

# Programme on Fixed Income Portfolio Management With Bond Trading Game

February 6 – 11, 2017

## Who should Attend?

- ☆ Fixed Income Dealers
- ☆ Portfolio Managers
- ☆ Fund & Investment Managers/Consultants
- ☆ Financial Analysts
- ☆ Mid/Back Office Professionals
- ☆ Regulators, Compliance Staffs and Auditors
- ☆ Managers of Corporate Treasuries
- ☆ *Any Newcomer interested in fixed income markets are also encouraged to participate*

## Content Highlights

- ◇ Basics of Fixed Income Securities Market
- ◇ Yield and Return Measures
- ◇ Pricing and Valuation Techniques
- ◇ Yield Curve & Interest Rate Term Structure Analysis
- ◇ Bond Price Sensitivity
- ◇ Interest Rate Derivatives and Hedging Fixed Income Portfolio
- ◇ Bond Trading and Portfolio Management Strategies
- ◇ Portfolio Optimization
- ◇ Value-at-Risk Analysis
- ◇ **Simulated Bond Trading Game**

Coordinator

Dr Kedar nath Mukherjee



National Institute of Bank Management  
Pune, India

## Programme on Fixed Income Portfolio Management With Bond Trading Game

Portfolio managers around the world continue to face greater challenges than ever before. Fixed income securities markets have also developed at a dramatic pace not only in developed countries but also in developing countries like India. Development in terms of widening the scope of fixed income markets, trading of new fixed income products, introduction of various hedging instruments including derivatives and structured products, setting various regulatory standards, etc. have brought a significant amount of challenges for the managers to efficiently manage their fixed income portfolio. Therefore, finance professionals require a thorough understanding of the structure of various vanilla and complex fixed income products, various strategies to successfully trade on those products, and the necessary fundamental and advanced hedging techniques, in order to be successful.

### ❖ Basic Concepts of Fixed Income Securities Market:

- ❖ Overview of Fixed Income Securities Markets in India and Worldwide
- ❖ Scope and Developments in Government Securities and Corporate Bond Markets in India

### ❖ Yield and Return Measures:

- ❖ Yield Measures: Nominal Yield, Current Yield, Yield to Maturity
- ❖ Yield Measures for Bonds with Special Features (Floating Rate, Call/Put Option)
- ❖ Yield Measures on Bond Portfolio
- ❖ Critical Assessment of Yield Measures
- ❖ Measure of Total Return
- ❖ Scenario Analysis

### ❖ Pricing and Valuation Techniques:

- ❖ Par Value, Discount and Premium Bonds
- ❖ Valuation of Zero-Coupon Bonds
- ❖ Traditional Method of Valuing Option-free Fixed Coupon Bond

- ❖ Treatment of Accrued Interest
- ❖ Day Count Conventions
- ❖ Valuation of Floating Rate Bonds
- ❖ Valuation of Bonds with Embedded Options

### ❖ Yield Curve Analysis:

- ❖ Construction of Yield Curves
  - Linear Interpolation
  - Cubic Polynomial/Spline
- ❖ Yield Curve Smoothing
- ❖ Treasury STRIPS and Bond Arbitrage: Coupon Stripping and Bond Reconstitution
- ❖ Calculating Implied Spot Rates/ZCYC from Coupon Bonds (Bootstrapping, NSS Methods)
- ❖ Calculating Implied Forward Rates
- ❖ Impact of Smooth and Fair Yield Curve on the Term Structures of Spot and Forward Rates
- ❖ Theories of Term-Structure:
  - Expectations Theory
  - Liquidity Preference Theory
  - Market Segmentation Theory

- ❖ Bond Price Sensitivity:
  - ❖ Factors Determining Bond Price Sensitivity
  - ❖ Price/Yield Relationship
  - ❖ Duration-Convexity Approach
  - ❖ Different Measures of Duration
  - ❖ Determinants of Duration
  - ❖ Macaulay and Modified Duration
  - ❖ Price Value Basis Point (PVBP/PV01)

### Distinctive Features of the Programme

This programme has been structured keeping in mind the advanced analytical requirement of a trader or a manager in dealing with the fixed income portfolio, or other concerned executives. Besides covering the complete theoretical fundamentals of bond portfolio management, the programme also intends to expose the participants to a bond trading game.

### Bond Trading Game:

This game will give hands-on experience of trading fixed income securities in an environment simulated to resemble an actual trading day in a bank's treasury. This will help the participants to learn how to analyse news: economic, political, domestic and international. Trading will be conducted in government bonds as well as corporate bonds, money market instruments, and interest rate derivative contracts. Participants will be given a starting portfolio as well as a set of limits they need to adhere to.

### ❖ Bond Price Sensitivity (Contd):

- ❖ Potential Gain from Increasing Convexity on Bond Portfolios
- ❖ Duration and Convexity of a Bond Portfolio

### ❖ Hedging Fixed Income Portfolio:

- ❖ Different Risks Involved in FI Portfolio
- ❖ Duration-based Hedging Strategies
- ❖ Forward Rate Agreement and Interest Rate Swaps Contract
  - Pricing and Valuation of FRA and IRS

- ❖ Effective Duration for Bonds with Embedded Options
- ❖ Duration for Floating Rate Bonds
- ❖ Limitations of Duration Measures
- ❖ Key Rate Duration
- ❖ Meaning and Importance of Convexity
- ❖ Convexity Adjusted Duration and its Significance

- Vocabulary of Options
- Callable and Puttable Bonds
- Options Adjusted Spreads
- ❖ Interest Rate Structured Products:
  - Arbitrage-free Binomial Option Pricing Model to Value Interest Rate Options
  - Structured Products (Cap, Floor and Collars, etc.) and their Valuation

### ❖ Trading and Management Strategies in Fixed Income Portfolio:

- ❖ Relative Value Trading:
  - Riding the Yield Curve
  - Yield Spread Trades
  - Butterfly Trades
- ❖ Passive and Active Strategies to Manage Fixed Income Portfolio
- ❖ Bond Portfolio Optimization

### ❖ Value-at-Risk Analysis:

- ❖ Calculating VaR on Bond Portfolio through:
  - Variance-Covariance Approach
  - Historical Simulations
  - Monte Carlo Simulations
- ❖ Critical Assumptions of VaR: Confidence Intervals, Historical Volatility and Correlations
- ❖ Stress Testing on VaR Estimates

### ❖ Simulated Bond Trading Game:

- ❖ Opening Bond Portfolio
- ❖ Market Moving News and Events
- ❖ Quotes to Customers
- ❖ Bid/Offer Quotes to Other Market Participants
- ❖ Bidding for RBI Bond Auctions
- ❖ Yield Curve Play
- ❖ Corporate Bond Yield vs Government Bond Yields (Spreads).

### Dates

February 6 – 11, 2017

The programme will commence at 9.00 am on February 6 and will conclude by 5.00 pm on February 11, 2017. Participants are requested to reach the campus by the evening of February 5, 2017.

### Venue

NIBM Campus, Kondhwa Khurd, Pune, India.

### Hostel Accommodation

The programme is fully residential. Participants will be provided well furnished single room AC accommodation in the Institute's hostel complex on the Campus. However, they will not be permitted to bring their family members to stay on the campus. In case any Officer/Executive with physical/medical disability is being nominated, kindly inform us in advance with particulars of disability to facilitate necessary arrangements.

The Institute has facilities for outdoor and indoor games and a large walking/jogging trail for physical fitness besides a yoga centre. Participants are, therefore, encouraged to bring the appropriate clothes/gears.

### Programme Coordinator

Dr Kedar nath Mukherjee

Assistant Professor, Finance Area, National Institute of Bank Management, Pune.



**Dr Mukherjee** has obtained his Bachelors, Masters, and M.Phil. in Commerce from the University of Burdwan, West Bengal, followed by Ph.D in Financial Management from Osmania University, Hyderabad. His last 10 years of teaching and training interests include: Financial Markets, Fixed Income Securities Market, Security Analysis and Portfolio Management, Risk Management and Financial Derivatives, Financial Engineering and Structured Finance, Time Series Analysis. He conducts various Executive Development Programmes in these areas for senior and middle

level executives in banks and other financial institutions. His research interests are also broadly in similar areas.

### Other Resource Persons (Indicative List)

- Shri G Mahalingam, Executive Director, Financial Market Department, Reserve Bank of India
- Shri DVSSV Prasad CEO, FIMMDA, Mumbai
- Shri Ripujit Chaudhuri, General Manager, Risk Management Group, ICICI Bank
- Shri S B Mainak, EX-Managing Director, LIC of India Ltd.
- Shri S Bandyopadhyay, MD & Chief Executive Officer, LIC Pension Fund Ltd.
- Shri Sanjeev Kumar, DGM – Domestic Treasury, Central Bank of India
- Shri Vijay Sharma, Executive Vice President & Head-Dealing, PNB Gilts Ltd.
- Shri Sayandeve Chakravarti, Head, Investors Sales, ANZ Bank
- Shri Rajosik Banerjee, Partner, KPMG, Mumbai.

### Last Date for Receiving Nominations:

January 27, 2017

### Last Date for Availing Early Bird Incentive:

January 21, 2017

(See Fee Structure on home page of the website)

### Nominations and Enquiries

Please address your enquiries and nominations to:

**Dr Kedar nath Mukherjee**

Programme Coordinator

National Institute of Bank Management

NIBM Post office, Kondhwe Khurd

Pune 411 048, India

Tel : 0091-20-26716000 (EPABX), 26716351 (Direct)

Fax : 0091-20-26834478

E-mail: kedar@nibmindia.org, kedar.nibm@gmail.com

Web : www.nibmindia.org

### Programme Fee (per participant)

US \$ 2400 for foreign participant

(See fee structure on home page of the website for incentive)

	Fee	ST	SBAC	KKC	Fee+ST+ SBAC+KKC	TDS
Mem. Banks	: 42000	5880	210	210	48300	4200
Non-Mem. Banks	: 49000	6860	245	245	56350	4900

The fee includes the cost of tuition, board and lodging facilities, teaching material, etc. (Service Tax (ST) @ 14%, Swachh Bharat Abhiyan Cess (SBAC) @ 0.5%, Krishi Kalyan Cess (KKC) @ 0.5% and TDS @ 10%. Kindly send the TDS Certificate on priority to NIBM).

### Mode of Payment for Indian Participants

- The fee may preferably be transferred by RTGS/NEFT/ECS to our A/c No. 20002400021 with Bank of Maharashtra, NIBM Branch, Pune (IFSC Code MAHB0001124). NIBM PAN No. AAATN0040P and ST No. AAATN0040PST001.
- National Institute of Bank Management  
NIBM Post Office, Kondhwe Khurd, Pune 411 048, INDIA.

### Mode of Payment for Foreign Participants

#### Mode of Remittance: SWIFT\*

1. Name & Address of our Bankers : **Oriental Bank of Commerce**  
C-2, Shop No. 4-5, Bramha Estate  
Kondhwe Khurd, Pune 411 048  
Maharashtra, India
2. Name of the Account : **National Institute of Bank Management**
3. NIBM's Bank Account No. : **Current A/C 11281131004402**  
with Oriental Bank of Commerce
4. Bank's Swift Code : **ORBCINBBFCP**
5. Oriental Bank of Commerce A/c No. : **36152559**  
with Correspondent Bank
6. Preferred currency : **USD**
7. Correspondent Bank : **CITIBANK N.A.**
8. Swift code for Citi Bank : **CITIUS33**

\* The Foreign Bank Charges/ SWIFT charges/Commission is to be borne by the remitter. The fees mentioned in the invoice/brochure is to be paid to NIBM, net of all bank charges.

**\*Payments will be accepted only through electronic mode.  
Cheques/DDs/Pay Orders will not be accepted.**

- For all electronic remittances, kindly send a confirmatory e-mail at: [accounts@nibmindia.org](mailto:accounts@nibmindia.org) giving details of the remitter and participant, name and dates of programme, etc.

Please see programme fee structure on home page of the website for early bird incentive, incentives for SAARC and other developing countries, mode of remittance, Pune City route map and local conveyance.