EXCHANGE RATES AND FOREX BUSINESS

CH – 1 MODULE A PART 5 BFM By Ashish Jain

7. Market Risk 📊

Definition: Potential losses due to adverse movements in **market variables** (exchange rates, interest rates, equity prices). Inability to exit positions quickly can amplify losses.

7.1 Interest Rate Risk

- Changes in **market interest rates** can erode the value of rate-sensitive assets or liabilities (e.g., bonds).

7.2 Equity Price Risk 📈

- **Volatility** in stock indices or individual share prices can reduce the fair value of equities held.

7.3 Currency Risk (Exchange Rate Risk)

- Also mentioned above. A decline in currency value reduces returns on foreign-currency assets.

8. Legal Risk ⚖️

Definition: Risk arising from **non-enforceability** of a contract against a counterparty, **documentation errors**, ambiguous clauses, or **international legal variations**.

Example: A contract with a foreign entity might become unenforceable in their local court, or certain **onerous clauses** may be invalid under that jurisdiction's laws.

9. Systemic Risk 🌐

Definition: The **contagion** possibility where the **failure of a major bank** cascades into broader **financial crises**, affecting multiple institutions.

10. Country Risk 🌍

Definition: The counterparty's inability to perform contractual obligations due to **local government regulations**, **political unrest**, or **economic instability** in its country.

Example: If **sanctions** or sudden policy changes prevent a foreign company from remitting funds to Indian banks, country risk materializes.

11. Sovereign Risk

Definition: A **subset** of country risk, where **state-owned entities** claim **sovereign immunity** from legal recourse or debt repayment. Some nations' laws uphold their sovereign status in a way that renders them effectively **immune to lawsuits**.

SUMMARY TABLE 📊

Risk Type	Key Aspect	Possible Impact
Operational Risk ⚙️	Human/system errors, poor controls	Losses from internal failures
Exchange Risk 💱	Currency fluctuations, mismatches in FX assets/liabilities	Loss in returns due to adverse exchange movements
Credit Risk 🤝	Counterparty default before/at maturity	Loss if payment is not received as per agreement
Settlement Risk ⏱️	Timing differences in FX settlements across different time zones	One party delivers currency, but the other fails, leading to partial settlement
Liquidity Risk 💧	Inability to meet short-term funding needs	Forced borrowing at high rates or asset firesales
Gap/Interest Rate Risk	Mismatched forward positions, changes in interest rate differentials	Negative impact on forward differentials, cash flows
Market Risk 📊	Adverse movements in exchange rates, interest rates, equities	Losses in trading or investment portfolios
Legal Risk ⚖️	Contract enforcement issues, documentation errors	Inability to recover claims due to legal complications
Systemic Risk 🌐	Contagion effect if a major institution fails	Potential wide-scale financial crisis
Country Risk 🌍	Political/economic instability, regulatory barriers	Counterparty prevented from honoring obligations
Sovereign Risk	Sovereign entities claim legal immunity	No legal recourse for recoveries if a state entity defaults

MANAGEMENT CONTROL IN DEALING ROOM OPERATIONS ⚖️

A **comprehensive management control** over dealing room operations involves:

1. **Assessing risk exposures** (outlined previously)
2. **Implementing strategies** to manage these risks

Since most banks regard **foreign exchange (FX) dealing rooms** as **profit centers**, having a **robust risk management policy** helps them operate within **permitted loss limits**. Attaining profits requires:

- **Adequate risk appetite**
- A proper **risk–reward trade-off**

Note: The **details on these risks** and their **management** are covered in the **Risk Management** unit.

SPECIALIZED NATURE OF FOREX DEALING OPERATIONS 💱

- FX dealing is a **highly specialized function**, requiring **well-trained personnel**.
- Typically, a dealing room has:
    - **Dealers** (Front Office)
    - **Back-Office Staff** (settlements, confirmations, and account entries)

The **Back Office** follows up on deals executed by dealers, ensuring **proper settlement**.

Effective controls are critical since opportunities for **manipulation** (e.g., exchange rates, mismatches, "washing names") can exist.

Clear Functional Separation

A key principle in dealing room operations is to **separate**:

1. **Dealing/Trading** (Front Office)
2. **Back-Office Accounting** (Processing & Control)
3. **Reconciliation** (Ensuring correct account balances)

IMPORTANCE FOR BANKS 🏦

- **Exchange profits** (from both **merchant transactions** and **trading** operations) contribute significantly to a bank's **bottom line**.
- Large banks (especially in major markets) invest heavily in:
    - **Multiple dealers**
    - **Sophisticated communication** & **IT systems**
    - **Specialized desks** (e.g., derivatives, currency futures, etc.) to **maximize profits**.

In **India**, many banks also maintain **large dealing rooms** catering to **various products** permitted by the **RBI** (Reserve Bank of India).

RISK CONTAINMENT MEASURES 🔒

Measure	Explanation
1. Dealer Limits 👨‍💼 🔒	Each dealer must know their **assigned limits** (exposure, stop-loss, etc.) and **operate strictly** within them.
2. Counterparty Limits 🤝 🔎	All deals with **counterparties** should stay within pre-approved **credit and exposure** limits.
3. Overall Position Control 🚦	By **day-end**, the bank's total position must be **within** NOOPL1, AGL2, IGL3, etc.
4. Mismatch Monitoring ⚖️	Keep a close watch on maturity **mismatches** (e.g., forward vs. spot dates) and open **currency positions**.
5. Profit/Loss Evaluation 📈 📉	**Foreign exchange P&L** must be regularly evaluated (periodically or more frequently).
6. Account Reconciliation 📝 🔧	- **RBI accounts**, **Nostro** and **Vostro** balances should be reconciled **at least monthly**. - Adjust discrepancies promptly.
7. Mirror Account Checks 🔄 ✅	Regularly review **mirror accounts**—confirm with Nostro correspondents and provide **Vostro** confirmations to banks maintaining INR accounts.

DERIVATIVE PRODUCTS

What is a Derivative?

A **derivative** is a **financial instrument** whose **value** is derived from an **underlying asset** (e.g., commodity, equity, bond, or foreign currency position). Common derivatives include:

- **Futures**
- **Forward Contracts**

- **Options**
- **Swaps**

These instruments serve **two distinct objectives**:

1. **Speculation** – taking a position **expecting a profit**.
2. **Hedging** – **reducing risks** associated with corporate cash flows or future exposures.

FOREIGN CURRENCY FUTURES 🌐

A **Foreign Currency Futures Contract** is an **exchange-traded** alternative to a forward contract.

It requires **future delivery** of a **standard amount** of foreign exchange at a fixed time, place, and price. Like other **futures contracts** (on commodities, metals, interest-bearing deposits, etc.), currency futures:

- Trade on **organized exchanges** (e.g., **Chicago Mercantile Exchange – CME**).
- Have prices linked to the **current spot/cash market** plus **forward volatility**.

Futures can be settled by **physical delivery** or **net settlement**. Common practices include **open interest** and **offsetting** positions to manage exposure.

Futures Contracts – Key Characteristics 🔑

1. **Standardized Contract**
   - Traded only **on the exchange** with **fixed specifications** (quantity, maturity, lot size, etc.).
2. **Price Discovery**
   - Based on **open outcry** or **electronic trading platforms**, driven by **demand and supply**.
3. **Underlying Assets**
   - Sellers must identify the **quality** if it's a commodity.
4. **Exchange-Traded**
   - Details of each element (USD, gold, equity index, etc.) are clearly defined.
5. **Settlement Price**
   - Established via **pit trading** or **electronic** systems.
6. **Clearing House Guarantee**
   - The **clearing house** becomes the **buyer to every seller** and **seller to every buyer**, ensuring performance.
7. **Margin Requirements**
   - **Clearing houses** manage credit risk by **collecting margins** (initial and mark-to-market).

FORWARD CONTRACTS ↔

A **forward contract** is a **negotiated agreement** between **two parties** to **fix an exchange rate** for foreign currency **in advance**. Unlike standardized futures, **forward contracts** are:

- **Tailor-made** for specific needs.
- **Over-the-counter (OTC)**, not exchange-traded.

They're typically used by **exporters** or **importers** to **hedge** future receivables/payables.

Example: An Exporter in India signs a **supply contract** on **1st November** with **90-day credit terms**, shipping goods on **5th November**. Payment of **USD 1,000,000** is due by **3rd February**. To avoid the **exchange fluctuation risk** on USD/INR, the exporter can enter a **forward contract** with their bank to lock in a **forward rate** for the USD receivable.

Forward Contracts – Key Characteristics ⚙️

1. **Agreement with a Bank**
   - Fixes **price** for a specified amount, **deliverable** on a future date.
2. **Delivery Options**
   - Either **fixed date** or **option-based** (within a range of dates).

3. **Tenure**
    - Typically up to **one year** (can be longer for **LTFX** if underlying exposure extends).
4. **Underlying Verification**
    - Requires **documentary evidence**.
    - Maturity of the hedge **must not exceed** the underlying.
5. **Credit Limits & Due Diligence**
    - Parties must have **credit lines** and pass **KYC/risk checks**.
6. **Utilization & Maturity**
    - Contracts must be **utilized** or **canceled** on/before **maturity**.
    - If **canceled**, **profit/loss** is settled accordingly.
7. **After-Maturity Cancellations**
    - If canceled **after** maturity, the **bank recovers losses** but **no profit** is passed to the customer.

FORWARD vs. FUTURES CONTRACTS 😲

Factor	Forward Contracts (OTC)	Futures Contracts (Exchange-Traded)
Contract Size	**Flexible** (any amount)	**Standardized** (set lot sizes)
Tenor (Maturity)	Up to **1 year** (can extend)	Typically **up to 1 year**
Contract Parties	**Customer & Bank** directly	**Customer & Exchange** through a clearing house
Price Discovery	**Bid/Ask quotes** between parties	**Open outcry** or **electronic** trading

Collateral/Margins	**No explicit** margin (credit line used)	**Initial & Mark-to-market** margins required
Settlement Process	Delivered/utilized/canceled on due date	Mostly **offsetting** or occasionally physical delivery
Market Hours	Flexible, **24 hours** (as per parties' convenience)	Restricted to **exchange operating hours**
Counterparty	**Direct contact** (bank-customer)	**Anonymous** (through exchange intermediary)
Commission	**No explicit** commission, bank earns from **spreads**	Typically a **single commission** concept

SUMMARY TABLE 📊

Topic	Key Points
Derivatives Definition	Value derived from **underlying assets** (currency, commodity, equity, etc.). Covers **Futures, Forwards, Options, Swaps**.
Futures Contracts 💱	- **Exchange-traded**, standardized - Settlement by **physical delivery** or **net offset** - **Clearing house** ensures performance - **Margin** required to manage risk
Forward Contracts ↔	- **OTC** (bank-client) - Flexible **size**, tailor-made - Used by **exporters/importers** for hedging future inflows/outflows - No formal **margin**, credit lines apply
Forwards vs. Futures 🤔	- **Forwards**: customized terms, no standard lot, direct bank-client - **Futures**: standardized lots, exchange-based, margin requirements

Indian Context Example IN	- Small exporter in **Surat** uses **forward** - Large IT firm in **Bengaluru** might choose **futures** on NSE