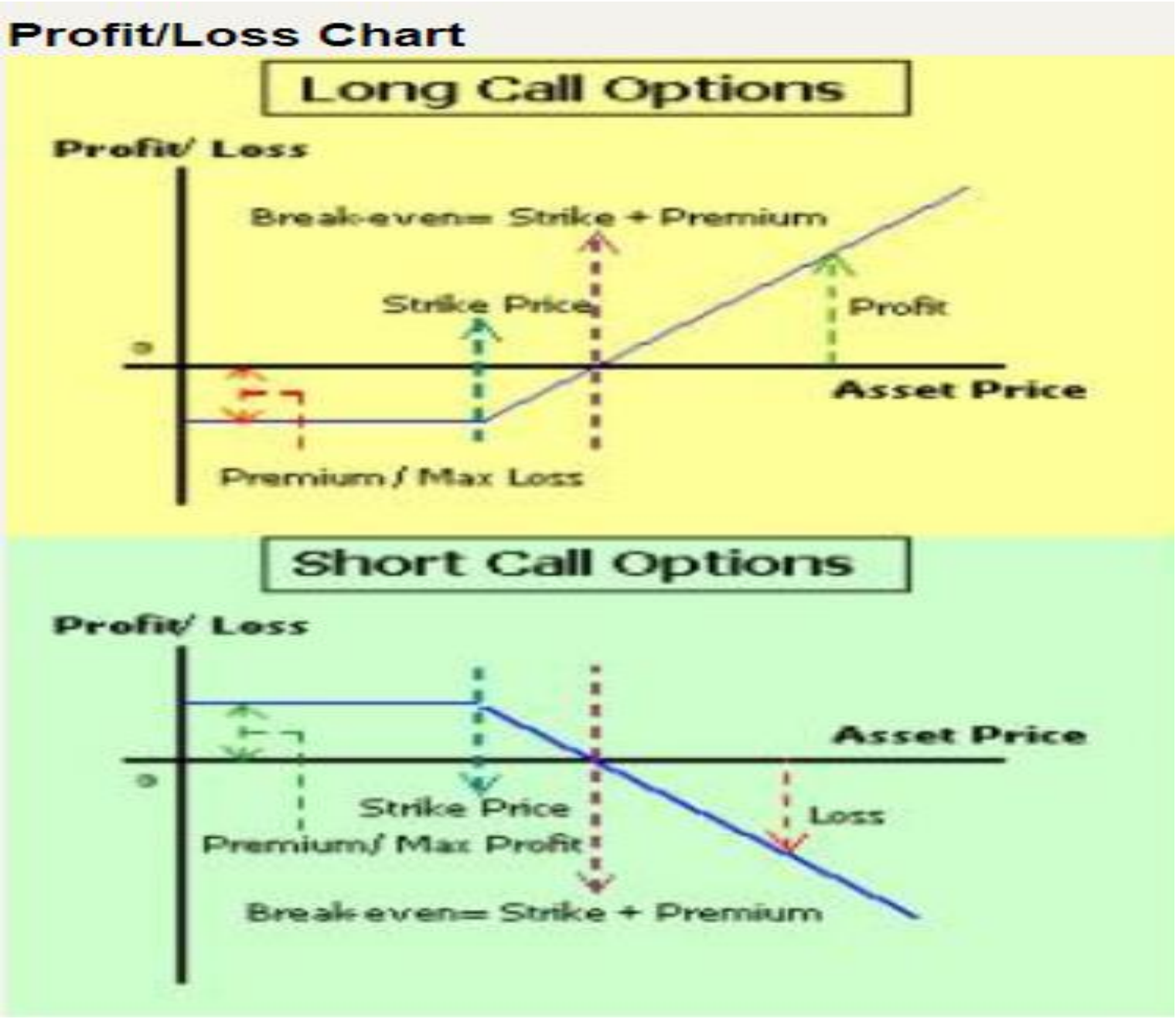
# Forward Contracts: Payoff Profiles




The long profits if the spot price at delivery, S(T), exceeds the original forward price, F(0,T).

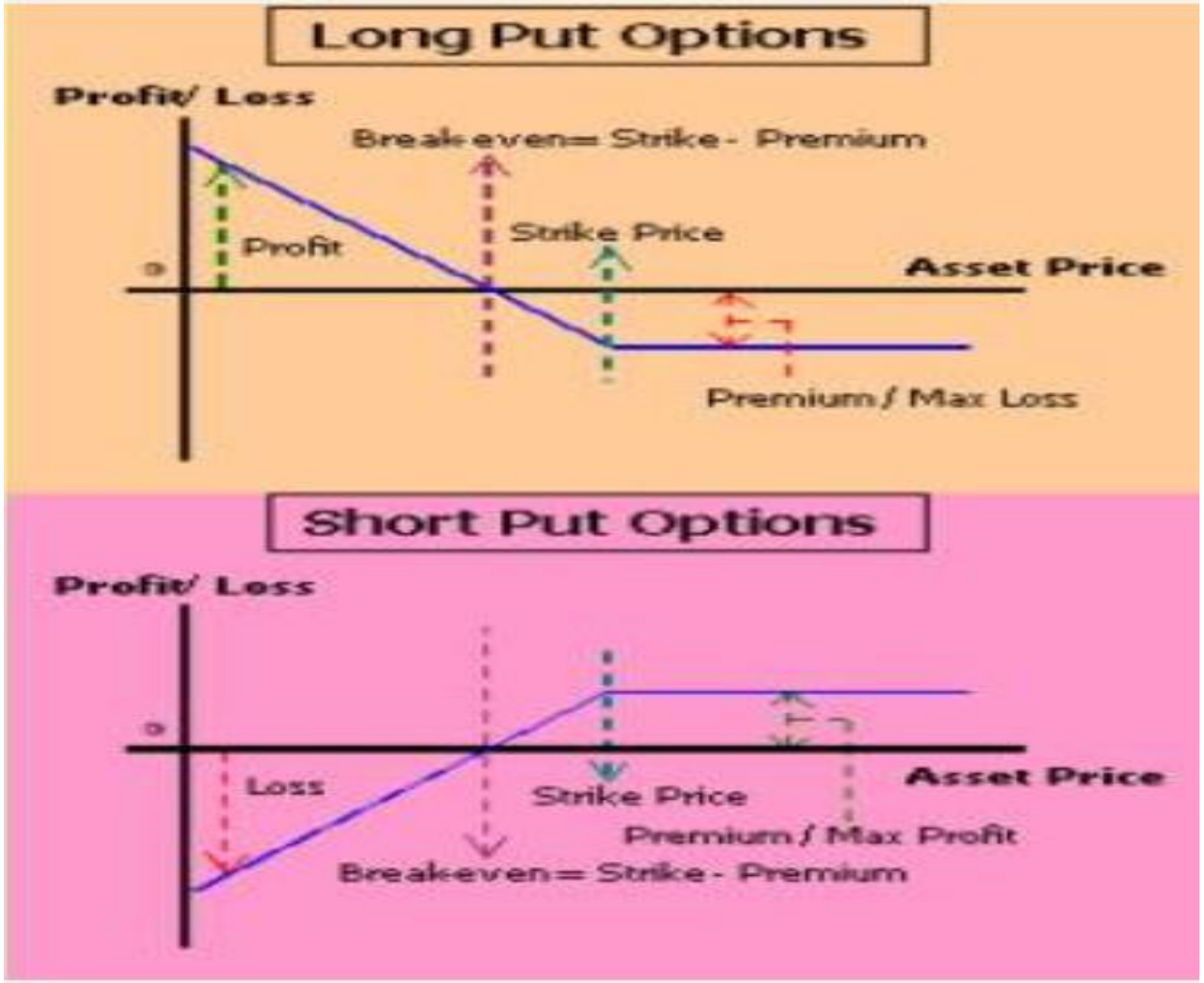



The short profits if the price at delivery, S(T), is below the original forward price, F(0,T).




Call Option

A call option is a contract that provides the buyer with the right to buy the underlying asset (long call) at a quantity and price specified in the contract. The call option seller has an obligation to sell the underlying asset (short call) to the call option buyer.




Put Option

A put option is a contract that gives the buyer the right to sell the underlying asset (long put) at a quantity and price specified in the contract. The put option seller has an obligation to buy the underlying asset (short put) from the put option buyer

## ❑MANAGEMENT OF FOREIGN EXCHANGE RISK

### ➢Why Worry about Foreign Exchange Risk?

- There are at least three arguments whey there is no need to worry about foreign exchange risk:

1) If international parity conditions hold, then foreign exchange risk will not arise.
2) If it is possible to forecast exchange rate accurately, then foreign exchange risk can be controlled, and the favourable outcome which is precluded by the act of hedging can be enjoyed.
3) Shareholders are naturally hedged through diversification, and so there is no need to indulge in costly hedging operations.

## ❑MANAGEMENT OF FOREIGN EXCHANGE RISK

### ➢Reasons Not to Hedge

Hence the key question: Is a reduction in the variability of cash flows sufficient reason for currency risk management" This question is actually accounting debate in multinational financial management. Opponents of currency hedging commonly make the following arguments:

1. Shareholders are much **more capable of diversifying currency risk than the management of the firm.**
2. Currency risk management **does not increase the expected cash flows of the firm**. Currency risk management normally **consumes some of a firm's resources and so reduces cash flow.**

## ❑MANAGEMENT OF FOREIGN EXCHANGE RISK

### ➢Reasons Not to Hedge

3. **Management often conducts hedging activities that benefit management at the expense of the shareholders** - Agency theory
4. **Managers cannot outguess** the market. If and when markets are in equilibrium with respect to parity conditions, the expected net present value of the hedging is zero.
5. **Management** may believe that it will be **criticized more severally for incurring foreign exchange losses in its financial statements than for incurring similar or even higher cash costs in avoiding the foreign exchange loss.** Foreign exchange losses appear in the income statement as a highly visible separate line item or as a footnote, but the higher costs of protection are buried in operating or interest expenses. Efficient-market theorists believe that investors can see through the "**accounting veil**" and therefore have already factored the foreign exchange effect into a firm's market valuation.

## ❑MANAGEMENT OF FOREIGN EXCHANGE RISK

### ➢Reasons to Hedge

- Proponents of hedging cite the following reasons for supporting it:

1. Reduction in risk in future cash flows **improves the planning capability of the firm**. If the firm can **predict future cash flows more accurately,** it may be able to undertake specific investments or activities that it might otherwise not consider.

2. Reduction of risk in future cash flow **reduces the likelihood that the firm's cash flows will fall below a necessary minimum.** A firm must generate sufficient cash flows to make debt-service payments in order for it to continue to operate. This minimum cash flow point, often referred to as the point of financial distress, lies left of the center of the distribution of expected cash flows. Hedging reduces the likelihood of the firm's cash flows failing to this level.

## ❑MANAGEMENT OF FOREIGN EXCHANGE RISK

### ➢Reasons to Hedge

3. Management has a comparative advantage over the individual shareholder in knowing the actual currency risk of the firm. Regardless of the level of disclosure provided by the firm to the public, **management always possesses an advantage in the depth and breadth of knowledge concerning the real risks and returns inherent in any firm's business.**

4. Markets are usually in disequilibrium because of structural and institutional imperfections, as well as unexpected external shocks (such as an oil crisis or terrorist attack). **Management is in a better position than shareholders to recognize disequilibrium conditions** and to take advantage of one-time opportunities to enhance firm singular, exceptional exposures or the occasional use of hedging when management has a definite expectation of the direction of exchange rates.

## ❑MANAGEMENT OF FOREIGN EXCHANGE RISK

## ➢TRANSACTION EXPOSURE MANAGEMENT

- Transaction exposure is concerned with future cash flows already contracted for.
- As exchange rates change between now and when transactions settle, so does the value of their associated foreign currency cash flows, leading to currency gains and losses.

### ➢Measurement of Transaction Exposure

- Transaction exposure measures gains or losses that arise from the settlement of existing financial obligations whose terms are stated in a foreign currency. Transaction exposure arises from the following:
  - Purchasing or selling on credit goods or services when prices are stated in foreign currencies.
  - Borrowing or lending funds when repayment is to be made in a foreign currency

**The most common example of transaction exposure arises when a firm has a receivable or payable denominated in a foreign currency.**

## ❑MANAGEMENT OF FOREIGN EXCHANGE RISK

## ➢TRANSACTION EXPOSURE MANAGEMENT

## ➢Protection against Transaction Exposure: Hedging Currency Risks

- A company has an **exposure to the risk of an adverse movement in exchange rates** whenever it needs to make a payment and whenever it expects to receive income in a foreign currency at a future date.
- The risk arises because between now and the future date, the exchange rate might move so that:

  - If a payment will be made in a foreign currency, the cost of buying the currency will be higher than it would be 'now' because the spot value of the foreign currency strengthens against the company's domestic currency.
  - If foreign currency income will be received exchanged for the company's domestic currency, the value of the receipt will be less than it would be 'now' because the spot value of the currency is weakness against the company's domestic currency.

## ❑MANAGEMENT OF FOREIGN EXCHANGE RISK

### ➢TRANSACTION EXPOSURE MANAGEMENT

### ➢Protection against Transaction Exposure: Hedging Currency Risks

### ➢Internal Hedging Techniques

1) *Invoicing in home currency: The currency of invoice decision* - Invoice in buyer's currency or another acceptable currency. For example, a UK company exporting goods to German can decide to invoice its customers in sterling. The currency risk is shifted to the German customers. A drawback to invoicing in domestic currency is that foreign customers might go to a different supplier.

2) *Leading and lagging:* Leading' refers to an immediate payment or the granting of very short-term credit. Lagging' refers to the granting (or taking) of long-term credit.

❑**MANAGEMENT OF FOREIGN EXCHANGE RISK**

➢**TRANSACTION EXPOSURE MANAGEMENT**

➢**Protection against Transaction Exposure: Hedging Currency Risks**

➢**Internal Hedging Techniques**

*3) Multilateral netting and matching:*

- **Matching involves** the use of receipts in a particular currency to meet payment obligations in the same currency.
- For example, suppose that a company expects to make **payments of US$479,000** in two months time, and also expects to **receive income of US$250,000** in two months. The company can use its income of $250,000 to meet some of the payments of $470,000. This **reduces to $220,000 its exposure** to a rise in the value of the dollar over the next two months.
- Similarly, suppose that a company expects to **receive €700,000** in three months time, when if also expects to **incur payments of €300,000**. It can use some of its income in Euros to make the payments, so that its **net exposure is to income of just €400,000.**
- It can be organized at group level by the treasury team, so that currency income for one subsidiary can be matched with expenditures in the same currency by another subsidiary.
- **Netting involves offsetting** the group's debtors and creditors in the same currency and only covering the net position.

❑**MANAGEMENT OF FOREIGN EXCHANGE RISK**

➢**TRANSACTION EXPOSURE MANAGEMENT**

➢**Protection against Transaction Exposure: Hedging Currency Risks**

➢**External Hedging Techniques**

## *1) Forward Market Hedge (Hedging with forward contracts) (FMH):*

- Forward contracts are an important method of hedging currency risks. This is because a forward contract can be used now to fix an exchange rate for a future receipt or payment in currency. If the exchange rate is fixed now, there is no need to worry about how the spot rate might change, because the future cash flow in domestic currency is now known with certainty. To hedge with a forward contract, we need to:
- Fix the rate now for buying or selling this foreign currency by entering into a forward exchange transaction with a bank.
- Read on advantaged and disadvantages of Forward Market Hedge

## *2) Money Market Hedge (MMH):*

- The money markets are markets for wholesale **(large-scale)** lending and borrowing, or trading in **short-term** financial instruments.
- Many companies are able to borrow or deposit funds through their bank in the money markets. Instead of hedging a currency exposure with a forward contract.
- A company can use the money markets to lend or borrow, and achieve a similar result. Since forward exchange rates are derived from spot rates and money market interest rates, the end result from hedging should be roughly the same by either method.

❑**MANAGEMENT OF FOREIGN EXCHANGE RISK**

➢**TRANSACTION EXPOSURE MANAGEMENT**

➢**Protection against Transaction Exposure: Hedging Currency Risks**

➢**External Hedging Techniques - MMH**

➢**Payable**

➢**Steps**

1. Calculate how much foreign currency needed (discount @ foreign deposit rate)
2. Convert that to home currency (you as customer will be buying the foreign currency)
3. Borrow that amount of home currency (@ home borrowing rate)
4. The cost will be the amount borrowed plus interest on that (@ home currency borrowing rate)

- **MANAGEMENT OF FOREIGN EXCHANGE RISK**
  - **TRANSACTION EXPOSURE MANAGEMENT**
  - **Protection against Transaction Exposure: Hedging Currency Risks**
  - **External Hedging Techniques - MMH**
  - **Example 1 – Payable**

**A Tanzanian importer has to pay USD 10,000,000 in 90 days to US supplier. The following information is provided:**

**The Spot Rate TZS 2100/USD**

**US Interest Rate 8%**

**Euro Interest Rate 5%**

***Calculate the cost in TZS using MMH and what is the effective forward rate?***

❑**MANAGEMENT OF FOREIGN EXCHANGE RISK**

➢**TRANSACTION EXPOSURE MANAGEMENT**

➢**Protection against Transaction Exposure: Hedging Currency Risks**

➢**External Hedging Techniques -MMH**

➢**Example 1 – Payable Solution**

We are dealing with this amount

**A Tanzanian importer has to pay USD 10,000,000 in 90 days to US supplier. The following information is provided:**

TZS is the home currency

USD is foreign currency

This is direct quotation

**The Spot Rate TZS 2100/USD**

**US deposit Interest Rate 8%p.a**

**Tanzanian Borrowing Interest Rate 10%p.a**

***Calculate the cost in TZS using MMH and what is the effective forward rate?***

# ❑MANAGEMENT OF FOREIGN EXCHANGE RISK

## ➢TRANSACTION EXPOSURE MANAGEMENT

## ➢Protection against Transaction Exposure: Hedging Currency Risks

## ➢External Hedging Techniques -MMH

## ➢Example 1 – Payable Solution

1. Calculate the value today of how much foreign currency needed to pay (discount @ foreign deposit rate)
   (i.e., to know how much should I deposit now to reach to USD 10,000,000 in 90 days)
   **You discount USD 10,000,000 now @ *8% = $10,000,000/(1+(0.08*90/360)***
   **= $ 9,803,921.569**
2. Convert that to home currency
   **$ 1 = TZS 2100**
   **$ 9,803,921.569 = ?**
   **= TZS 20,588,235,294.1176**
3. Borrow that amount of home currency (@ home borrowing rate)
   Borrow TZS 20,588,235,294.1176 **@ 10% rate equivalent to 90 days**
4. The cost will be the amount borrowed plus interest on that (@ home currency borrowing rate)
   **Cost will be**
   **TZS 20,588,235,294.1176 * *(1+(0.10*90/360)* = TZS 21,102,941,176.471 from MMH**

❑**MANAGEMENT OF FOREIGN EXCHANGE RISK**

➢**TRANSACTION EXPOSURE MANAGEMENT**

➢**Protection against Transaction Exposure: Hedging Currency Risks**

➢**External Hedging Techniques - MMH**

➢**Example 1 – Payable Solution**

## *The effective forward rate?*

**= The cost of the amount borrowed/ The payment you have to make**

**= 21,102,941,176.471 /10,000,000**

**= 2,110.294**

❑**MANAGEMENT OF FOREIGN EXCHANGE RISK**

➢**TRANSACTION EXPOSURE MANAGEMENT**

➢**Protection against Transaction Exposure: Hedging Currency Risks**

➢**External Hedging Techniques - MMH**

- **Receivable**

The foreign receipt is in the future, we can eliminate exchange risk by getting that foreign currency NOW. To do this we need to borrow it abroad.

## ➢Steps

1. Calculate the value today of how much foreign currency will be received (discount @ foreign borrowing rate)
2. Convert that to home currency (you as customer will be selling the foreign currency)
3. Deposit that amount of home currency (@ home deposit rate)
4. The receipt will be the amount deposited plus interest on that (@ home currency deposit rate)

- **MANAGEMENT OF FOREIGN EXCHANGE RISK**
  - **TRANSACTION EXPOSURE MANAGEMENT**
  - **Protection against Transaction Exposure: Hedging Currency Risks**
  - **External Hedging Techniques - MMH**
  - **Example 2 - Receivable**

**Tanzanian exporter will receive $400,000 from a US customer in 90 days. The following information is provided:**

**The Spot Rate TZS 2400/TZS**

**US Interest Rate borrowing is 2%p.a**

**Tanzanian Interest Rate deposit is 8% p.a**

***Calculate the expected dollar receipts using MMH and what is the effective forward rate?***

❑**MANAGEMENT OF FOREIGN EXCHANGE RISK**

➢**TRANSACTION EXPOSURE MANAGEMENT**

➢**Protection against Transaction Exposure: Hedging Currency Risks**

➢**External Hedging Techniques - MMH**

➢**Example 2 – Receivable Solution**

We are dealing with this amount

**Tanzanian exporter will receive $400,000 from a US customer in 90 days. The following information is provided:**

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TZS is the home currency

USD is foreign currency

This is direct quotation

***Calculate the expected dollar receipts in 90 days using MMH and what is the effective forward rate?***

## ❑MANAGEMENT OF FOREIGN EXCHANGE RISK

## ➢TRANSACTION EXPOSURE MANAGEMENT

## ➢Protection against Transaction Exposure: Hedging Currency Risks

## ➢External Hedging Techniques - MMH

## ➢Example 2 – Receivable Solution

## ➢Steps

1. Calculate the value today of how much foreign currency will be received (discount @ foreign borrowing rate)

   **$ 400,000now @ *2%* = *$400,000/(1+(0.02*90/360)***

   **= $ 398,009.950**

2. Convert that to home currency (you as customer will be selling the foreign currency)

   **$ 1 = TZS 2400**

   **$ 398,009.950 = ?**

   **= TZS 955,223,880.597**

3. Deposit that amount of home currency (@ home deposit rate)

   **Deposit TZS 955,223,880.597 @ 8%**

4. The reciept will be the amount deposited plus interest on that (@ home currency deposit rate)

   **TZS 955,223,880.597 * (1+(0.08*90/360) = TZS 974,328,358.20894**

- **MANAGEMENT OF FOREIGN EXCHANGE RISK**
  - **TRANSACTION EXPOSURE MANAGEMENT**
  - **Protection against Transaction Exposure: Hedging Currency Risks**
  - **External Hedging Techniques -MMH**
  - **Example 2 – Receivable Solution**

## *The effective forward rate?*

**= The Receipts you receive/The cost of the amount**

**= 974,328,358.20894/400,000**

**= 2,435.820**

❑**MANAGEMENT OF FOREIGN EXCHANGE RISK**

➢**TRANSACTION EXPOSURE MANAGEMENT**

➢**Protection against Transaction Exposure: Hedging Currency Risks**

➢**External Hedging Techniques - MMH**

➢**Example 3 – Receivable**

*Example: Kilimanjaro Company is a Tanzanian-based Company.*

***3 months expected receipts $300,000***

| | |
|---|---|
| ***Spot rate (TZS per $)*** | ***2100 – 2190*** |
| ***3 months forward (TZS per $)*** | ***2050 – 2200*** |

| | ***Borrowing Rate*** | ***Deposit Rate*** |
|---|---|---|
| ***One year TZS interest rate*** | ***4.9%*** | ***4.6%*** |
| ***One year $ interest rate*** | ***5.4%*** | ***5.1%*** |

***Calculate the expected TZS receipts in three 3months using MMH and what is the effective forward rate? Recommend whether FMH or MMH should be used?***

## ❑MANAGEMENT OF FOREIGN EXCHANGE RISK

## ➢TRANSACTION EXPOSURE MANAGEMENT

## ➢Protection against Transaction Exposure: Hedging Currency Risks

## ➢External Hedging Techniques - MMH

## ➢Example 3 – Receivable Solution

## ➢Steps

1. Calculate the value today of how much foreign currency will be received (discount @ foreign borrowing rate)

   **$ 300,000now @ *5.4% = $300,000/(1+(0.054*3/12)***

   **= $ 296,004**

2. Convert that to home currency (you as customer will be selling the foreign currency)

   **$ 1 = TZS *2100***

   **$ 296,004 = ?**

   **= 296,004 * 2100 = TZS 621,608,400**

3. Deposit that amount of home currency (@ home deposit rate)

   **Deposit 621,608,400 @ 4.6%**

4. The receipts will be the amount deposited plus interest on that (@ home currency deposit rate)

   **= 621,608,400 * *(1+(0.046*3/12)* = 628,756,896.6- from MMH**

❑**MANAGEMENT OF FOREIGN EXCHANGE RISK**

➢**TRANSACTION EXPOSURE MANAGEMENT**

➢**Protection against Transaction Exposure: Hedging Currency Risks**

➢**External Hedging Techniques - MMH**

➢**Example 3 – Receivable Solution**

***The effective forward rate?***

**= 628,756,896.6/300,000**

**= 2,095.856**

❑**MANAGEMENT OF FOREIGN EXCHANGE RISK**

- **TRANSACTION EXPOSURE MANAGEMENT**
- **Protection against Transaction Exposure: Hedging Currency Risks**
- **External Hedging Techniques - MMH**
- **Example 3 – Receivable Solution**

**Solution: Comparing with forward**

***3 months forward (TZS per $) 2050 – 2200***

**In forward you world receive:**

**$300,000*2050 = TZS 615,000,000**

***Better use MMH***

## ❑MANAGEMENT OF FOREIGN EXCHANGE RISK

### ➢TRANSLATION EXPOSURE MANAGEMENT

### ➢Definition and Nature

- Translation or accounting exposure arises from the need to consolidate worldwide operations according to predetermined accounting rules. Assets, liabilities, revenues and expenses must be restated in home currency terms in order to be consolidated into group accounts.
- If the same exchange rate were used to measure each and every line item on the individual statement (income statement, an imbalance sheet), there would be no imbalances resulting from the measurement. But if a different exchange rate were used for different line items on an individual statement, an imbalance would result.

## ❑MANAGEMENT OF FOREIGN EXCHANGE RISK

### ➢TRANSLATION EXPOSURE MANAGEMENT

### ➢Definition and Nature

- The most common means of protecting against translation exposure is balance sheet hedging.
  - These involve attempting to equalize exposed assets and liabilities.
  - For example, a **company may try to reduce its foreign currency denominated assets if it fears a devaluation of the overseas currency**, by running down cash balances, chasing debtors and reducing stock levels.
  - At the time it might **increase its liabilities by borrowing in the local currency if it fears appreciation of overseas currency**. If it can equate its foreign currency assets and liabilities then it will have no net exposure to changes in exchange rates.

## ❑MANAGEMENT OF FOREIGN EXCHANGE RISK

## ➢TRANSLATION EXPOSURE MANAGEMENT

### ➢Definition and Nature

- The Importance of **translation exposure to financial management is, however, often questioned** - In financial management terms we must ask the question '**Does a translation loss reduce shareholder wealth?**'

- The answer is that it is **unlikely to be of consequence to shareholders** who should in an efficient market, **value shares on the basis of the firm's future cash flows, not on asset values in published accounts.** Unless management feels that translation losses will greatly upset the shareholders there would seem little point in protecting against them.

❑**MANAGEMENT OF FOREIGN EXCHANGE RISK**

➢**TRANSLATION EXPOSURE MANAGEMENT**

➢**Alternative Translation Methods**

## ➢*Monetary/Nonmonetary Method*

- This method differentiates between monetary assets and liabilities – that is, those items that represent a claim to receive, or an obligation to pay, a fixed amount of foreign currency units – and nonmonetary, or physical, assets and liabilities.
- Monetary items (for example, cash, accounts payable and receivable, and long-term debt) are translated at the current rate, nonmonetary items (for example, inventory, fixed assets, and long-term investments) are translated at historical rates.

❑**MANAGEMENT OF FOREIGN EXCHANGE RISK**

➢**TRANSLATION EXPOSURE MANAGEMENT**

➢**Alternative Translation Methods**

## ➢*Temporal Method*

- The temporal method appears to be a modified version of the monetary/nonmonetary method. The only difference is that under the temporal method, inventory is translated at the current rate.

## ➢*Current Rate Method*

- The current rate method is the most prevalent in the world today. Under this method, all financial statement line items are translated at the “current” exchange rate with few exceptions.

## ❑MANAGEMENT OF FOREIGN EXCHANGE RISK

## ➢ECONOMIC EXPOSURE MANAGEMENT

➢Economic exposure is the combination of two components: transaction exposure and operating exposure.

- Operating exposure arises because currency fluctuations can alter a company's future revenues and costs – That is, its operating cash flows. Consequently, measuring a firm's operating exposure requires a longer-term perspective, viewing the firm as an ongoing concern with operations whose cost and price competitiveness could be affected by exchange rate changes. Thus, the firm faces operating exposure the moment it invests in servicing a market subject to foreign competition or in sourcing goods or inputs abroad. This investment includes new-product development, a distribution network, foreign supply contracts, or production facilities.
- Transaction exposure arises later on and only if the company's commitments lead it to engage in foreign currency-denominated sales or purchases.

❑**MANAGEMENT OF FOREIGN EXCHANGE RISK**

➢**ECONOMIC EXPOSURE MANAGEMENT**

**Strategic Management of Operating Exposure**

- Diversifying Operations
- Diversifying Financing

**Proactive Management of Operating Exposure**

- Matching currency cash flows
- Risk-sharing agreements
- Back-to-back or parallel loans
- Currency swaps
- Leads and lags

# We Did It!


THANK YOU
FOR YOUR
ATTENTION


THE
END