Asset & Liability Management Under Basel III

Objectives:	During this programme participants will: ▪ Analyse the structure of a bank's balance sheet and understand the key implications of the Basel III framework; ▪ Differentiate between economic and regulatory capital and explore key credit concepts; ▪ Explore the role of the Asset & Liability Management (ALM) function and key liquidity and balance sheet ratios; ▪ Cover key aspects of Funds Transfer Pricing (FTP) and its role in executing the bank's strategy; ▪ Understand fundamental money market and long-term assets and their mechanics; ▪ Look at the uses of interest rate and cross currency swaps to manage FX, yield curve and duration risk. ▪ Understand PFE implications, credit and market risk factors of key derivative products. ▪ Take a helicopter view of XVA ▪ Run through the organization and roles in the management and execution of the front, middle and back office roles.
Training Methodology:	The programme is highly interactive and it will encourage participation through exercises and case studies, which the delegates will solve individually or in small work-groups. These activities are designed to allow delegates to practice and to consolidate the concepts that will be discussed during the lectured sessions of the program. The program will focus on the practical realities of the market, rather than taking an excessively mathematical or academic approach.
Who Should Attend:	The programme is designed for: ▪ Treasury staff
Course Duration	Two days

Introduction	The Programme Director will introduce the course and what it will achieve.
The Bank Balance Sheet **0830 - 1000**	▪ The capital structure of a financial institution ▪ Asset structure – Risk-Weighted Assets – Balance sheet risks ▪ Counterparty concentration ▪ Liability Structure – Debt structure: Short- and long-term instruments – Common Equity Tier 1 (CET1), AT1, Tier 2 ▪ Capital & Solvency Ratios – Common Equity Tier 1 Ratio ▪ Helicopter view of Basel III – Key liquidity and balance sheet ratios – Capital adequacy **Exercise:** Determine the payout priority in a bankruptcy Ratio analysis
Regulatory Capital versus Economic Capital **1020 - 1100**	▪ The difference between Regulatory Capital and Economic Capital – Expected Losses (EL) versus Unexpected Losses (UL) – Understanding the concepts of Exposure at Default (EAD), Probability of Default (PD) and Loss Given Default (LGD) – What regulations are in place from the Central Bank and why are they there? – Differentiating lending risk versus settlement and pre-settlement risk
Asset & Liability Management I **1100 - 1200**	▪ The roles of ALCO, ALM and Treasury ▪ How to identify cash flow funding gaps – Quantifying Earnings at Risk (EAR) **Exercise:** Review Quiz

Liquidity Coverage Ratio (LCR) **1200 - 1245**	▪ Reasons to monitor liquidity – The role of High-Quality Liquid Assets (HQLA) ▪ HQLA Level 1, 2A, 2B and their proportions ▪ Total HQLA / Eligible HQLA / Haircuts for asset types – What HQLA are eligible in the UAE? – Net Cash Outflow (NCO): Unsecured versus Secured ▪ Derivative NCOs ▪ Contractual settlements linked to derivatives due over the next 30 days ▪ Possible posting of collateral ▪ Unfunded commitments • Prescribed outflow rates ▪ Maintenance of cash reserves with the Central Bank **Exercise:** Review Quiz / Calculate LCR
Net Stable Funding Ratio (NSFR) **1345 - 1430**	▪ Loan / Deposit Ratio – The implications of a high / low ratio ▪ The thought process behind the NSFR – Northern Rock / Continental Illinois – Weightings under the NSFR for individual assets and liabilities
Asset & Liability Management (ALM) II **1430 – 1515** **1530 - 1600**	▪ Funds Transfer Pricing (FTP) – How an FTP curve assists a business strategy – Explaining the liquidity premium – Generating a funding / deposit curve ▪ Market Risk: PV01 / PVBP / DV01 – High level view of Macaulay and Modified Duration ▪ Reporting interest rate risk under the IRRBB (Interest Rate Risk in the Banking Book) **Exercise**: Review Quiz
Money Market Instruments **1600 - 1700**	▪ Treasury Bills – Price versus effective annual yield ▪ Certificates of Deposits ▪ Commercial Paper ▪ (Reverse) Repos – Classic repo versus sell & buy back – Uses to fund a position – Uses to go short – Credit risks in a repo – Maintenance of collateral value **Exercise:** Convert a discounted instrument to an effective annual yield

Day 2	▪ Review of Day 1 ▪ Review Questions
Fixed Income Bonds **0830 - 1015**	▪ Intuitive Valuation – The relationship of price, coupon, maturity and yield ▪ Asset swap spreads – Combining bonds + swaps ▪ Credit Default Swap – Mechanics – Pricing factors – Determination committees **Exercise:** Intuitive bond price / yield calculations
Interest Rate Risk **1035 – 1050**	▪ Where and why does an institution run rate interest rate risk? – Working capital facilities – Cash balances – Debt facilities – Loan prepayments ▪ Yield curve risk: (non) parallel shifts **Exercise:** Identify where Financial Institutions are exposed to rate risk
Short Term Interest Rate Derivatives **1050 - 1200**	▪ Interpreting a yield curve – The forward Libor curves and its relationship to a swap curve – Where do the numbers come from for a forward curve? ▪ Forward Rate Agreements (FRAs) – Market terminology – Understanding the convexity adjustment versus futures **Exercise:** An FRA payout ▪ Introduction to Short Term Interest Rate (STIR) futures – Contract specifications – Interpreting a contract table – Uses in hedging yield curve risk **Exercise**: Calculate a Futures price and profit / loss

Interest Rate Swaps

1200 - 1300

- Profit / Interest Rate Swaps
  - The relationship of a swap rate to a forward Libor curve
  - The Libor / EIBOR setting
  - The swap rate as a combination of a risk-free rate + swap spread
- Managing single currency basis risk
- Payment structure risk
- Cash flow movements and the implications of netting
  - Bilateral risk versus netting & Central Counterparty Clearing (CCP)
  - Potential Future Exposure (PFE) and the risk envelope of an IRS

Exercise: Intuitive interest rate swap valuation

Basis Swaps

1400 - 1515

- Cross currency basis swaps
  - Value drivers (such as supply and demand)
  - Identifying where they make or break a deal
  - Relevance to new issues and asset swaps
- Conversion factors
  - Relevance to multi-currency facilities and asset swaps

Exercise: Calculate mark-to-market on a cross currency swap for restructuring

- Potential Future Exposure (PFE) and the risk envelope for a cross currency swap

XVA Overview

1535 - 1600

- Helicopter view of XVA:
  - Counterparty Credit Risk (CCR)
  - Credit Valuation Adjustment (CVA)
  - Debit Valuation Adjustment (DVA)
  - Wrong /right way risk
  - Funding Valuation Adjustment (FVA)
- Capital Valuation Adjustment (KVA)

Exercise: Review quiz

Front, Middle & Back Office Roles and Relationship

1600 - 1700

- Management Responsibility
  - ALCO
    - Define overall risk strategy
    - Allocate capital
    - Approve policies and procedures
    - Sets trading limits and product scope
    - Limit excess procedures
- Overall process and control structure
  - Following a trade from front to back office
- Front-Office
- Middle Office functions & processes
  - Risk monitoring
  - Product Control
  - P&L attribution
  - Model & software controls
  - Valuation policies
  - Stress scenario

- Back-office functions & processes

  - Trade Processing
  - Market Operations
  - Confirmations & Matching
  - Rate-resetting
  - Settlement
  - Collateral Management
  - Custody

Course Review & Close