

**TREASURY CONSULTING GROUP (TCG) –  
DEMYSTIFYING FINANCIAL DERIVATIVES  
(INTERNATIONAL SERIES)**

## Demystifying Financial Derivatives (International Series)

### The objective of the Course – Demystifying Financial Derivatives (International Series)

**The objective of the Course:** The agenda of this course will offer delegates a thorough and practical understanding of Financial Derivatives and risks and will explain how Financial Derivatives can be used in directional and no directional Strategies, together with their dynamic hedging implications. The program will also focus on analysing, structuring, and decomposing hedging, trading, and investment strategies utilizing both vanilla and exotic options. Delegates will construct and examine a wide variety of directional and non-directional Strategies, formulate strategies to meet client exposure management and other objectives, and decompose a range of structured option strategies into their parts.

The Impact of changing market conditions on the pricing and performance of these strategies will also be examined. Particular emphasis is placed on the dynamic interaction between Financial Derivatives and the impact on Portfolio risk of higher-order risk properties of vanilla and exotic options (e.g., Vanna, Volga) and their pricing and risk management. Particular attention will be placed on higher-order volatility risks Vanna and Volga, and Their management within portfolios of vanilla and exotic option types.

For their usage in a variety of different hedging and trading applications.

#### ¥ Targetted Audience :

- Chief Executive Officers (CEO)
- Chief Financial Officers (CFO)
- Corporate Treasurers
- Corporate Controllers
- Accounting Heads
- Treasury Teams
- Bankers
- Front Desk Traders
- Proprietary Traders
- Chartered Accountants (CA)
- Cost Accountants
- Company Secretaries
- Master of Business Administration (MBA)

### Part I - Course Content – Demystifying Financial Derivatives (International Series)

#### ¥ Module 1: - Introduction to Foreign Exchange Markets

- Introduction to Foreign Exchange Markets
- Types of Foreign Exchange Markets - Onshore & Offshore Treasury Markets
- Offshore Treasury Markets –
  - Singapore
  - NY
  - Australia
  - LLF (London, Luxembourg, Frankfurt)
  - Japan
  - Dubai
- Types of Hedging Exposures in Corporate Balance Sheets
  - Transaction Exposure
  - Translation Exposure
  - Revaluation Exposure
  - Economic Exposure
  - Operating Exposure

## Demystifying Financial Derivatives (International Series)

- Accounting Exposures
- Types of Underlying in Corporate Balance Sheets
  - Financial Underlying
  - Non-Financial Underlying
- Trading vs Speculation vs Arbitration
- Instruments in Foreign Exchange Markets for Corporate Treasurers

### ¥ **Module II: - Onshore Foreign Exchange Markets- Deliverable Markets**

- Introduction to Onshore Treasury Markets
- Introduction to various Hedging instruments in Onshore Treasury Markets
- Introduction to Deliverable Forwards Contracts - STFX / LTFX
- Introduction to Deliverable Options Contracts - Plain Vanilla Options Contracts
- Introduction to Exotic / Cost Reduction Structures
  - Range Forwards
  - Ratio Forwards
  - Participatory Forwards
  - Seagull
  - Call Spread
  - Put Spread
  - Straddle
  - Strangle
  - Box Spread
  - Butterfly Spread
  - Condors
  - Diagonal Spread
  - Vertical Spread
  - Calendar Spread
  - Knock-In Knock Out (KIKO)
  - Chooser Option
  - Barrier Options
  - Lookback Options

### ¥ **Module III: Onshore Deliverable Treasury Markets - Interest Rate Hedging (Deliverable Hedging)**

- Introduction to Onshore Interest Rate Hedging
  - Interest Rate Hedging - Principal Only Swaps (POS)
  - Interest Rate Hedging - Coupon Only Swaps (COS)
  - Interest Rate Hedging - CCIRS
- Interest Rate Hedging - Dollarization Swaps
  - Conversion of Local Currency Assets / (Liabilities) into \$ Assets / (Liabilities)
- Interest Rate Hedging - Reverse Dollarization
  - Conversion of \$ Assets / (Liabilities) into Local Currency Assets / (Liabilities)
- Interest Rate Hedging - Overnight Index Swaps (OIS)
  - Conversion of Floating Rate Liability into Fixed Rate Liability
  - Conversion of Fixed Rate Liability into Floating Rate Liability

### ¥ **Module IV: Offshore Non-Deliverable Treasury Markets - Interest Rate Hedging (Non-Deliverable)**

- Introduction to Onshore Interest Rate Hedging
  - Interest Rate Hedging - Principal Only Swaps (POS)
  - Interest Rate Hedging - Coupon Only Swaps (COS)
  - Interest Rate Hedging - CCIRS
- Interest Rate Hedging - Dollarization Swaps

## Demystifying Financial Derivatives (International Series)

- Conversion of Local Currency Assets / (Liabilities) into \$ Assets / (Liabilities)
- Interest Rate Hedging - Reverse Dollarization
  - Conversion of \$ Assets / (Liabilities) into Local Currency Assets / (Liabilities)
- Interest Rate Hedging - Overnight Index Swaps (OIS)
  - Conversion of Floating Rate Liability into Fixed Rate Liability
  - Conversion of Fixed Rate Liability into Floating Rate Liability

## ¥ Module V: - Options Contracts (Deliverable vs. Non-Deliverable Options Contracts)

- Deliverable and Non-Deliverable Options Contracts
- Mechanics of Deliverable Options Contracts - Onshore Treasury Markets
  - Singapore
  - NY
  - Australia
  - LLF (London, Luxembourg, Frankfurt)
  - Japan
  - Shanghai
- Mechanics of Non-Deliverable Options Contracts - Offshore Treasury Markets
  - Singapore
  - NY
  - Australia
  - LLF (London, Luxembourg, Frankfurt)
  - Japan
  - Shanghai
- Options Settlement Cut
  - Japanese Cut
  - London Cut
  - NY Cut
  - Frankfurt Cut
  - Sydney Cut
- Options Greeks
  - Delta
  - Gamma
  - Theta
  - Vega
  - Phi
  - Rho
  - Exotics Greeks
- Options Payoffs – Deliverable vs Non-Deliverable
  - Range Forwards
  - Ratio Forwards
  - Participatory Forwards
  - Seagull
  - Call Spread
  - Put Spread
  - Straddle
  - Strangle
  - Box Spread
  - Butterfly Spread
  - Condors

## Demystifying Financial Derivatives (International Series)

- Diagonal Spread
- Vertical Spread
- Calendar Spread
- Knock-In Knock Out (KIKO)
- Barrier Options
- Chooser Options
- Lookback Options

### ¥ Module VI: - Credit Derivatives

- Credit Default Swaps (CDS)
  - CDS Reference Obligation
  - CDS Payment Obligation
  - CDS Single Name
  - CDS Multi Name
  - CDS Single Basket
  - CDS Multi Basket
  - CDS Single Trigger
  - CDS Multi Trigger
- Total Return Swaps (TRS)
- Basis Swaps
- Quanto Swaps / Reverse Quanto Swaps
- Accreting / Amortization Swaps
- Credit Linked Notes (CLN)
- Equity Linked Notes (ELN)
- Valuation Adjustments
  - Credit Valuation Adjustment (CVA)
  - Debit Valuation Adjustment (DVA)
  - Funding Value Adjustment (FVA)
  - Collateral Valuation Adjustment (COLVA)
  - Capital Valuation Adjustment (KVA)
  - Margin Valuation Adjustment (MVA)
- Basel III and implications on Pricing of Credit Derivatives Libor Fiat Swaps (W/o QSD)
- Introduction to Overnight Index Swaps (OIS) – IBOR Exposures

### ¥ Module VII: - Onshore & Offshore - Fixed Income Markets & Fixed Income Derivatives

- Introduction to Fixed Income Markets
  - Duration
    - Macaulay Duration
    - Modified Duration
    - Dollar Duration
    - Effective Duration
    - Key Rate Duration
    - Spread Duration
  - Convexity
    - Effective Convexity
    - Dollar Convexity
    - Key Rate Convexity
    - Spread Convexity
  - Duration – Convexity Approach
- Fixed Income Markets Derivatives
  - Bonds Futures
  - Interest Rate Futures
- Swaptions (Swap + Options)

## Demystifying Financial Derivatives (International Series)

- Interest Rate Risk Management – Floors
- Interest Rate Risk Management – Caps
- Interest Rate Risk Management – Collars
- Interest Rate Risk Management – Participating Collars
- Interest Rate Risk Management – Participating Swaps
- Forward Rate Agreements (FRA)
  - USD Forward Rate Agreements (FRA)
  - EUR Forward Rate Agreements (FRA)
  - GBP Forward Rate Agreements (FRA)
  - AUD Forward Rate Agreements (FRA)

### ¥ **Module VIII: - Implication of Trade Finance & Foreign Exchange – Part I**

- Introduction to Corporate Finance - SME
- Theory of working Capital - Short Term / long-term working capital loan
- Interest Rate Structure in India
  - OIS (Overnight Index Swaps)
  - MIBOR (Mumbai Interbank Offered Rate)
  - PLR (Prime Lending Rate)
  - MCLR
- Utilization of Working Capital in the books
- Hedging of INR denominated loans in the books
- Accounting of INR loans in the books – IND-AS, IFRS
  - IFRS 9 – Valuation of Derivatives
  - IFRS 7 – Disclosures of Derivatives
  - IFRS 13 – Fair Valuation Hierarchy

### ¥ **Module IX: - Implication of Trade Finance & Foreign Exchange – Part II**

- Introduction to Trade Finance
- Instruments in Trade Finance
  - Letter of Credit (L/C) - Usance L/C
  - Sight L/C
  - Revocable L/C
  - Irrevocable L/C
  - Revolver L/C
- Instruments in Trade Finance - Bank Guarantee (BG) - Performance BG, Financial BG
- Loans in Trade Finance
  - Offshore Buyers Credit
  - Offshore Supplier Credit

### ¥ **Module X: - Financial Modelling and Foreign Exchange Markets**

- The implication of Financial Modelling on Foreign Exchange Markets
- Excel functions
  - V Lookup
  - H Lookup
  - Index
  - Match
  - Offset Table
  - Column
- Valuation of MTM (Mark to Market)
  - Level 1 – Mark to Market – 100% Observable, 0% Non-Observable
    - Forwards Contracts
    - Options Contracts

## Demystifying Financial Derivatives (International Series)

- Options Payoffs (Range Forwards)
- Level 2 – Mark to Matrix – 99% Observable, >= 1% Non-Observable
  - Forwards Contracts
  - Options Contracts
  - Options Payoffs (Range Forwards)
- Level 3 – Mark to Model – 0% Observable, 100% Non-Observable
  - Forwards Contracts
  - Options Contracts
  - Options Payoffs (Range Forwards)
- Valuations of Swaps using Excel 2013
  - POS – Principal Only Swaps
  - COS – Coupon Only Swaps
  - CCIRS – Cross Currency Interest Rate Swaps
- Valuation of OIS using Excel 2013
- Valuation of MIFOR using Excel 2013

### ¥ Module XI: - Cash Flow Modelling, Financial Models

- Cash Flow Modelling Functions like Time, Lookup, Logic, Text, Other Functions
- Foreign Exchange Forecast
  - Cash Flow Methods
  - Common Size Analysis
  - Forecast Sheet
- Cash Flow Modelling
  - Interest Rates
  - Forecast Interest Income
  - Forecast Balance Sheet
  - Long term liabilities & shareholders' funds
  - Cash Flow Statement
  - Debt Service
  - Cash Flow Charting
  - Cash Flow Statement
  - Cash Flow Core Ratios
- Cash Flow Methods
  - Book Value Method
  - Adjusted Book Value Method
  - Market Value Method
  - Multiples Value Method
  - Peer Data Value Method
  - Adjusted Present Value Method
  - Scenario Manager Method

### ¥ Module XII: - Carry Trades & Treasury Regulatory

- Introduction to Carry Trades
  - Investment Carry
    - Step 1 – Conversion of FC into LC
    - Step 2 – Investment of LC in Local Country Books
    - Step 3 – Hedging of LC in FC
    - Step 4 – Conversion of LC into FC
  - Funding Carry
    - Step 1 – Conversion of FC into LC
    - Step 2 – Investment of LC in Local Country Books
    - Step 3 – Hedging of LC in FC
    - Step 4 – Conversion of LC into FC

## Demystifying Financial Derivatives (International Series)

- Carry Trades – Sub Account
- Steps in carrying Trades (With Subaccount)
  - Conversion or Borrowing Step
  - Investment Step
  - Repatriation Step
- ISDA Documentation
  - ISDA 2002 – Master Service Agreement (MSA)
  - ISDA Annexure
  - ISDA Risk Disclosure Statement
  - ISDA Credit Support Annex (CSX)
    - No CSX
    - One Way CSX
    - Two Way CSX
    - Single Collateral CSX
    - Double Collateral CSX
    - Initial Margin CSX
    - Threshold CSX
  - Interbank Credit Support Annex (CSX)
    - Interbank CSX – Forwards
    - Interbank CSX – Options
    - Interbank CSX – Swaps
  - ISDA Dodd-Frank Letter

### ¥ Module XIII: - Types of Hedging Programs

- Cash Flow Hedging
- Fair Value Hedging
- Net Investment Hedging @ Local Currency Books, Foreign Currency Books
- Correlation Products
  - Credit Linked Notes (CLN)
  - Equity Linked Notes (ELN)
- Commodities Linked Notes (CLLN)
- Gold Linked Notes (GLN)
- Currencies Linked Notes (CLN)
  - Foreign Currency Hedging of Correlation Products
  - Correlation Products Delta
    - Delta
    - D Delta
    - I Delta
    - N Delta
    - C Delta

### ¥ Module XIV:- Managed Futures Programs (Commodity Trading Advisors)

- Private Placement Programs (PPP)
- Private Placement Programs (PPP) Desk
- Managed Futures Programs
  - Equities CTA
  - Options CTA
  - Commodities CTA
  - Derivatives CTA
  - Options Payoffs CTA
- Volatility Clustering Managed Futures Programs
- Drift based Managed Futures Programs

**Treasury Consulting Group (TCG) – A Singaporean Multinational HQ Group (Touching \$ 1 Bn Valuation by Dec'21)**  
**An Asia Pacific Trainings, Consulting, Publication, Software, Analytics, FI, Technology Implementation Group**

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## Demystifying Financial Derivatives (International Series)

- ☐ Mean Reverting Managed Futures Programs

### ¥ Session XV: - Value at Risk (VAR) using Options

- ☐ VAR - Call Options, Secured Call, Range Forwards
- ☐ VAR – Put Options, Protective Put, Range Forwards
- ☐ VAR – Portfolio of Call Spreads
- ☐ VAR – Portfolio of Put Spreads
- ☐ CFAR – Introduction to Cash Flow At Risk
- ☐ ES – Introduction to Expected Shortfall

### ¥ Session XVI:- Exotic Options – KIKO/Path Dependent

- ☐ Knock-In Knock Out – Call Options
- ☐ Knock-In Knock Out – Put Options
- ☐ Asia Options
- ☐ Barrier Options
- ☐ Lookback Options
- ☐ Rainbow Options
- ☐ Auto Calls
- ☐ Worst of Calls – Long Calls
- ☐ Worst of Puts – Long Puts
- ☐ Best of Calls – Short Calls
- ☐ Best of Puts – Short Calls

- ❖ **Live Demonstration of Financial Terminals – Thomson Reuters, Bloomberg TV, MT4 (Meta Trader 4), MT5 (Meta Trader 5)**
- ❖ **Course Coverage:** Course to get covered using Webinars, Skype Conference Calls, Audio, Video Calls. Sessions are highly interactive and participants are most welcome to ask any questions during the Course.
- ❖ **Course Duration:** Course duration is 100 Hrs + 2 Hrs of Complimentary Skype Call which to be taken within 3 months of completion of the Course.
- ❖ **Course Duration:** Rs 180,000 (Indian Rupees)

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## YouTube Channel (Impetus X) -  
<https://www.youtube.com/channel/UC3bPXxADBssdFMwlkphLFFQ/featured>

## Vimeo Video Channel - <https://vimeo.com/rahulmagan>

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