Modern Treasury Functions Topography
What to expect
V2.0
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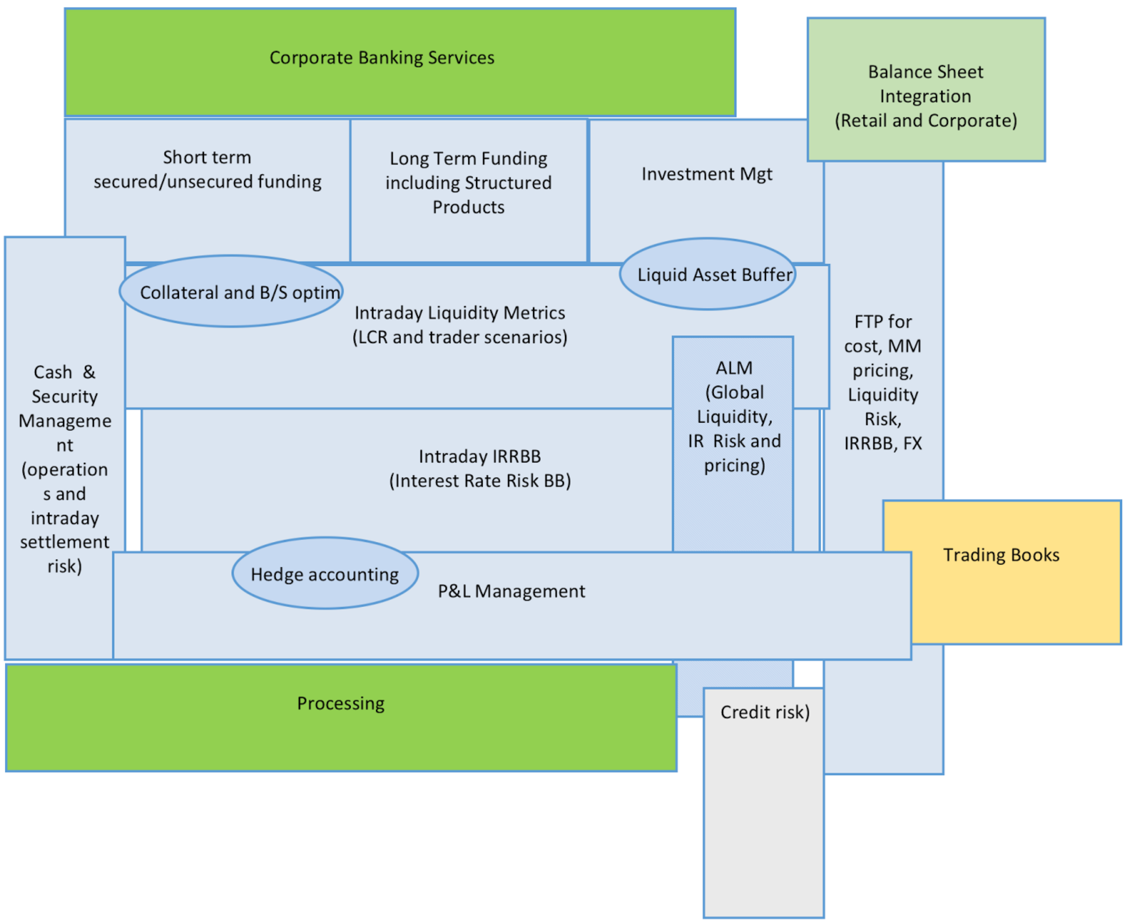

I will segment the document into Products and Functions.

Products:

FX
- Spot
- Forwards
- Swaps
- NDF
- OTC Vanilla Options
- Barrier / Digital Options
- FX Futures

Interest Rate
- Bonds (Govies, Corporates including callable)
- Bonds (Mortgage backed securities rated AA+)
- IR Futures
- Bond Futures
- Interest Rate Swaps
- Cross Currency Swaps
- Non Deliverable Swaps
- Swaption
- Cap/ Floor

Money Market
- Loans
- Non Deliverable Loans
- Deposits
- Repo
    - Standard
    - Tri-party
    - Buy & Sell Back
    - Pledges
- FRA
- CD
- CP
- T-Bills
- Credit Facilities
- Letter of Credits
- Callable Deposits
- Call accounts
- Guaranties

Fixed Income Issuances
- Fixed coupon bonds
- Floating rate bonds
- Callable/Puttable bonds

Precious Metals

- Spot
- Forward
- lease/depo
- Precious metals lease rate swap
- Futures
- Listed option

Functions:

Trade Capture

- Purpose: Sales, What-if, Internal, ...
- KYC
- Product Check
- Classifications
- Rules
- Enrichments

Hedging

- FX
- Interest Rates

Financing

- Debt
- Loans
- Overnights Roll-Overs [FX/MM]
- Deposits Account

Risk Management

- Cash Ladder with "What-if" scenarios
- Repricing Gap analysis
- Forward Accrual analysis (NII forecast)
- Maturity Gap analysis
- Average Rate analysis
- Average Duration analysis
- Repricing Gap with "What-if" scenario (and bucketed curve risk/Key Rate Duration)
- Liquidity Gap with "What-if" scenario (and bucketed curve risk/Key Rate Duration)
- Tenor basis risk
- Funding basis risk
- Cross-currency basis risk

- Behavioral Scenario Modeling
    - Early termination assumption on loans and deposits
    - Early call assumptions on bonds and loans
    - Rollover assumptions for deposits and issuances
    - Payment delay on loans

- (In case where global liquidity risk proxy required intraday) Non maturing run-off scenarios and trade replication models for IR risk

- Sensitivity analysis
- FX Delta analysis

- Banking Book Risk Management
    - Risk separation (FTP) of banking book trades per currency
    - Integrated balance sheet liquidity and market view through risk tickets modeling
    - Funding cost allocation
    - Liquidity premium calculation (Balance sheet management spread and contingent spread including some liquidity scenarios)
    - Risk breakage cost calculation for lifecycle events
    - IRRBB

- VaR
    - VaR Simulation [Historical, Monte-Carlo and Parametric]
    - VaR attribution
    - Stress Testing /Back Testing

<u>P&L Management</u>

- P&L type (Accrual, MTM)
- P&L decomposition (Realized / Unrealized / Cost of Funding/Cost of Opportunity/Realized FX)
- P&L management (Adjustments / Selloff & Sellback)
- P&L explained
- Return on RWA

<u>Liquidity Management</u>

- Intra-Day
    - Time-critical payments monitoring
    - Throughput analysis
    - Peak liquidity usage
    - Total payments and receipts
    - Intra-day stress analysis

- Short Term
    - Liquid Asset Buffer reporting
    - Incoming and outgoing cash flows
    - Coverage Ratio
    - Significant currency analysis
    - LCR at significant currency level /LCR forecast

- Long Term
    - Long term issuance
    - Capital Management
    - Special Accounts Management
    - Constant and Dynamic balance sheet modeling assumptions

Hedge Accounting

- Fair value, cash flow and translation (net investment) hedging strategies micro and macro/gap based.
- Re-hedging and carrying the original ineffectiveness
- Multi-currency support in case of cross currency hedges and FX exposure hedges
- P/L allocation based on hedging

Cash Management

- Define available inventory for funding
- Coverage ratio modeling

Nostro Management

- Multi Nostro Management
- Loro vs Nostro
- Cash Account Portability
- Monitoring of Nostro Accounts
- T+1 integration and processing of incoming MT940/950
- Cash sweeping between accounts

Collateral Management

- CSA Management
- Margin Call Management
- Optimizations
- Allocations, Collateral Transfer Pricing ex-post, ex-ante
- Interest Management
- Dispute Management

Asset Liability Gaps

- ALM - Balance sheet reporting
- ALM- risk modelling
- ALM- Stress Testing
- Earnings at Risk

Limits Management

- Cash Position Limits
- Securities Position Limits
- Bucketed AL Gap Limits
- Re-pricing Gap Limits
- Stop/loss limits

Cost of Funding Management

- Cash
- Securities
- Fund Transfer Pricing
    - Cost Model
    - P&L model

Trade Life Cycle

- Nettings
- Expiry
- Termination
- Extensions
- Novations
- Exercise
- Knock-In/Knock-Out
- Resets

Processing

- Confirmations
- Settlements
- Payments
- Matching
- Disputes
- Reconciliations
- Corporate Actions
- SWIFT (MT & MX messages)

Accounting

- Definition of chart of accounts
- Definition of accounting events
- Postings
- Closing types - Mth Qtr, Half and Year

Sales

- Interest computation for Client Accounts,
- Withholding tax calculations
- Hard and soft limits for Client Accounts
- Accounts operations: opening, closing, suspension, activation, blocking
- Bank Account Statements
- Monitoring of Client cash positions
- Cash sweeping between accounts
- Management of fees and overdraft charges
- Support third-party and on-behalf-of payment

Liquid Asset Buffer Portfolio Management

- Portfolio yield
- Portfolio duration
- Optimization of yield

Corporate Banking Services

- Entities definition and relationship
- KYC and onboarding
- Treasury and cash management
- Liquidity Management
- Risk management
- Cash & balance sheet forecasting
- Accounts management

- Payment management
- Customized loans and leases
- Real asset analysis, portfolio evaluation, debt and equity structuring
- Trade finance
- Payroll management
- Investment management
- Security underwriting
- Compliance checking
- Hedge Accounting
- Help Desk