

# Foreign Exchange, Money Markets and Derivatives

## Why Attend

- The global foreign exchange (FX) and money markets are the world's largest markets and pivotal parts of the financial system. In foreign exchange alone, more than \$5 trillion of transactions occur daily. These markets provide funding, trading and investment opportunities and are the conduit between all other components of the world's capital markets. In recent years, the importance of the money markets has become even greater as financial institutions focus more closely on the management and diversification of their sources of liquidity, apply greater discipline to their funding and examine the attractions of short term investment and trading strategies.
- This course provides a strong foundation on the instruments and activities of the international money and FX markets; and it focuses on the current profile of the markets and offers insights based on the lessons learned from the 2007-09 financial crisis as well as the latest market developments.
- Moreover, the course emphasizes the integrated nature of FX, money markets and derivatives. Mastering the mechanics and usages of such instruments provides excellent opportunities for arbitrage, hedging and risk management for those engaged in corporate treasury functions, commercial banks and asset management companies. The course also analyses the liquidity characteristics and risks of different instruments and funding strategies.

## Course Methodology

- This course uses a wide range of learning methods, including explanatory slides, case studies, detailed examination of Excel models in an interactive workshop style environment and others.

## Course Objectives

By the end of the course, participants will be able to:

- Develop a deep understanding of the FX market, its mechanics and major participants
- Analyze the role and impact of central banks on FX and money markets
- Examine the nature of money supply, open market operations and quantitative easing
- Demonstrate a thorough understanding of liquidity, capital adequacy and solvency
- Apply analytical skills to key financial products within global money markets
- Explain the logic and uses of financial derivatives – forwards, swaps and options
- Develop an understanding of key strands of financial risk management

## Target Audience

- This course is suitable for all those working within the banking industry, including wealth managers, auditors, accountants, finance specialists, risk managers, and treasury and product control professionals. It is also suitable for those working with financial services and in corporate finance positions.

## Target Competencies

- Exchange rate and interest rate risk best practices
- Analyzing unorthodox policies
- Global money, FX markets, and capital flows
- Thought leadership

Interface of money markets and foreign exchange (FX)

- Size of the markets
- Issuance of Treasury instruments, repos, bankers acceptances, commercial paper
- Overview of the Euromarkets
- London Interbank Offered Rate (LIBOR)
- Treasury bill issuance in different jurisdictions
- The mechanics of the Repo market
- Forward rates for interest rate and FX
- Effective yields when risk adjusted for FX exposures
- Arbitrage and interest rate parity
- Current market conditions
- Risk premia, key money markets spreads and currency outlook

## Role of central banks in the financial system

- Overview of central banks
- Federal Reserve
- European Central Bank
- People's Bank of China
- Bank of Japan
- Bank of England
- Structure of a central bank balance sheet
- Characteristics of central bank's assets and liabilities
- Lender of last resort
- Summary of Open Market Operations
- Unorthodox monetary policy including quantitative easing (QE)
- Independence of central banks
- Financial stability and macro-prudential policy
- Forward guidance and transparency of decision making
- Management of FX reserves and exchange rate policy
- Nature of payments systems – real-time gross settlement systems (RTGS), net settlement, Fedwire, Target2

## Monetary policy and money supply

- Overview of the policy committees
- Federal Open Market Committee (FOMC)
- Monetary Policy Committee of the Bank of England (MPC of BOE)
- European Central Bank (ECB Governing Council)
- The People's Bank of China (PBOC) governance
- Overview of money supply
- Monetary tools and how they impact money supply
- How is money created in a modern economy
- Inflation targeting
- Central bank reserves
- Explanation of the Taylor rule
- Term structure of interest rates

## Foreign exchange market characteristics

- Size of market, volumes, participants, major currency pairs
- Regional breakdown of where and when most FX trading takes place
- Key role of London market in FX trading
- Historical background to today's FX market
- Role of the International Monetary Fund (IMF) and Special Drawing Rights (SDR's)
- Global FX reserves
- Review of several key historical FX rates
- Price of gold and relationship to the US Dollar index

## Interest rate (IR) swaps

- Basic structures and terminology of swaps
- Business case for using IR swaps
- Contrast money market rates and IR swap rates
- Notion of swap as an aggregation of forward rate agreements
- Pricing the fixed leg and interpreting the swap markets
- Counter party risk
- Recognition that credit valuation adjustment (CVA) is integral part of trading practices and pricing of derivatives and not just a regulatory (Basel) issue
- Over-The-Counter (OTC) market versus Swap Execution Facilities (SEF's)
- Collateralized OTC trades versus margin based Central Clearing Party (CCP) platforms
- Netting arrangements

## Credit default swaps (CDS)

- Terminology – protection buyer/seller, reference entity,
- Naked CDS positions
- Contrast between a CDS and a financial insurance contract
- Equating actual and contingent payments
- Inputs to model - default probabilities, loss given default (LGD), forward curve
- Sovereign and corporate markets
- Single name CDS versus basket products, nth to default structures
- Determination of a credit event
- Recent amendments to the International Swaps and Derivatives Association (ISDA) protocols on determination of credit events
- ISDA protocols

## Using derivatives for general hedging purposes

- Key concepts of hedging equity and fixed income risk with derivatives
- Using index futures and options to hedge equity portfolio
- Hedge ratio calculation for equity futures
- Calculating portfolio beta
- Options strategies
- Using forwards to hedge forex risk
- Using swaps to hedge credit risk
- Using variance swaps to hedge volatility risk

## Asset/liability management and the treasury function

- Interest rate risks
- Market risk i.e. re-valuation of bank holdings from changes in interest rates
- Accounting issues related to fair value accounting
- Duration gap analysis
- Interest rate forecasting
- Review of inflation protected securities
- Estimating the Term Liquidity Premium in money markets
- Funds Transfer Pricing (FTP) mechanics
- Contingency buffers for liquidity risk management
- Funding Value Adjustment (FVA)
- Bank funding curves
- Applying the correct FTP charges for strategic balance sheet management

## The global regulatory framework

- Overview of the Basel III framework
- Key provisions of Basel III related to market risk, credit risk, liquidity risk and operational risk
- Pillars 2 and 3 of Basel accords and role of central banks as supervisors
- Contrast macro-prudential policy initiatives with traditional micro-prudential
- Pro-cyclical and counter-cyclical risk management
- Dodd Frank Act and Financial Stability Oversight Council (FSOC), Volcker rule
- Regulatory investigations into market abuse
- USA - the Federal Reserve, Treasury, Securities and Exchange Commission (SEC), Commodity Futures Trading Commission (CFTC), Federal Deposit Insurance Corporation (FDIC)
- UK - Bank of England, Prudential Regulation Authority (PRA), Financial Conduct Authority
- European Union – ECB, the European Stability Mechanism (ESM), the European Securities and Markets Authority (ESMA)
- Trans national – Bank for International Settlements (BIS), Global Financial Stability Board etc.
- Sarbanes-Oxley – risk disclosure, stringent accounting requirements, impact on IT policies
- Volcker Rule – restrictions on activities/structure of banks