Product Catalogue – Exchange Traded Derivatives

Oracle Banking Treasury Management

Accelerator Pack 14.5.1.0.0

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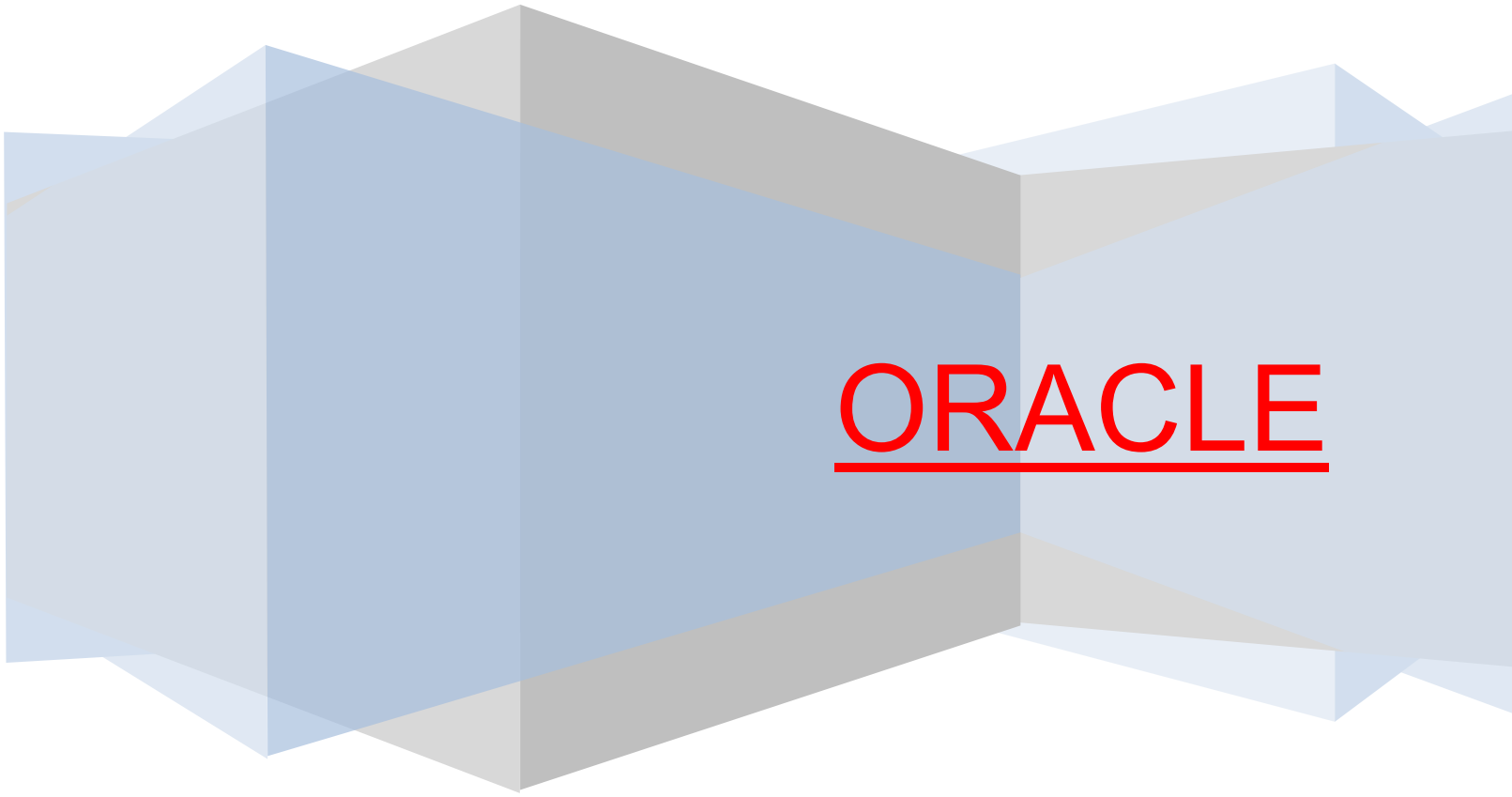

Product Catalogue – ETD Module

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Contents

1. Product Catalogue - Treasury – ETD

This chapter describes the product of this module in the following sections:

1.1. Product Code – FU01

(FU01) S&P 500 Future Product (Index Futures)

1.1.1. Business Scenario

Purpose: Index futures product helps customers hedge against the volatility of an index and gives an alternative to expose (invest) in a specific market or sector without purchasing shares directly.

Target audience / Beneficiaries: Customers who want to have sector-specific shares without willing to bear the risk.

Customer segment: Corporate customers and financial institutions (Investors /Hedger).

1.1.2. Introduction

An Index Futures contract's price follows the level of a hypothetical portfolio of the stocks, which are included in the index itself.

With this product, Investor or Hedgers can enjoy the following benefits:-

- Broad equity diversification with a single transaction.
- Transaction costs that are markedly lower than other products.
- Actively quoted markets with transparent pricing.
- Flexibility to enter and exit the market at any time during the trading day,
- No restriction for short-selling the market.
- Mitigation of counterparty risk association because of the daily cash settlement of trading gains and losses.
- Liquidity as a consequence of concentrated trading activity in standardized contracts with the broad-based market appeal.

  No replication error when adding or retracting stocks from the index.

1.1.3. Summary

Index futures are the exchange-traded derivative products, which has an index as their underlying assets. These products are traded in terms of several contracts. Each contract is to buy or sell a fixed value of the index. The contract's value is defined as the index multiplied by the specified monetary amount (Called Multiplier). In the S&P 500 futures contract traded at the Chicago Mercantile Exchange (CME), the contract specification states:

1 Contract = $250 * Value of the S&P 500

Assuming if the S&P 500 is quoting at 1,000, the value of one contract will be equal to $250,000 (250*1,000). The monetary value - $250, in this case, is fixed by the exchange where the contract is traded.

1.1.4. Synopsis

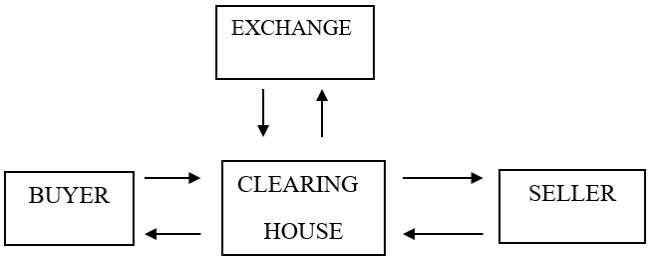
- Index Futures are standardized contracts with index as its underlying asset.
- Index futures are used for hedging or investment purpose without exposing to a specific sector.
- Futures contracts are only valid, for a particular period of time, as mentioned in the contract, but it's valid for three months in most cases.
- Futures contracts have expirations in March, June, September, and December.
- Parties involved are buyer, exchange and seller, in some case, broker and clearinghouse might be involved.

1.1.5. Operations

- Customer expects a share or a set of shares included in an existing stock index, are going to move up, but he/she is not willing to expose directly to that share or set of share.
- He/she approaches the bank with this need and asks to have long or short positions for a derivative, which has an index as underlying.
- On his/her behalf bank takes action as per their instruction and update the customer's portfolio accordingly.
- Bank requires settling margin based on the market daily and collecting from the customer or payback to customer according to the market value of the derivative.
- Banks can take further action for short (if the portfolio is in long position) or long (in case of the portfolio is in short position) based on his/her instruction. Or can wait for liquidation at the end of series for derivative.

1.1.6. Parties Involved

- **Buyer/Seller**: For any transaction to occur, there must be a buyer to buy or the long and the seller to sell or the short.
- **Exchange**: This is the central feature of the “Exchange-Traded” derivatives market.
- **Clearinghouse**: A clearinghouse (which is sometimes a part of the Exchange or a separate entity) is another central feature.
- **Broker**: A broker is an entity that mediates between a seller/buyer and a clearing member.



1.1.7. Detailed Coverage

Product FU01 covers the following Instrument features

- Call or Put might be define for Index Futures
- Premium Style for Index Futures
- Underlying asset’s currency and Pricing currency for Index Futures
- User defined fields for the Index futures
- Capturing percentage of Initial margin for the deal
- Upward and downward price moment might be define
- Prior/Physical Settlement might be capture
- Series details including strike price start and end date
- Transaction, Composite and Funds MIS codes for instrument
- Maximum Open position for long / short customers
- Back valued dated future contracts

Portfolio details

- Own / Customer portfolio might be defined
- WAC, LIFO, FIFO, DAMT costing methods can have for each type of portfolio
- Capturing portfolio report generation details and generating report
- Capturing notional revaluation details for the portfolio
- Capturing customer, currency or branch level restrictions

Default

- Amendment of Index future contract
- Matching or Un-matching of the future contract
- Reversal of Index future contact
- Reversal of Opening, Closing and Revaluation of Long / Short positions
- Assignment of long and short position (Auto / Manual)
- Exercise of long / short position (Auto / Manual)
- Expiry of long / short position (Auto / Manual)
- Reversal of Expiry, Exercise and Assignment of Long / Short positions
- Liquidation of Long /short position
- Daily settlement through MTM
- Notional or Realized revaluation for future contracts

Advice

- Option to suppress the message type with priority
- Option to generate Confirmation advice for future contracts

MIS

- Capturing of Transaction, Composite, and Funds MIS codes
- Linkages to particular reference group.

Market and market price

- Capturing market details where index future is being traded
- Capturing market price moment for the Index future derivative

Query

- Displays WAC balance and Scheme balance
- Displays margin (Initial / variation) settlements for the portfolio
- Displays details for Long/short deals and Liquidation deals

1.1.8. Events Covered

Product FU01 has the Life Cycle as listed below:

Events Covered	Terminology
EBOK	Booking of Index Future Contract
EAMD	Amendment of Index Future Contract
EREV	Reversal of Booking
EMAT	Event Matching of Deal

EOLG	Opening of Long Position
ERVL	Revaluation of long Position
ECLG	Closure of Long Position
EOSH	Opening of Short Position
ERVS	Revaluation of Short Position
ECSH	Closure of Short Position
EXPL	Expiry of Long Position
EXPS	Expiry of Short Position
EXRL	Exercise in Long Position
EAXS	Assignment in Short Position
EEPL	Exchange for Physicals in Long
EEPS	Exchange for Physicals in Short
ROLG	Reversal of Opening of Long Position
RRVL	Reversal of Revaluation of Long Position
RCLG	Reversal of Closure of Long Position
ROSH	Reversal of Opening of Short Position
RRVS	Reversal of Revaluation of Short Position
RCSH	Reversal of Closure of Short Position
RXPL	Reversal of Expiry of Long Position
RXPS	Reversal of Expiry of Short Position
RXRL	Reversal of Exercise in Long Position
RAXS	Reversal of Assignment in Short Position

Advices/Statements Supported

- Generation of deal confirmation advice
- Generation of Portfolio margin settlement

Additional Information (UDF) / Special maintenance:

In case, Bank wants to capture some other details about the deal or the parties involved, the same might be customized by way of using UDF option available at various screens.

Maintenances required

Following Parameter maintenances to be done:

- Branch Parameter
- General Ledger Parameter
- Interest & Charges Parameter

- Journal Entry Parameter
- Messaging Parameter
- Local Holidays
- Batch file for running EOD

1.2. Product Code – OP01

(OP01) MNX -- Put Option Product (Index Options)

1.2.1. Business Scenario

Purpose: Index Options product offers the investor an opportunity to either capitalize on an expected market move or to protect holdings in the underlying instruments.

Target audience / Beneficiaries: Customers who wants to speculate or hedge the risk involved in sector specific shares with willing to bear predetermined risk.

Customer segment: Corporate customers and financial institutions (Investors /Hedger).

1.2.2. Introduction

An Index Futures contract's price follows the level of a hypothetical portfolio of the stocks, which are included in the index itself.

With this product, Investor or Hedgers can enjoy the following benefits:-

- Broad equity diversification with a single transaction.
- Transaction costs that are markedly lower than other products.
- Actively quoted markets with transparent pricing.
- Flexibility to enter and exit the market at any time during the trading day,
- No restriction for short-selling the market.
- Mitigation of counterparty risk association because of the daily cash settlement of trading gains and losses.
- Liquidity as a consequence of concentrated trading activity in standardized contracts with the broad-based market appeal.
- No replication error when adding or retracting stocks from the index.

1.2.3. Summary

Index Options are the exchange traded derivative products, which has Index as their underlying assets. These products are traded in terms of number of contracts. Each contract is to buy or sell a fixed value of the index. The value of the contract is defined as the value of the index multiplied by the specified monetary amount (Called Multiplier). In the MNX futures contract traded at the New York Stock Exchange (NYSE), the contract specification states: -

1 Contract = $100 * Value of the MNX

Assuming if the MNX is quoting at 100, the value of one contract will be equal to $10,000 (100*100). The monetary value (Multiplier) is $100, in this case, is fixed by the exchange where the contract is traded.

1.2.4. Synopsis

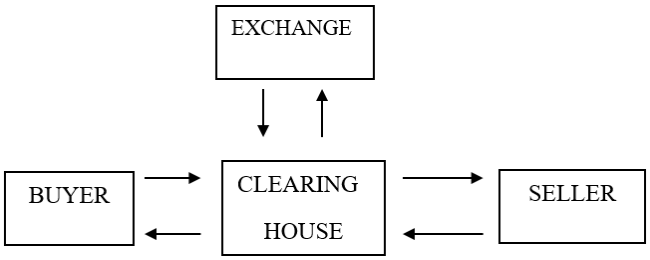
- Index Options are standardized contracts with index as its underlying asset, where parties have the right to buy (call option) or the right to sell (put option).
- In exchange for these "rights," the buyer pays the seller a price known as the premium for the option.
- Option contracts are only valid for a specific period of time as mentioned in contract, but in most of the cases it's valid for 3 months.
- Option contracts have expirations in March, June, September, and December.
- Parties involved are buyer, exchange and seller, in some case, broker and clearing house might be involved.

1.2.5. Operations

- Customer have a share or a set of shares, which are included in an existing stock index and expects that they are going to move down, but he/she is not willing to sell the share or set of shares at the moment.
- He/she approaches the bank with this need and asks to have call or put kind of options, which has an index as underlying.
- On his/her behalf bank takes the action as per their instruction and update customer's portfolio accordingly
- Bank requires settling margin based on the market on daily basis and collect from customer or pay back to customer according to market value of the derivative.
- Banks can take further action based on his/her trading strategy or simply can wait for liquidation at the end of series for derivative.

1.2.6. Parties Involved

- **Buyer/Seller:** For any transaction to take place there must be a “buyer” to buy or the long and the seller to sell or the “short”.
- **Exchange**: This is the central feature of the “Exchange-Traded” derivatives market.
- **Clearinghouse**: A clearinghouse (which is sometimes a part of the Exchange or a separate entity) is another central feature of the market.
- **Broker**: A broker is an entity that mediates between a seller/buyer and a clearing member.



1.2.7. Detailed Coverage

Product OP01 covers the following Instrument features

- Call or Put might be define for Index Futures
- Premium Style for Index Futures
- Underlying asset’s currency and Pricing currency for Index Futures
- User defined fields for the Index futures
- Capturing percentage of Initial margin for the deal
- Upward and downward price moment might be define
- Prior/Physical Settlement might be capture
- Series details including strike price start and end date
- Transaction, Composite and Funds MIS codes for instrument
- Maximum Open position for long / short customers
- Back valued dated future contracts

Portfolio details

- Own / Customer portfolio might be defined
- WAC, LIFO, FIFO, DAMT costing methods can have for each type of portfolio
- Capturing portfolio report generation details and generating report
- Capturing notional revaluation details for the portfolio
- Capturing customer, currency or branch level restrictions

Default

- Amendment of Index future contract
- Matching or Un-matching of the future contract
- Reversal of Index future contact
- Reversal of Opening, Closing and Revaluation of Long / Short positions
- Assignment of long and short position (Auto / Manual)
- Exercise of long / short position (Auto / Manual)
- Expiry of long / short position (Auto / Manual)
- Reversal of Expiry, Exercise and Assignment of Long / Short positions
- Liquidation of Long /short position
- Daily settlement through MTM
- Notional or Realized revaluation for future contracts

Advice

- Option to suppress the message type with priority
- Option to generate Confirmation advice for future contracts

MIS

- Capturing of Transaction, Composite, and Funds MIS codes
- Linkages to particular reference group.

Market and market price

- Capturing market details where index future is being traded
- Capturing market price moment for the Index future derivative

Query

- Displays WAC balance and Scheme balance
- Displays margin (Initial / variation) settlements for the portfolio
- Displays details for Long/short deals and Liquidation deals

1.2.8. Events Covered

Product OP01 has the Life Cycle as listed below:

Events Covered	Terminology
EBOK	Booking of Index Future Contract
EAMD	Amendment of Index Future Contract
EREV	Reversal of Booking
EMAT	Event Matching of Deal

EOLG	Opening of Long Position
ERVL	Revaluation of long Position
ECLG	Closure of Long Position
EOSH	Opening of Short Position
ERVS	Revaluation of Short Position
ECSH	Closure of Short Position
EXPL	Expiry of Long Position
EXPS	Expiry of Short Position
EXRL	Exercise in Long Position
EAXS	Assignment in Short Position
EEPL	Exchange for Physicals in Long
EEPS	Exchange for Physicals in Short
ROLG	Reversal of Opening of Long Position
RRVL	Reversal of Revaluation of Long Position
RCLG	Reversal of Closure of Long Position
ROSH	Reversal of Opening of Short Position
RRVS	Reversal of Revaluation of Short Position
RCSH	Reversal of Closure of Short Position
RXPL	Reversal of Expiry of Long Position
RXPS	Reversal of Expiry of Short Position
RXRL	Reversal of Exercise in Long Position
RAXS	Reversal of Assignment in Short Position

Advices/Statements Supported

- Generation of deal confirmation advice
- Generation of Portfolio margin settlement

Additional Information (UDF) / Special maintenance:

In case, Bank wants to capture some other details about the deal or the parties involved, the same might be customized by way of using UDF option available at various screens.

Maintenances required

Following Parameter maintenances to be done:

- Branch Parameter
- General Ledger Parameter
- Interest & Charges Parameter

- Journal Entry Parameter
- Messaging Parameter
- Local Holidays
- Batch file for running EOD

1.3. Product Code – FU02

(FU02) USD/INR Future Product (Currency Futures)

1.3.1. Business Scenario

Purpose: Index futures product helps customers hedge against the volatility of an index and gives an alternative to expose (invest) in a specific market or sector without purchasing shares directly.

Target audience / Beneficiaries: Customers who want to have sector-specific shares without willing to bear the risk.

Customer segment: Corporate customers and financial institutions (Investors /Hedger).

1.3.2. Introduction

Currency futures contracts might be hard-working additions to any investor's or trader's portfolio. Currency futures offer gearing on exchange rates in a cost effective way. Currency Futures benefit the users in many ways:-

- For Importers/Exporters who may have some obligations in the Fore market, trading in Currency Futures will help them hedge their positions (risk). Similarly, any investor who has any receivables/payables in foreign exchange can trade in Currency Futures.
- The counter-party risk is eliminated as the Clearing House/Corporation guarantees all the trades.
- By ensuring that transactions are executed on a price time priority, the best price is available to all categories of market participants.
- In Currency Futures, mark-to-market obligations are settled on a daily basis.

1.3.3. Summary

Currency futures are the exchange traded derivative products, which has any currency as their underlying assets. These products are traded in terms of number of contracts, which is also called "Lots". Each contract is to buy or sell based on any Reference FX Rate as in case of NSE its RBI Reference Rate. The following formula is used to set the price for a contract for a given currency pair: -

$$F = S (1 + RQ \times T) / (1 + RB \times T)$$

Where:

F = the price for the currency futures contract

S = the spot rate for the currency pair

RQ = the interest rate of the quote currency

RB = the interest rate of the base currency

T = the tenor or time to maturity (in days)

1.3.4. Synopsis

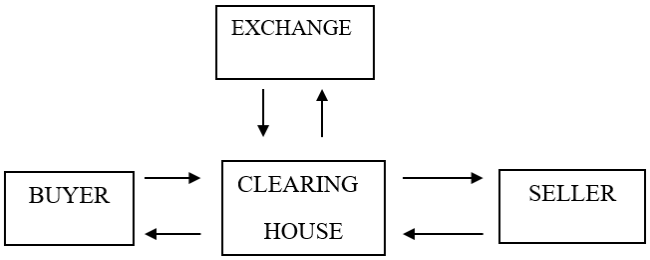
- Currency Futures are standardized contracts with foreign exchange rate of a given pair of currency as its underlying asset.
- In most of the cases, settlement for Currency futures happens in cash.
- Currency Future contracts are only valid for a specific period of time as mentioned in contract, but in most of the cases it's valid for 3 months.
- Parties involved are buyer, exchange and seller, in some case, broker and clearing house might be involved.

1.3.5. Operations

- An exporter is expecting to receive its dues on a future date in some foreign currency. It would hurt him if his domestic currency gets appreciated against foreign currency.
- He/she approaches the bank with this need and asks to have long or short kind of derivate, which has a foreign currency as underlying.
- On his/her behalf bank takes the action as per their instruction and update customer's portfolio accordingly.
- Bank requires settling margin based on the market on daily basis and collect from customer or pay back to customer according to market value of the derivative.
- Banks can take further action based on his/her trading strategy. Or simply can wait for liquidation at the end of series for derivative.

1.3.6. Parties Involved

- **Buyer/Seller**: For any transaction to take place there must be a “buyer” to buy or the long and the seller to sell or the “short”.
- **Exchange**: This is the central feature of the “Exchange-Traded” derivatives market.
- **Clearinghouse**: A clearinghouse (which is sometimes a part of the Exchange or a separate entity) is another central feature of the market.
- **Broker**: A broker is an entity that mediates between a seller/buyer and a clearing member.



1.3.7. Detailed Coverage

Product FU02 covers the following Instrument features:

- Call or Put might be define for Index Futures
- Premium Style for Index Futures
- Underlying asset’s currency and Pricing currency for Index Futures
- User defined fields for the Index futures
- Capturing percentage of Initial margin for the deal
- Upward and downward price moment might be define
- Prior/Physical Settlement might be capture
- Series details including strike price start and end date
- Transaction, Composite and Funds MIS codes for instrument
- Maximum Open position for long / short customers
- Back valued dated future contracts

Portfolio details

- Own / Customer portfolio might be defined
- WAC, LIFO, FIFO, DAMT costing methods can have for each type of portfolio
- Capturing portfolio report generation details and generating report
- Capturing notional revaluation details for the portfolio
- Capturing customer, currency or branch level restrictions

Default

- Amendment of Index future contract
- Matching or Un-matching of the future contract
- Reversal of Index future contact
- Reversal of Opening, Closing and Revaluation of Long / Short positions
- Assignment of long and short position (Auto / Manual)
- Exercise of long / short position (Auto / Manual)
- Expiry of long / short position (Auto / Manual)
- Reversal of Expiry, Exercise and Assignment of Long / Short positions
- Liquidation of Long /short position
- Daily settlement through MTM
- Notional or Realized revaluation for future contracts

Advice

- Option to suppress the message type with priority
- Option to generate Confirmation advice for future contracts

MIS

- Capturing of Transaction, Composite, and Funds MIS codes
- Linkages to particular reference group.

Market and market price

- Capturing market details where index future is being traded
- Capturing market price moment for the Index future derivative

Query

- Displays WAC balance and Scheme balance
- Displays margin (Initial / variation) settlements for the portfolio
- Displays details for Long/short deals and Liquidation deals

1.3.8. Events Covered

Product FU02 has the Life Cycle as listed below:

Events Covered	Terminology
EBOK	Booking of Index Future Contract
EAMD	Amendment of Index Future Contract
EREV	Reversal of Booking
EMAT	Event Matching of Deal

EOLG	Opening of Long Position
ERVL	Revaluation of long Position
ECLG	Closure of Long Position
EOSH	Opening of Short Position
ERVS	Revaluation of Short Position
ECSH	Closure of Short Position
EXPL	Expiry of Long Position
EXPS	Expiry of Short Position
EXRL	Exercise in Long Position
EAXS	Assignment in Short Position
EEPL	Exchange for Physicals in Long
EEPS	Exchange for Physicals in Short
ROLG	Reversal of Opening of Long Position
RRVL	Reversal of Revaluation of Long Position
RCLG	Reversal of Closure of Long Position
ROSH	Reversal of Opening of Short Position
RRVS	Reversal of Revaluation of Short Position
RCSH	Reversal of Closure of Short Position
RXPL	Reversal of Expiry of Long Position
RXPS	Reversal of Expiry of Short Position
RXRL	Reversal of Exercise in Long Position
RAXS	Reversal of Assignment in Short Position

Advices/Statements Supported

- Generation of deal confirmation advice
- Generation of Portfolio margin settlement

Additional Information (UDF) / Special maintenance:

In case, Bank wants to capture some other details about the deal or the parties involved, the same might be customized by way of using UDF option available at various screens.

Maintenances required

Following Parameter maintenances to be done:

- Branch Parameter
- General Ledger Parameter
- Interest & Charges Parameter

- Journal Entry Parameter
- Messaging Parameter
- Local Holidays
- Batch file for running EOD

1.4. Product Code – OP02

(OP02) USD/INR- Call Option Product (Currency Options)

1.4.1. Business Scenario

Purpose: Currency Options product offers the buyer the right (but not the obligation) to buy or sell the underlying foreign currency at a specified price on an agreed upon date in the future.

Target audience / Beneficiaries: Customers who wants to speculate or hedge the foreign exchange risk involved in foreign exchange trade around the world.

Customer segment: Corporate customers and currency hedgers, traders, speculators, portfolio managers, and, on occasion, central banks.

1.4.2. Introduction

Currency options have gained acceptance as invaluable tools in managing foreign exchange risk. They are extensively used and bring a much wider range of hedging alternatives as a result of their unique nature. Some of the benefits, which Investors or hedgers can have, are:-

- Currency options are extremely useful for hedging against the adverse movements of exchange rates,
- Only a small premium paid for high valued contract,
- Get profitability based on forecast of movements of exchange rates.

1.4.3. Summary

Currency Options are the exchange traded derivative products, which has any currency as their underlying assets. These products are traded in terms of number of contracts, which is also called “Lots”. The following formula is used to set the price for a call FX options contract for a given currency pair: -

$$c = S_0 \exp(-r_f T)\mathbb{N}(d_1) - K \exp(-r_d T)\mathbb{N}(d_2)$$

Where:

$$d_1 = \frac{\ln(S_0/K) + (r_d - r_f + \sigma^2/2)T}{\sigma\sqrt{T}}$$

and $d_2 = d_1 - \sigma\sqrt{T}$

S_0 - Current spot rate,

K - Strike price,

N - Cumulative normal distribution function,

r_d - Domestic risk free simple interest rate,

r_f - Foreign risk free simple interest rate,

T - Time to maturity,

σ - Volatility of the FX rate.

1.4.4. Synopsis

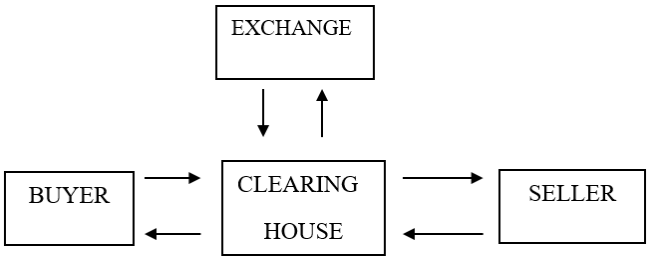
- Currency Options are standardized contracts with foreign exchange rate of a given pair of currency as its underlying asset.
- In exchange for these "rights," the buyer pays the seller a price known as the premium for the option.
- Currency Option contracts are only valid for a specific period of time as mentioned in contract.
- Parties involved are buyer, exchange and seller, in some case, broker and clearing house might be involved.

1.4.5. Operations

- An Importer is expecting to pay its dues on a future date in some foreign currency. It would hurt him if foreign currency gets appreciated against domestic currency.
- He/she approaches the bank with this need and asks to have call or put kind of options, which has a foreign currency as underlying.
- On his/her behalf bank takes the action as per their instruction and update customer's portfolio accordingly.
- Bank requires settling margin based on the market on daily basis and collect from customer or pay back to customer according to market value of the derivative.
- Banks can take further action based on his/her trading strategy. Or simply can wait for liquidation at the end of series for derivative

1.4.6. Parties Involved

- **Buyer/Seller:** For any transaction to take place there must be a "buyer" to buy or the long and the seller to sell or the "short".
- **Exchange**: This is the central feature of the "Exchange-Traded" derivatives market.
- **Clearinghouse**: A clearinghouse (which is sometimes a part of the Exchange or a separate entity) is another central feature of the market.
- **Broker**: A broker is an entity that mediates between a seller/buyer and a clearing member.



1.4.7. Detailed Coverage

Product OP02 covers the following Instrument features

- Call or Put might be define for Index Futures
- Premium Style for Index Futures
- Underlying asset's currency and Pricing currency for Index Futures
- User defined fields for the Index futures
- Capturing percentage of Initial margin for the deal
- Upward and downward price moment might be define
- Prior/Physical Settlement might be capture
- Series details including strike price start and end date
- Transaction, Composite and Funds MIS codes for instrument
- Maximum Open position for long / short customers
- Back valued dated future contracts

Portfolio details

- Own / Customer portfolio might be defined
- WAC, LIFO, FIFO, DAMT costing methods can have for each type of portfolio
- Capturing portfolio report generation details and generating report
- Capturing notional revaluation details for the portfolio
- Capturing customer, currency or branch level restrictions

Default

- Amendment of Index future contract
- Matching or Un-matching of the future contract
- Reversal of Index future contact
- Reversal of Opening, Closing and Revaluation of Long / Short positions
- Assignment of long and short position (Auto / Manual)
- Exercise of long / short position (Auto / Manual)
- Expiry of long / short position (Auto / Manual)

- Reversal of Expiry, Exercise and Assignment of Long / Short positions
- Liquidation of Long /short position
- Daily settlement through MTM
- Notional or Realized revaluation for future contracts

Advice

- Option to suppress the message type with priority
- Option to generate Confirmation advice for future contracts

MIS

- Capturing of Transaction, Composite, and Funds MIS codes
- Linkages to particular reference group.

Market and market price

- Capturing market details where index future is being traded
- Capturing market price moment for the Index future derivative

Query

- Displays WAC balance and Scheme balance
- Displays margin (Initial / variation) settlements for the portfolio
- Displays details for Long/short deals and Liquidation deals

1.4.8. Events Covered

Product OP02 has the Life Cycle as listed below:

Events Covered	Terminology
EBOK	Booking of Index Future Contract
EAMD	Amendment of Index Future Contract
EREV	Reversal of Booking
EMAT	Event Matching of Deal
EOLG	Opening of Long Position
ERVL	Revaluation of long Position
ECLG	Closure of Long Position
EOSH	Opening of Short Position
ERVS	Revaluation of Short Position
ECSH	Closure of Short Position
EXPL	Expiry of Long Position
EXPS	Expiry of Short Position

EXRL	Exercise in Long Position
EAXS	Assignment in Short Position
EEPL	Exchange for Physicals in Long
EEPS	Exchange for Physicals in Short
ROLG	Reversal of Opening of Long Position
RRVL	Reversal of Revaluation of Long Position
RCLG	Reversal of Closure of Long Position
ROSH	Reversal of Opening of Short Position
RRVS	Reversal of Revaluation of Short Position
RCSH	Reversal of Closure of Short Position
RXPL	Reversal of Expiry of Long Position
RXPS	Reversal of Expiry of Short Position
RXRL	Reversal of Exercise in Long Position
RAXS	Reversal of Assignment in Short Position

Advices/Statements Supported

- Generation of deal confirmation advice
- Generation of Portfolio margin settlement

Additional Information (UDF) / Special maintenance:

In case, Bank has to capture some other details about the deal or the parties involved, the same might be customized by way of using UDF option available at various screens.

Maintenances required

Following Parameter maintenances to be done:

- Branch Parameter
- General Ledger Parameter
- Interest & Charges Parameter
- Journal Entry Parameter
- Messaging Parameter
- Local Holidays
- Batch file for running EOD

1.5. Product Code – OP03

(OP03) Weather Put Option Product (Commodity Options)

1.5.1. Business Scenario

Purpose: Weather derivative product offers investor a risk management strategy to reduce risk associated with adverse or unexpected weather conditions.

Target audience / Beneficiaries:

- Farmers can use weather derivatives to hedge against poor harvests caused by drought or frost
- Theme parks may want to insure against rainy weekends during peak summer seasons
- Gas and Power companies may use heating degree days (HDD) or cooling degree days (CDD) contracts to smooth earnings
- A sports event managing company may wish to hedge the loss by entering into a weather derivative contract because if it rains the day of the sporting event, fewer tickets will be sold.

Customer segment: Corporate customers and financial institutions (Majorly Hedger).

1.5.2. Introduction

Weather affects every aspect of the economy. It is estimated that weather and climate sensitive industries in the United States directly impacted by weather (such as agriculture, construction, energy distribution, and outdoor recreation) account for nearly 10 percent of GDP. To reduce risk associated with adverse weather and climate conditions, User can use weather derivatives as part of their risk management strategy.

1.5.3. Summary

Customers can have a number of alternatives in structuring a weather deal; they can buy a cooling degree day option (CDD) in the case of summer, or a heating degree day option (HDD) for winter. The number of cooling degree days on a single day is the difference of the daily average temperature from 65 Fahrenheit. Cooling degree days and heating degree days are never negative. If the daily average temperature is less than 65 F, then the difference of the daily average temperature and 65 F is the number of HDDs.

Weather options are written on the cumulative HDDs or CDDs over a specified period. The value of weather option contracts might be calculated based on the total number of HDDs or CDDs in

the month and integrating the product of the probability distribution with the payoff of the option. The expected payoff of a CDD option, or its theoretical value, is simply determined by: -

$$E = M \int \{P(CDD) \times Q(CDD) \times D(CDD)\}$$

The expected value changes as a function of the strike, the probability distribution of CDDs, and the number of dollars per CDD.

Where

P (CDD) = Probability distribution of CDDs,

Q (CDD) = Payoff of the option in units of CDDs,

M = Number of dollars specified in the contract per CDD,

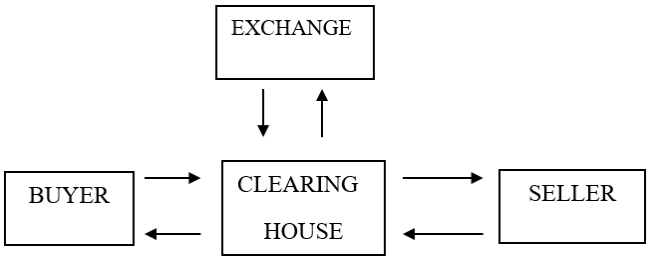
D (CDD) = Differential.

1.5.4. Operations

- An Importer is expecting to pay its dues on a future date in some foreign currency. It would hurt him if foreign currency gets appreciated against domestic currency.
- A soft drink manufacturer is expecting temperature in Delhi city to go up till 120 degrees Fahrenheit in the month of June, due to which demand of their soft drink will be on peak, but they want to avoid the unexpected behavior of weather.
- They approach the bank with this need and ask to have put or call kind of derivatives, which have weather (Temp in Delhi city in month of June) as underlying.
- On their behalf bank takes the action as per their instruction and update customer's portfolio accordingly.
- Bank requires settling margin based on the market on daily basis and collect from customer or pay back to customer according to market value of the derivative.
- Banks can take further action based on his/her trading strategy. Or simply can wait for liquidation at the end of series for derivative.

1.5.5. Parties Involved

- **Buyer/Seller:** For any transaction to take place there must be a "buyer" to buy or the long and the seller to sell or the "short". ". These Buyer /sellers might be the parties which mentioned above.
- **Exchange**: This is the central feature of the "Exchange-Traded" derivatives market.
- **Clearinghouse**: A clearinghouse (which is sometimes a part of the Exchange or a separate entity) is another central feature of the market.
- **Broker**: A broker is an entity that mediates between a seller/buyer and a clearing member.



1.5.6. Detailed Coverage

Product OP03 covers the following Instrument features

- Call or Put might be define for Index Futures
- Premium Style for Index Futures
- User defined fields for the Index futures
- Capturing percentage of Initial margin for the deal
- Upward and downward price moment might be define
- Series details including strike price start and end date
- Transaction, Composite and Funds MIS codes for instrument
- Maximum Open position for long / short customers

Portfolio details

- Own / Customer portfolio might be defined
- WAC, LIFO, FIFO, DAMT costing methods can have for each type of portfolio
- Capturing portfolio report generation details and generating report
- Capturing notional revaluation details for the portfolio
- Capturing customer, currency or branch level restrictions

Default

- Amendment of Weather Options contract,
- Matching or Un-matching of the Weather Options contract,
- Reversal of Weather Options contact,
- Exercise of long / short position (Auto / Manual),
- Expiry of long / short position (Auto / Manual),
- Reversal of Expiry, Exercise and Assignment of Long / Short positions,
- Liquidation of Long /short position,
- Daily settlement through MTM.

Advice

- Option to suppress the message type with priority
- Option to generate Confirmation advice for Weather Options contracts

MIS

- Capturing of Transaction, Composite, and Funds MIS codes
- Linkages to particular reference group.

Market and market price

- Capturing market details where index future is being traded
- Capturing market price moment for the Index future derivative

Query

- Displays WAC balance and Scheme balance
- Displays margin (Initial / variation) settlements for the portfolio
- Displays details for Long/short deals and Liquidation deals

1.5.7. Events Covered

Product OP03 has the Life Cycle as listed below:

Events Covered	Terminology
EBOK	Booking of Index Future Contract
EAMD	Amendment of Index Future Contract
EREV	Reversal of Booking
EMAT	Event Matching of Deal
EOLG	Opening of Long Position
ERVL	Revaluation of long Position
ECLG	Closure of Long Position
EOSH	Opening of Short Position
ERVS	Revaluation of Short Position
ECSH	Closure of Short Position
EXPL	Expiry of Long Position
EXPS	Expiry of Short Position
EXRL	Exercise in Long Position
EAXS	Assignment in Short Position
EEPL	Exchange for Physicals in Long
EEPS	Exchange for Physicals in Short

ROLG	Reversal of Opening of Long Position
RRVL	Reversal of Revaluation of Long Position
RCLG	Reversal of Closure of Long Position
ROSH	Reversal of Opening of Short Position
RRVS	Reversal of Revaluation of Short Position
RCSH	Reversal of Closure of Short Position
RXPL	Reversal of Expiry of Long Position
RXPS	Reversal of Expiry of Short Position
RXRL	Reversal of Exercise in Long Position
RAXS	Reversal of Assignment in Short Position

Advices/Statements Supported

- Generation of deal confirmation advice
- Generation of Portfolio margin settlement

Additional Information (UDF) / Special maintenance:

In case, Bank has to capture some other details about the deal or the parties involved, the same might be customized by way of using UDF option available at various screens.

Maintenances required

Following Parameter maintenances to be done:

- Branch Parameter
- General Ledger Parameter
- Interest & Charges Parameter
- Journal Entry Parameter
- Messaging Parameter
- Local Holidays
- Batch file for running EOD

1.6. Product Code – FU03

(FU03) Wheat Futures Product (Commodity Futures)

1.6.1. Business Scenario

Purpose: Commodity Future product helps buyer of the contract to hedge the risks associated with the upward price fluctuations of the wheat and also helps seller to hedge the risk associated with downward price fluctuations of the wheat and try to lock in a price for their products.

Target audience / Beneficiaries: Customers who are wheat producers, exporters, millers and bakers - and whose inventories are subject to price change of wheat.

Customer segment: Corporate customers and financial institutions (Investors /Hedger).

1.6.2. Introduction

Commodity derivatives are financial tools to offer protection to former against crop values falling below the cost of growing the crop. This protection comes in the form of derivative contracts, and these contracts cover commodities such as white pepper, wheat, rice, coffee, cotton, and many others. Investors in commodity derivatives speculate on which direction commodity prices will take, making money if the price moves towards their favor. The commodity market and commodity derivatives allow investors to put their money in commodities without having to actually take possession of the commodity.

1.6.3. Summary

Commodity Futures are the exchange traded derivative products, which has any commodity as their underlying assets. These products are traded in terms of number of contracts, which is also called “Lots”. Each contract can have multiple number of units of the underlying commodity, which is decided by the exchange where the futures are being traded, for example each “Hard Red Winter Wheat Futures” traded at Kansas City Board of Trade has 5,000 bushels hard red wheat per contract. The futures contract price is simply what a buyer is willing to pay and a seller is willing to accept for a product. Bids and offers for commodity futures are based on the traders' assessments of supply and demand factors as well as technical indications of price relationships.

1.6.4. Synopsis

- Commodity Futures are standardized contracts with a given units of given commodity as its underlying asset.

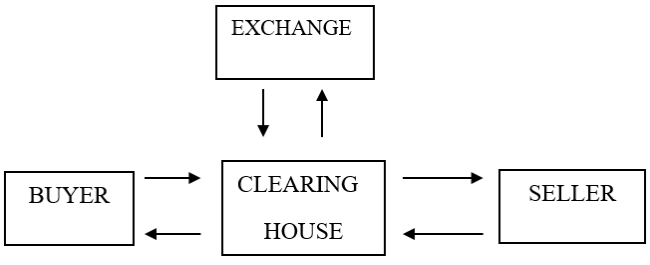
- Commodity Future contracts are only valid for a specific period of time as mentioned in contract, which may be define based on demand or supply of the commodity or in case of wheat the harvesting period of that particular region.
- Parties involved are buyer, exchange and seller, in some case, broker and clearing house might be involved.

1.6.5. Operations

- An exporter is expecting to receive its dues on a future date in some foreign currency. It would hurt him if his domestic currency gets appreciated against foreign currency.
- He/she approaches the bank with this need and asks to have long or short kind of derivate, which has a foreign currency as underlying.
- On his/her behalf bank takes the action as per their instruction and update customer's portfolio accordingly.
- Bank requires settling margin based on the market on daily basis and collect from customer or pay back to customer according to market value of the derivative.
- Banks can take further action based on his/her trading strategy. Or simply can wait for liquidation at the end of series for derivative.

1.6.6. Parties Involved

- **Buyer/Seller**: For any transaction to take place there must be a "buyer" to buy or the long and the seller to sell or the "short".
- **Exchange**: This is the central feature of the "Exchange-Traded" derivatives market.
- **Clearinghouse**: A clearinghouse (which is sometimes a part of the Exchange or a separate entity) is another central feature of the market.
- **Broker**: A broker is an entity that mediates between a seller/buyer and a clearing member.



1.6.7. Detailed Coverage

Product FU03 covers the following Instrument features:

- Call or Put might be define for Commodity Futures,
- Premium Style for Commodity Futures,
- Pricing currency for Commodity Futures,
- User defined fields for the Commodity Futures,
- Capturing percentage of Initial margin for the deal,
- Settlement days for the Commodity Futures,
- Upward and downward price moment might be define,
- Prior/Physical Settlement might be capture,
- Series details including strike price start and end date,
- Transaction, Composite and Funds MIS codes for instrument,
- Maximum Open position for long / short customers,
- Back valued dated Commodity Futures contracts.

Portfolio details

- Own / Customer portfolio might be defined
- WAC, LIFO, FIFO, DAMT costing methods can have for each type of portfolio
- Capturing portfolio report generation details and generating report
- Capturing notional revaluation details for the portfolio
- Capturing customer, currency or branch level restrictions

Default

- Amendment of Commodity Futures contract,
- Matching or Un-matching of the Commodity Futures contract,
- Reversal of Commodity Futures contact,
- Reversal of Opening, Closing and Revaluation of Long / Short positions.
- Assignment of long and short position (Auto / Manual),
- Exercise of long / short position (Auto / Manual),
- Expiry of long / short position (Auto / Manual),
- Reversal of Expiry, Exercise and Assignment of Long / Short positions,
- Liquidation of Long /short position,
- Daily settlement through MTM,
- Notional or Realized revaluation for Commodity Futures contracts.

Advice

- Option to suppress the message type with priority
- Option to generate Confirmation advice for future contracts

MIS

- Capturing of Transaction, Composite, and Funds MIS codes
- Linkages to particular reference group.

Market and market price

- Capturing market details where index future is being traded
- Capturing market price moment for the Index future derivative

Query

- Displays WAC balance and Scheme balance
- Displays margin (Initial / variation) settlements for the portfolio
- Displays details for Long/short deals and Liquidation deals

1.6.8. Events Covered

Product FU03 has the Life Cycle as listed below:

Events Covered	Terminology
EBOK	Booking of Index Future Contract
EAMD	Amendment of Index Future Contract
EREV	Reversal of Booking
EMAT	Event Matching of Deal
EOLG	Opening of Long Position
ERVL	Revaluation of long Position
ECLG	Closure of Long Position
EOSH	Opening of Short Position
ERVS	Revaluation of Short Position
ECSH	Closure of Short Position
EXPL	Expiry of Long Position
EXPS	Expiry of Short Position
EXRL	Exercise in Long Position
EAXS	Assignment in Short Position
EEPL	Exchange for Physicals in Long
EEPS	Exchange for Physicals in Short

ROLG	Reversal of Opening of Long Position
RRVL	Reversal of Revaluation of Long Position
RCLG	Reversal of Closure of Long Position
ROSH	Reversal of Opening of Short Position
RRVS	Reversal of Revaluation of Short Position
RCSH	Reversal of Closure of Short Position
RXPL	Reversal of Expiry of Long Position
RXPS	Reversal of Expiry of Short Position
RXRL	Reversal of Exercise in Long Position
RAXS	Reversal of Assignment in Short Position

Advices/Statements Supported

- Generation of deal confirmation advice
- Generation of Portfolio margin settlement

Additional Information (UDF) / Special maintenance:

In case, Bank wants to capture some other details about the deal or the parties involved, the same might be customized by way of using UDF option available at various screens.

Maintenances required

Following Parameter maintenances to be done:

- Branch Parameter
- General Ledger Parameter
- Interest & Charges Parameter
- Journal Entry Parameter
- Messaging Parameter
- Local Holidays
- Batch file for running EOD

1.7. Product Code – FU04

(FU04) T Bond-Future Product (Bond Futures)

1.7.1. Business Scenario

Purpose: Bond futures product provides an efficient way to gain exposure to the debt markets and hedging the risk associated with interest rate of medium to long term Bonds.

Target audience / Beneficiaries: Customers who wants to hedge risk associated with interest rate on a long term bonds.

Customer segment: Corporate customers and financial institutions (Investors /Hedger).

1.7.2. Introduction

Bonds are a vital source of funding for governments, Corporate and institutional borrowers such as banks. But this fund raising activity comes with various types of interest-rate and credit risks, but one can hedge these risks with Bond future products and can cover one's risk associated with movement of interest rates. Bond Futures benefit the users in many ways:-

- Involve lower brokerage as compared to bond trading.
- While trading in bond futures, one needs to pay the margin amount as compared to the entire market bond price when trading in bonds.
- Highly liquid compared to bond.

1.7.3. Summary

Bond futures are the exchange traded derivative products, which has a bond as their underlying assets. These products are traded in terms of number of contracts, which provides price transparency and liquidity with reduced counterparty risk. The value of future contract might be calculated by below mentioned formula:-

$$ЛТ = N \times (ST - FT \times k) / 100$$

Where

N = Size of the contract,

ST = Quoted price of the underlying physical bond at maturity,

FT = Quoted futures price at date,

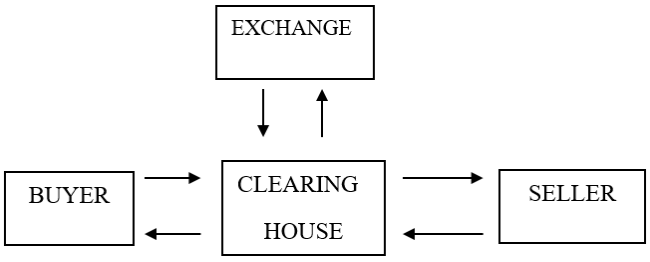
K = Conversion factor.

1.7.4. Operations

- A Corporate firm has a large investment in the bonds with floating interest rate, and expecting a down turn in the interest rates on the bonds in the coming quarter, but they want to avoid the loss in the cost due to less interest rate.
- They approach the bank with this need and ask to have long or short kind of derivatives, which has a reference interest rate as underlying.
- On their behalf bank takes the action as per their instruction and update customer's portfolio accordingly.
- Bank requires settling margin based on the market on daily basis and collect from customer or pay back to customer according to market value of the derivative.
- Banks can take further action based on his/her trading strategy. Or simply can wait for liquidation at the end of series for derivative.

1.7.5. Parties Involved

- **Buyer/Seller**: For any bond future transaction to take place, there must be a "buyer" to buy or the long and the seller to sell or the "short".
- **Exchange**: This is the central feature of the "Exchange-Traded" derivatives market.
- **Clearinghouse**: A clearinghouse (which is sometimes a part of the Exchange or a separate entity) is another central feature of the market.
- **Broker**: A broker is an entity that mediates between a seller/buyer and a clearing member.



1.7.6. Synopsis

- Bond Futures are standardized contracts with bond as its underlying asset.
- Futures contracts are only valid for a specific period of time as mentioned in contract.
- Futures contracts have expirations in March, June, September, and December, up to two quarters months ahead.
- Parties involved are buyer, exchange and seller, in some case, broker and clearing house might be involved.

1.7.7. Detailed Coverage

Product FU04 covers the following Instrument features:

- Call or Put might be define for Commodity Futures
- Premium Style for Commodity Futures
- Underlying asset's currency and Pricing currency for bond futures
- User defined fields for the bond futures
- Capturing percentage of Initial margin for the deal
- Settlement days
- Upward and downward price moment might be define
- Prior/Physical Settlement might be capture
- Series details including strike price start and end date
- Transaction, Composite and Funds MIS codes for instrument
- Maximum Open position for long / short customers
- Back valued dated future contracts

Portfolio details

- Own / Customer portfolio might be defined
- WAC, LIFO, FIFO, DAMT costing methods can have for each type of portfolio
- Capturing portfolio report generation details and generating report
- Capturing notional revaluation details for the portfolio
- Capturing customer, currency or branch level restrictions

Default

- Amendment of Commodity Futures contract,
- Matching or Un-matching of the Commodity Futures contract,
- Reversal of Commodity Futures contact,
- Reversal of Opening, Closing and Revaluation of Long / Short positions.
- Assignment of long and short position (Auto / Manual),

- Exercise of long / short position (Auto / Manual),
- Expiry of long / short position (Auto / Manual),
- Reversal of Expiry, Exercise and Assignment of Long / Short positions,
- Liquidation of Long /short position,
- Daily settlement through MTM,
- Notional or Realized revaluation for Commodity Futures contracts.

Advice

- Option to suppress the message type with priority
- Option to generate Confirmation advice for future contracts

MIS

- Capturing of Transaction, Composite, and Funds MIS codes
- Linkages to particular reference group.

Market and market price

- Capturing market details where index future is being traded
- Capturing market price moment for the Index future derivative

Query

- Displays WAC balance and Scheme balance
- Displays margin (Initial / variation) settlements for the portfolio
- Displays details for Long/short deals and Liquidation deals

1.7.8. Events Covered

Product FU04 has the Life Cycle as listed below:

Events Covered	Terminology
EBOK	Booking of Index Future Contract
EAMD	Amendment of Index Future Contract
EREV	Reversal of Booking
EMAT	Event Matching of Deal
EOLG	Opening of Long Position
ERVL	Revaluation of long Position
ECLG	Closure of Long Position
EOSH	Opening of Short Position
ERVS	Revaluation of Short Position
ECSH	Closure of Short Position

EXPL	Expiry of Long Position
EXPS	Expiry of Short Position
EXRL	Exercise in Long Position
EAXS	Assignment in Short Position
EEPL	Exchange for Physicals in Long
EEPS	Exchange for Physicals in Short
ROLG	Reversal of Opening of Long Position
RRVL	Reversal of Revaluation of Long Position
RCLG	Reversal of Closure of Long Position
ROSH	Reversal of Opening of Short Position
RRVS	Reversal of Revaluation of Short Position
RCSH	Reversal of Closure of Short Position
RXPL	Reversal of Expiry of Long Position
RXPS	Reversal of Expiry of Short Position
RXRL	Reversal of Exercise in Long Position
RAXS	Reversal of Assignment in Short Position

Advices/Statements Supported

- Generation of deal confirmation advice
- Generation of Portfolio margin settlement

Additional Information (UDF) / Special maintenance:

In case, Bank wants to capture some other details about the deal or the parties involved, the same might be customized by way of using UDF option available at various screens.

Maintenances required

Following Parameter maintenances to be done:

- Branch Parameter
- General Ledger Parameter
- Interest & Charges Parameter
- Journal Entry Parameter
- Messaging Parameter
- Local Holidays
- Batch file for running EOD

1.8. Product Code – OP04

(OP04) Euro-Bond Call Option Product (Bond Option)

1.8.1. Business Scenario

Purpose: Bond Options product helps investors to hedge their current interest rate exposure against falling or rising rates on a bond or to earn extra return on their existing portfolio.

Target audience / Beneficiaries: Customers who wants to speculate or hedge the risk involved with interest rate on medium to long term bonds.

Customer segment: Corporate customers and financial institutions (Investors /Hedger).

1.8.2. Introduction

Bond Options is one of the financial tools, which gives user an option cover their risk associated with downward movement of interest rates on the underling bonds or capitalize the upward movement of interest rates.

1.8.3. Summary

Bond Options are the exchange traded derivative products, which has medium to long term as their underlying assets. These products are traded in terms of number of contracts. Each contract is to buy or sell a fixed value of the bond. The value of the contract is defined as the value of the interest receivable on bond multiplied by the specified monetary amount (Called Multiplier). In the contract traded at the New York Stock Exchange (NYSE), the contract specification states: -

1 Contract = $100 * Value of the interest receivable on bond

Assuming if the interest receivable on bond is quoting at 100, the value of one contract will be equal to $10,000 (100*100). The monetary value (Multiplier) is $100, in this case, is fixed by the exchange where the contract is traded.

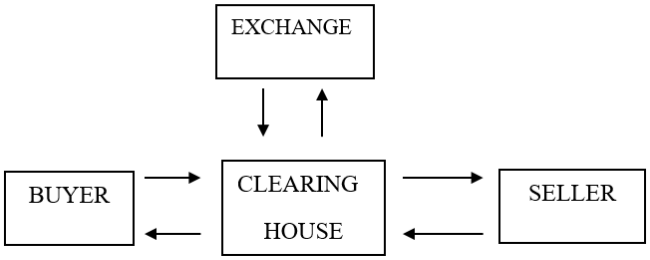
1.8.4. Operations

- A financial institution is expecting an upward movement in the interest rates on the bonds in the coming quarter, but they want to enjoy it without exposing themselves to bonds (Purchasing the bonds).
- They approach the bank with this need and ask to have put or call kind of options, which have a references interest rate as underlying.
- On their behalf bank takes the action as per their instruction and update customer's portfolio accordingly.

- Bank requires settling margin based on the market on daily basis and collect from customer or pay back to customer according to market value of the derivative.
- Banks can take further action based on his/her trading strategy. Or simply can wait for liquidation at the end of series for derivative.

1.8.5. Parties Involved

- **Buyer/Seller:** For any transaction to take place there must be a “buyer” to buy or the long and the seller to sell or the “short”.
- **Exchange**: This is the central feature of the “Exchange-Traded” derivatives market.
- **Clearinghouse**: A clearinghouse (which is sometimes a part of the Exchange or a separate entity) is another central feature of the market.
- **Broker**: A broker is an entity that mediates between a seller/buyer and a clearing member.



1.8.6. Synopsis

- Bond Options are standardized contracts with Bond as its underlying asset, where parties have the right to buy (call option) or the right to sell (put option).
- In exchange for these "rights," the buyer pays the seller a price known as the premium for the option.
- Option contracts are only valid for a specific period of time as mentioned in contract.
- Option contracts have expirations in March, June, September, and December.
- Parties involved are buyer, exchange and seller, in some case, broker and clearing house might be involved.

1.8.7. Detailed Coverage

Product OP04 covers the following Instrument features:

- Call or Put might be define for Bond Options,
- Premium Style for Bond Options,
- Underlying asset’s currency and Pricing currency for Bond Options,

- User defined fields for the Bond Options,
- Capturing percentage of Initial margin for the deal,
- Upward and downward price moment might be define
- Prior/Physical Settlement might be capture,
- Series details including strike price start and end date,
- Transaction, Composite and Funds MIS codes for instrument,
- Maximum Open position for long / short customers,
- Back valued dated Option contracts.

Portfolio details

- Own / Customer portfolio might be defined
- WAC, LIFO, FIFO, DAMT costing methods can have for each type of portfolio
- Capturing portfolio report generation details and generating report
- Capturing notional revaluation details for the portfolio
- Capturing customer, currency or branch level restrictions

Default

- Amendment of Bond Option contract,
- Matching or Un-matching of the Options contract,
- Reversal of Bond Options contact,
- Reversal of Opening, Closing and Revaluation of Long / Short positions.
- Assignment of long and short position (Auto / Manual),
- Exercise of long / short position (Auto / Manual),
- Expiry of long / short position (Auto / Manual),
- Reversal of Expiry, Exercise and Assignment of Long / Short positions,
- Liquidation of Long /short position,
- Daily settlement through MTM,
- Notional or Realized revaluation for Options contracts

Advice

- Option to suppress the message type with priority
- Option to generate Confirmation advice for Weather Options contracts

MIS

- Capturing of Transaction, Composite, and Funds MIS codes
- Linkages to particular reference group.

Market and market price

- Capturing market details where index future is being traded
- Capturing market price moment for the Index future derivative

Query

- Displays WAC balance and Scheme balance
- Displays margin (Initial / variation) settlements for the portfolio
- Displays details for Long/short deals and Liquidation deals

1.8.8. Events Covered

Product OP04 has the Life Cycle as listed below:

Events Covered	Terminology
EBOK	Booking of Index Future Contract
EAMD	Amendment of Index Future Contract
EREV	Reversal of Booking
EMAT	Event Matching of Deal
EOLG	Opening of Long Position
ERVL	Revaluation of long Position
ECLG	Closure of Long Position
EOSH	Opening of Short Position
ERVS	Revaluation of Short Position
ECSH	Closure of Short Position
EXPL	Expiry of Long Position
EXPS	Expiry of Short Position
EXRL	Exercise in Long Position
EAXS	Assignment in Short Position
EEPL	Exchange for Physicals in Long
EEPS	Exchange for Physicals in Short
ROLG	Reversal of Opening of Long Position
RRVL	Reversal of Revaluation of Long Position
RCLG	Reversal of Closure of Long Position
ROSH	Reversal of Opening of Short Position
RRVS	Reversal of Revaluation of Short Position
RCSH	Reversal of Closure of Short Position
RXPL	Reversal of Expiry of Long Position
RXPS	Reversal of Expiry of Short Position

RXRL	Reversal of Exercise in Long Position
RAXS	Reversal of Assignment in Short Position

Advices/Statements Supported

- Generation of deal confirmation advice
- Generation of Portfolio margin settlement

Additional Information (UDF) / Special maintenance:

In case, Bank has to capture some other details about the deal or the parties involved, the same might be customized by way of using UDF option available at various screens.

Maintenances required

Following Parameter maintenances to be done:

- Branch Parameter
- General Ledger Parameter
- Interest & Charges Parameter
- Journal Entry Parameter
- Messaging Parameter
- Local Holidays
- Batch file for running EOD

1.9. Product Code – FU05

(FU05) Future on Eurodollar future (Derivative Futures)

1.9.1. Business Scenario

Purpose: derivative futures product helps customers to hedge against risk associated with trading of underlying derivatives and also provides an opportunity to explore the derivative without actually investing in them.

Target audience / Beneficiaries: Customers who wants to cover risk associate with the underlying derivative or wants to capitalize on an expected upward move in the value of underlying derivatives.

Customer segment: Corporate customers and financial institutions (Investors /Hedger).

1.9.2. Summary

Derivative futures are the exchange traded derivative products, which has derivatives as their underlying assets and these underlying derivatives may have any of the underlying assets like bond, index, equity, interest rate, commodity etc. These products are traded in terms of number of contracts. Each contract is to buy or sell a value of the underlying derivative. The value of the contract is defined as the value of the underlying derivative multiplied by the specified monetary amount (Called Multiplier). In the Futures contract with underlying as Eurodollar futures, traded at the Chicago Mercantile Exchange (CME), the contract specification states:

1 Contract = $250 * Value of underlying derivative

Assuming if underlying derivative is quoting at 1,000, the value of one contract will be equal to $250,000 (250*1,000). The monetary value is $250, in this case is fixed by the exchange where the contract is traded.

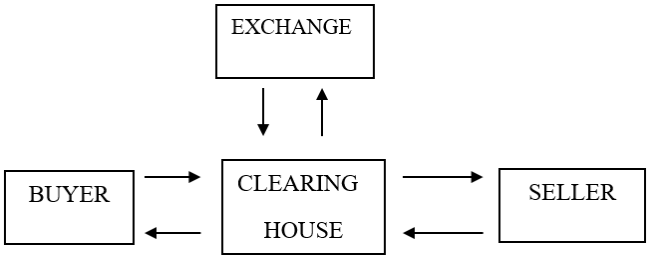
1.9.3. Operations

- A financial institution is expecting an upward movement in the price of a particular derivative in the future, but they want to enjoy it without exposing themselves to that derivative (Purchasing the derivatives).
- They approach the bank with this need and ask to have long or short kind of futures, which have that particular derivative as underlying.
- On their behalf bank takes the action as per their instruction and update customer's portfolio accordingly.
- Bank requires settling margin based on the market on daily basis and collect from customer or pay back to customer according to market value of the derivative.

- Banks can take further action based on his/her trading strategy. Or simply can wait for liquidation at the end of series for derivative.

1.9.4. Parties Involved

- **Buyer/Seller**: For any bond future transaction to take place, there must be a “buyer” to buy or the long and the seller to sell or the “short”.
- **Exchange**: This is the central feature of the “Exchange-Traded” derivatives market.
- **Clearinghouse**: A clearinghouse (which is sometimes a part of the Exchange or a separate entity) is another central feature of the market.
- **Broker**: A broker is an entity that mediates between a seller/buyer and a clearing member.



1.9.5. Synopsis

- Derivative futures are standardized contracts with any other derivative as its underlying asset.
- Derivative futures are used for hedging or investment purpose without exposing to the underlying derivatives.
- Derivative futures contracts are only valid for a specific period of time as mentioned in contract, but in most of the cases it's valid for 3 months.
- Derivative futures contracts have expirations in March, June, September, and December.
- Parties involved are buyer, exchange and seller, in some case, broker and clearing house might be involved.

1.9.6. Detailed Coverage

Product FU05 covers the following Instrument features

- Call or Put might be define for derivative futures
- Premium style for derivative futures
- Underlying derivative's currency and Pricing currency for derivative futures
- User defined fields for the derivative futures
- Capturing percentage of Initial margin for the deal
- Upward and downward price moment might be define
- Prior/Physical Settlement might be capture
- Series details including strike price start and end date
- Transaction, Composite and Funds MIS codes for instrument
- Maximum Open position for long / short customers
- Back valued dated derivative future contracts

Portfolio details

- Own / Customer portfolio might be defined
- WAC, LIFO, FIFO, DAMT costing methods can have for each type of portfolio
- Capturing portfolio report generation details and generating report
- Capturing notional revaluation details for the portfolio
- Capturing customer, currency or branch level restrictions

Default

- Amendment of derivative future contract
- Matching or Un-matching of the derivative future contract
- Reversal of derivative future contact

- Reversal of Opening, Closing and Revaluation of Long / Short positions
- Assignment of long and short position (Auto / Manual)
- Exercise of long / short position (Auto / Manual)
- Expiry of long / short position (Auto / Manual)
- Reversal of Expiry, Exercise and Assignment of Long / Short positions
- Liquidation of Long /short position
- Daily settlement through MTM
- Notional or Realized revaluation for derivative future contracts

Advice

- Option to suppress the message type with priority
- Option to generate Confirmation advice for future contracts

MIS

- Capturing of Transaction, Composite, and Funds MIS codes
- Linkages to particular reference group.

Market and market price

- Capturing market details where index future is being traded
- Capturing market price moment for the Index future derivative

Query

- Displays WAC balance and Scheme balance
- Displays margin (Initial / variation) settlements for the portfolio
- Displays details for Long/short deals and Liquidation deals

1.9.7. Events Covered

Product FU05 has the Life Cycle as listed below:

Events Covered	Terminology
EBOK	Booking of Index Future Contract
EAMD	Amendment of Index Future Contract
EREV	Reversal of Booking
EMAT	Event Matching of Deal
EOLG	Opening of Long Position
ERVL	Revaluation of long Position
ECLG	Closure of Long Position
EOSH	Opening of Short Position

ERVS	Revaluation of Short Position
ECSH	Closure of Short Position
EXPL	Expiry of Long Position
EXPS	Expiry of Short Position
EXRL	Exercise in Long Position
EAXS	Assignment in Short Position
EEPL	Exchange for Physicals in Long
EEPS	Exchange for Physicals in Short
ROLG	Reversal of Opening of Long Position
RRVL	Reversal of Revaluation of Long Position
RCLG	Reversal of Closure of Long Position
ROSH	Reversal of Opening of Short Position
RRVS	Reversal of Revaluation of Short Position
RCSH	Reversal of Closure of Short Position
RXPL	Reversal of Expiry of Long Position
RXPS	Reversal of Expiry of Short Position
RXRL	Reversal of Exercise in Long Position
RAXS	Reversal of Assignment in Short Position

Advices/Statements Supported

- Generation of deal confirmation advice
- Generation of Portfolio margin settlement

Additional Information (UDF) / Special maintenance:

In case, Bank wants to capture some other details about the deal or the parties involved, the same might be customized by way of using UDF option available at various screens.

Maintenances required

Following Parameter maintenances to be done:

- Branch Parameter
- General Ledger Parameter
- Interest & Charges Parameter
- Journal Entry Parameter
- Messaging Parameter
- Local Holidays
- Batch file for running EOD

1.10. Product Code – OP05

(OP05) Call Options on Eurodollar Future (Derivative Options)

1.10.1. Business Scenario

Purpose: Derivative options product offers the investor an opportunity to either capitalize on an expected market move for underlying derivative or to protect holdings in the underlying derivative.

Target audience / Beneficiaries: Customers who wants to speculate or hedge the risk involved underlying derivative which could have asset as its underlying.

Customer segment: Corporate customers and financial institutions (Investors /Hedger).

1.10.2. Summary

Derivative options are the exchange traded derivative products, which has derivative as their underlying assets and these underlying derivatives may have any of the underlying assets like bond, index, equity, interest rate, commodity etc. These products are traded in terms of number of contracts. Each contract is to buy or sell a value of the underlying derivative. The value of the contract is defined as the value of the underlying derivative multiplied by the specified monetary amount (Called Multiplier). In the contract traded at the New York Stock Exchange (NYSE), the contract specification states:

1 Contract = $100 * Value of the underlying derivative

Assuming if the underlying derivative is quoting at 100, the value of one contract will be equal to $10,000 (100*100). The monetary value (Multiplier) is $100, in this case, is fixed by the exchange where the contract is traded.

1.10.3. Operations

- A financial institution has a particular derivative and expecting a downturn in the return on that particular derivative the future, but they want to hedge this risk without selling the particular derivatives.
- They approach the bank with this need and ask to have put or call kind of options, which have that particular derivative as underlying.
- On their behalf bank takes the action as per their instruction and update customer's portfolio accordingly.
- Bank requires settling margin based on the market on daily basis and collect from customer or pay back to customer according to market value of the derivative.

- Banks can take further action based on his/her trading strategy. Or simply can wait for liquidation at the end of series for derivative.

1.10.4. Parties Involved

- **Buyer/Seller:** For any transaction to take place there must be a “buyer” to buy or the long and the seller to sell or the “short”.
- **Exchange**: This is the central feature of the “Exchange-Traded” derivatives market.
- **Clearinghouse**: A clearinghouse (which is sometimes a part of the Exchange or a separate entity) is another central feature of the market.
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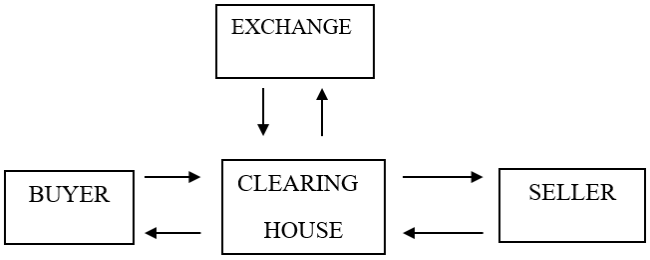

1.10.5. Synopsis

- Derivative options are standardized contracts with other derivative as its underlying asset, where parties have the right to buy (call option) or the right to sell (put option).
- In exchange for these "rights," the buyer pays the seller a price known as the premium for the option.
- Option contracts are only valid for a specific period of time as mentioned in contract, but in most of the cases it’s valid for 3 months.
- Option contracts have expirations in March, June, September, and December.
- Parties involved are buyer, exchange and seller, in some case, broker and clearing house might be involved.

1.10.6. Detailed Coverage

Product OP05 covers the following Instrument features:

- Call or Put might be define for Derivative options
- Premium style for Derivative options
- Underlying asset’s currency and Pricing currency for Derivative options
- User defined fields for the Derivative options

- Capturing percentage of Initial margin for the deal
- Upward and downward price moment might be define
- Prior/Physical Settlement might be capture
- Series details including strike price start and end date
- Transaction, Composite and Funds MIS codes for instrument
- Maximum Open position for long / short customers
- Back valued dated Option contracts

Portfolio details

- Own / Customer portfolio might be defined
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- Reversal of Derivative options contact
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- Exercise of long / short position (Auto / Manual)
- Expiry of long / short position (Auto / Manual)
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- Liquidation of Long /short position
- Daily settlement through MTM
- Notional or Realized revaluation for Options contracts

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- Option to suppress the message type with priority
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