

**DEPARTMENT OF COMMERCE AND FINANCIAL STUDIES
BHARATHIDASAN UNIVERSITY, TIRUCHIRAPALLI-620024
MBA(FINANCIAL MANAGEMENT)**

Course Code: FMCC8/24

Course Name :FOREIGN EXCHANGE MANAGEMENT

**Unit – IV/ Topic : Clearing, Settlement, Risk Management,
Accounting and Taxation in Currency Futures**

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Scheme of Presentation

- Clearing entities
- Clearing mechanism
- Settlement mechanism
- Risk management measures
- Concept of margin requirements
- Accounting treatment for derivative contracts:
- Taxation of derivative transaction in securities
- Tax treatment of profit/loss on derivative transaction in securities

Clearing Vs Settlement

- Clearing means computing open positions and obligations of clearing members in the trading system.
- Whereas, settlement means actual pay in or pay out to settle the contract.
- The open positions computation is used to arrive at daily mark to market margin requirement and maintaining exposure norms.
- The settlement could be of mark to market settlement which happens on daily basis or could be final settlement which happens at the expiry of the contract.

Clearing members

- In the Currency Derivatives segment, trading-cum-clearing member clear and settle their own trades as well as trades of other trading members (TMs).
- Besides, there is a special category of members, called professional clearing members (PCM) who clear and settle trades executed by TMs.
- The members clearing their own trades and trades of others, and the PCMs are required to bring in additional security deposits in respect of every TM whose trades they undertake to clear and settle.

Clearing banks

Funds settlement takes place through clearing banks.

For the purpose of settlement all clearing members are required to open a separate bank account with the Clearing Corporation designated clearing bank for Currency Derivatives segment.

The Clearing and Settlement process comprises of the following three main activities:

- 1) Clearing
- 2) Settlement
- 3) Risk Management

Clearing Mechanism

The clearing mechanism essentially involves working out open positions and obligations of clearing (trading-cum-clearing/professional clearing) members.

This position is considered for exposure and daily margin purposes.

The open positions of Clearing Members (CMs) are arrived at by aggregating the open positions of all the TMs and all custodial participants clearing through him.

A TM's open position is arrived at as the summation of his proprietary open position and clients' open positions.

Clearing Mechanism

- While entering orders on the trading system, TMs are required to identify the orders, whether proprietary (if own trades) or client (if entered on behalf of clients) through 'Pro/Cli' indicator provided in the order entry screen.
- Proprietary positions are calculated on net basis (buy - sell) for each contract.
- Clients' positions are arrived at by summing together net (buy - sell) positions of each individual client.
- Positions are only netted for each client and not netted across clients and are rather added up across clients.
- A TM's open position is the sum of proprietary open position, client open long position and client open short position.

Settlement Mechanism

All futures contracts are cash settled, i.e. through exchange of cash in Indian Rupees.

The settlement amount for a CM is netted across all their TMs/clients, with respect to their obligations on Mark-to-Market (MTM) settlement.

Settlement of currency futures contracts

Currency futures contracts have two types of settlements, the MTM settlement which happens on a continuous basis at the end of each day, and the final settlement which happens on the last trading day of the futures contract.

Mark-to-Market settlement (MTM Settlement)

- All futures contracts for each member are marked to market to the daily settlement price of the relevant futures contract at the end of each day.
- The profits/losses could be computed differently for different types of positions.
- The computational methodology is given below:
 - A. For squared off position: The buy price and the sell price for contracts executed during the day and squared off.
 - B. For positions not squared off: The trade price and the day's settlement price for contracts executed during the day but not squared up.
 - C. For brought forward positions: The previous day's settlement price and the current day's settlement price for brought forward contracts.

Final settlement for futures

On the last trading day of the futures contracts, after the close of trading hours, the Clearing Corporation marks all positions of a CM to the final settlement price and the resulting profit/loss is settled in cash.

Final settlement loss/profit amount is debited/ credited to the relevant CM's clearing bank account on T+2 working day following last trading day of the contract (contract expiry day).

The final settlement price is the RBI reference rate for the last trading day of the futures contract.

All open positions are marked to market on the final settlement price for all the positions which gets settled at contract expiry.

Such marked to market profit / loss shall be paid to / received from clearing members.

Risk Management Measures

- Since futures is a leveraged position, it is imperative to have very effective margining framework at exchange to avoid any systemic failure during periods of high volatility.
- Margins also play the role of acting as a deterrent to excessive speculation.
- In addition to having daily mark to market margin that is computed at end of the day, exchanges have systems to levy additional margin or limit the amount of position that can be initiated against initial margin during the course of the trading session.
- A robust risk management system should therefore, not only impose margins on the members of the clearing corporation but also enforce collection of margins from the clients .

Risk Management Measures

- During the trading session, the system keeps track of losses, both notional and booked, incurred by every member up to the last executed trade.
- This is calculated by the system on a real-time basis by way of computing the difference between the actual trade price of a member and the daily settlement price of the market.
- Such calculation happens for every member after execution of each and every trade.
- The maximum loss limit, which the system allows a member to sustain on a real-time basis, is 75% of the total deposit.
- Every time such loss amount goes beyond the levels of 60%, 75%, or 90% of the prior mentioned maximum loss limit, the member gets a warning signal.
- Thereafter, when the loss crosses the 75% of the total deposit limit, the member is suspended by the system.

Risk Management Measures

In such calculations, there is no allowance given in respect of profits made by such members in a different contract.

This is monitored by the system to curb any default in the process of day trading.

Every exchange has a comprehensive risk containment mechanism for the currency derivatives segment.

The salient features of risk containment mechanism on the currency derivatives segment are:

The financial soundness of the members is the key to risk management. Therefore, the requirements for membership in terms of capital adequacy (net worth, security deposits) are quite stringent.

Risk Management Measures

- Upfront initial margin is charged for all the open positions of a CM. The exchange specifies the initial margin requirements for each futures contract on a daily basis.
- It also follows a value-at-risk (VaR) based margining through SPAN® (Standard Portfolio Analysis of Risk).
- The CM in turn collects the initial margin from the TMs and their respective clients.
- The open positions of the members are marked to market based on contract settlement price for each contract.
- The difference is settled in cash on a T+1 basis.

Risk Management Measures

- The on-line position monitoring system monitors the member's open positions and margins on a real-time basis vis-à-vis the deposits provided by the CM or the limits set for the TM by the CM.
- The on-line position monitoring system generates alerts whenever the margins of a member reaches the predetermined percentage of the capital deposited by the CM or limits set for the TM by the CM.
- The Clearing Corporation monitors the CMs for initial margin and extreme loss margin violations, while TMs are monitored for initial margin violation.
- CMs are provided with a trading terminal for the purpose of monitoring the open positions of all the TMs clearing and settling through them.
- A CM may set limits for a TM clearing and settling through him.

Risk Management Measures

- The Clearing Corporation assists the CM to monitor the intra-day limits set up by a CM and whenever a TM exceeds the limits, it stops that particular TM from further trading.
- A member is alerted of his position to enable him to adjust his position or bring in additional capital. Margin violations result in withdrawal of trading facility for all TMs of a CM in case of a violation by the CM.
- Separate settlement guarantee funds for this segment have been created by exchanges.

Margin Requirements

The trading of currency futures is subject to maintaining initial, extreme loss, and calendar spread margins and the Clearing Corporations of the exchanges should ensure maintenance of such margins by the participants based on the guidelines issued by the SEBI from time to time.

The Clearing Corporation acts as a counterparty to all contracts traded on the exchange and is responsible for settling all trades.

They control their risks, by asking the members to pay margins and provide timely information about their financial conditions.

Initial Margins

- Initial margin is payable on all open positions of Clearing Members, upto client level, and is payable upfront by Clearing Members in accordance with the margin computation mechanism and/or system as may be adopted by the Clearing Corporation from time to time.
- Initial Margin includes SPAN margins, futures final settlement margin and such other additional margins, that may be specified by the Clearing Corporation from time to time.

Calendar Spread Margins

- A calendar spread is position in an underlying with one maturity which is hedged by an offsetting position in the same underlying with a different maturity:
- Calendar spreads attract lower margins because they are not exposed to market risk of the underlying.
- If the underlying rises, the July contract would make a profit while the August contract would make a loss.
- The benefit for a calendar spread continues till expiry of the near month contract.

Extreme Loss margins

Clearing members are subject to extreme loss margins in addition to initial margin.

The applicable extreme loss margin is 1% on the mark to market value of the gross open positions or as may be specified by the relevant authority from time to time.

In case of calendar spread positions, extreme loss margin is levied on one third of the mark to market value of the open position of the far month contract.

Mode of payment of margin

- CDS Clearing Members are required to furnish margin deposits in the form of liquid assets, which consist of cash component as well as non-cash component.
- The cash component should be at least 50% of the liquid assets and include cash, bank guarantees, fixed deposit receipts, units of money market mutual fund and Gilt funds, and any other form of collateral as prescribed by the Clearing Corporation.
- Non-cash component includes all other forms of deposits like deposit of approved list of demat securities, units of mutual funds and any other form of collateral as may be prescribed by the Clearing Corporation from time to time.
- The margins is collected/adjusted from the liquid assets of the member on a real time basis.

Payment of margins

- The initial margin and extreme loss margins are payable upfront by the clearing members.
- Members are required to collect initial margins and extreme loss margins from their client/constituents on an upfront basis.
- It is mandatory for all clearing /trading members to report details of such margins collected to the Clearing Corporation.
- Penalties, as specified by the stock exchange, is levied on trading members for short-collection/ non-collection of margins from clients.

Accounting Treatment for Derivative Contract

Derivative contracts are financial instruments whose value is derived from the value of an underlying asset, such as stocks, bonds, commodities, currencies, or indices.

Accounting Steps

1. **Initial Recognition:** Record derivative contracts at fair value on the date of entering into the contract. Any transaction costs directly related to the contract are generally expensed.
2. **Subsequent Measurement:** Derivatives are measured at fair value through profit or loss (FVTPL), unless hedge accounting is applied. Any changes in the fair value of derivatives are recognized in the profit or loss account.

Taxation of Derivative Transactions in Securities

3. For Hedging Derivatives: If the derivative is designated as a hedging instrument, hedge accounting can be applied.

There are three types of hedges:

Fair Value Hedge: Gains/losses from changes in the fair value of the derivative and the hedged item are recognized in the profit or loss account. **Cash Flow Hedge:** The effective portion of gains/losses is recorded in Other Comprehensive Income (OCI) and transferred to P&L when the underlying hedged transaction affects P&L.

Net Investment Hedge: Gains/losses are recognized in OCI and transferred to P&L upon disposal of the investment.

4. Derecognition: When the derivative contract expires, is settled, or no longer meets recognition criteria, it is derecognized. Any resulting gains or losses are recognized in P&L.

Taxation of Derivative Transactions in Securities

Derivative transactions in securities are treated differently under tax laws, depending on whether they are classified as speculative or non-speculative.

Tax Treatment Under Indian Tax Laws:

Income Tax Act, 1961:

- **Nature of Transactions:** Derivatives in securities traded on recognized stock exchanges are classified as non-speculative business transactions.
- **Taxability:** Profit or loss from such transactions is considered business income and taxed at slab rates applicable to the taxpayer (for individuals, HUFs, etc.) or corporate tax rates.
- **Set-Off and Carry Forward:** Loss from derivative transactions can be set off against any other business income. Unutilized losses can be carried forward for 8 years and set off against future business income.

Taxation of Derivative Transactions in Securities

2. Securities Transaction Tax (STT): STT is applicable to derivatives traded on recognized stock exchanges and is allowed as a deduction under Section 36(1)(xv) while computing business income.
3. Applicability of GST: No GST is levied on profits/losses from derivative trading, as these are financial transactions.

Tax Treatment of Profit/Loss on Derivative Transactions

The tax treatment depends on whether the taxpayer classifies income as business income or capital gains.

Profit/Loss Taxation Scenarios:

1. Profit on Derivative Transactions: Taxed as business income at the applicable tax rate. For corporate taxpayers, normal tax rates or Minimum Alternate Tax (MAT) provisions apply.
2. Loss on Derivative Transactions:
 - Speculative Loss: If classified as speculative (for unrecognized exchanges), it can be set off only against speculative income. Speculative losses can be carried forward for 4 years.

Tax Treatment of Profit/Loss on Derivative Transactions

- **Non-Speculative Loss:** Losses from recognized exchange transactions are treated as non-speculative and can be set off against any business income.
3. **Audit Requirements:** If the turnover from derivatives exceeds the prescribed limit (₹10 crore for non-cash transactions or ₹5 crore for cash transactions as per FY 2023-24), a tax audit under Section 44AB may be applicable.

References

1. NISM's Currency Derivatives, (2024). (n.p.): Taxmann Publications Private Limited.
2. KK & Mattoo VJ, **Foreign Exchange: Principles and Practice**, Sultan Chand & Sons, New Delhi.
3. Taxmann's(2019) *Foreign Exchange Management 36th Edition*, Taxmann Publication
4. William D. Gerdes, 2018, **The Basics of Foreign Exchange Market: A Monetary Systems Approach**, 2nd Edition, Business Expert Press.
5. Williams L. Richards, 2015, **Currency: Fundamentals and Functions**, (First Edition) Design Pub.
6. Esha Sharma(2015) , *Foreign Exchange Management* Laxmi Publication.
7. Jeevanandam. C(2020) *Foreign Exchange&Risk Management* Sultan Chand & Sons