Asset & Liability Management in An Islamic Banking Context

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Objectives

- Overview of ALM as implemented by conventional banks
- Review the challenges faced by Islamic banks in effectively managing their assets and liabilities
- Propose the approach by which Islamic banks could meet the challenges
Outline

- Forming an ALM Committee (“ALCO”)
- Developing an ALM policy
- Identifying & measuring the risks
- Monitoring and managing the risks
- The Challenge of ALM for Islamic Banks
- Proposed conceptual framework for Islamic ALM

ALCO

- Define ALCO’s mandate (Planning, directing, and controlling the flow, level, mix, cost and yield of bank funds)
- Membership must cover major areas of the organization (CEO, CFO, Treasurer, Sr. Mgrs. Credit, Deposits and Investments)
- Set goals for market risks (interest rate, basis, FX, etc.), liquidity and investments
ALM Policy

- Interest Rate Risk Policy
  - Limits for Value and Earnings at Risk
  - Parameters for stress testing
- Investment Policy
  - Diversification, liquidity, quality, FX exposure and minimum required risk adjusted returns
  - Support for lending policy
- Liquidity Policy
  - Liquidity and dependency ratios

Identifying Sources of Risks

- Interest Rate Risk
  - Repricing, yield curve, basis, optionality
  - Affects earnings and asset values
- Liquidity Risk
  - External (e.g., systemic)
  - Internal (e.g., perception of the bank in the market)
  - Affects the bank’s ability to meet its obligations and to fund its operations
- Other Risks (FX rates, equity prices, etc.)
Measuring Risks

- **Interest Rate Risk**
  - GAP, Duration Weighted GAP, Static/Dynamic Simulations (including RiskMetrics; Montcarlo)

- **Liquidity Risk**
  - Financing to stable deposits
  - Liquid assets to volatile liabilities
  - Future funding needs to funding sources

- **Other Risks**
  - Standard Deviation and Beta for equities
  - GAP and simulations for FX rates

Monitoring & Managing Risks

- **For all Market Risks (Interest, Equity, FX)**
  - Set limits for value and earnings at risk as a result of an adverse move, as well as risk taking guidelines and stress testing parameters
  - Report exposure vs. limits and stress test results

- **Liquidity Risk**
  - Set maximum/minimum values for the various liquidity ratios and report actual results
  - Stress testing
ALM Challenges Faced by Islamic Banks

- Islamic banks share the same risks with conventional banks including, despite some contentions to the contrary, interest rate risk.
- However, in the case of Islamic banks, there are the added complexities of:
  - How do Islamic deposits behave in reaction to interest rate volatility, and what is the core deposit base?
  - How to obtain emergency funds in case of a liquidity crunch?
  - How to hedge against the market risks?

Conceptual Framework for Islamic ALM Deposits

- All profit sharing deposits could be deemed variable profit rate liabilities.
- Accordingly, a significant portion of pooled funds should be deployed in variable profit rate assets.
- A core deposit base could be calculated across all deposit types by using statistical techniques such as OAS.
- To the extent of core deposits, assets may be deployed longer term.
Conceptual Framework for Islamic ALM

**Liquidity**

- Reciprocal deposit arrangements, using the points system, with Islamic and conventional banks
- Reverse Murabaha arrangements with Islamic and conventional banks using the “restricted investment account” paradigm
- Arrangement with the national supervisor (e.g., the central bank) to place funds on a Murabaha basis with the bank when needed

**Hedging the Market Risks**

- Use synthetic Profit Rate SWAPS to hedge interest rate risk
- Use Khiyar-al-Shart contract to hedge equity risk
- Khiyar-al-Shart may also be used in hedging interest rate risk in some cases
- Use Exchange of Deposit arrangements or Reverse Murabaha to hedge FX risk
Summary

- Just as a conventional bank does, an Islamic bank needs to identify, measure, monitor and manage financial risks.
- The bank’s risk tolerance must be well defined, and should take the form of limits for market, liquidity and investment risks.
- Islamic banks must innovate Shari’a compatible means for managing their identified risks, particularly interest rate and liquidity risks.