Foundations of Risk and Asset Liability Management Knowledge Badge Exam Content Guide

Describe the fundamentals of Risk Management

- What is risk?
- What are sources and types of risk?
- What are the four steps in risk management?

Describe basic concepts of market risk

- Define market risk and identify financial products exposed to market risk.
- Identify macroeconomic indicators.
- Identify common market risk measures.
- Recall common examples of market risk mitigation and regulations.

Explain the basic concepts of credit risk

- Define the types of credit risk.
- Describe the financial products that can be exposed to credit risk.
- Identify the macroeconomic indicators that govern credit risk.
- Identify common credit risk measures.
- Define credit scoring and identify the five types of credit score cards
- Explain the purpose of stress testing in credit risk.
- Common examples of credit risk mitigation and regulations.

Explain the basic concepts of liquidity risk

- Identify the different types of liquidity risk.
- Identify the types of financial products exposed to liquidity risk.
- Describe the common liquidity risk measures.
- Determine Macroeconomic indicators that govern liquidity risk.
- Identify common liquidity risk mitigation methods.
- Identify examples of key liquidity risk regulations.

Explain the basic concepts of operational risk

- Define operational risk.
- Explain who measures operational risk and why.
- Identify the different types of operational risk.
- Identify common operational risk measures.
- Identify common techniques deployed for measuring and assessing operational risk.
- Identify common operational risk mitigation methods.
- Identify common operational risk mitigation regulations.

Describe approaches to risk management organization

- Explain different approaches to risk management organization.
- Discuss the strengths and weaknesses of each approach.
- Define risk governance.
- Identify key components of risk governance.
- Explain the importance of IT/IT frameworks in risk governance.

Describe SAS solutions for risk management

- SAS credentials as a company.
- Discuss SAS capabilities in risk management.
- Identify SAS Risk solution platforms.
- Identify common SAS solutions in risk management.

Explain asset and liability management

- Recognize key components of assets and liabilities
- Recall the four pillars of ALM and their risk implications
- Describe and define the major risk categories managed through ALM.
- Explain why ALM is critical for financial health.
- List the six steps of the iterative cycle of ALM management.
- Describe measurement approaches for quantifying ALM risk.

Define and explain the structure of a balance sheet and income statement in ALM

- Explain the purpose and structure of a balance sheet.
- Identify key components of assets.
- Cash and reserves.
- Explain the liquidity and profitability trade-off and its impact on ALM.
- Identify key components of liabilities and understand maturity mismatch.
- Explain how revenue and expenses shape profitability.
- Describe the interconnections between balance sheet and income statement in ALM.

Define and explain repricing and liquidity gaps concepts

- Define gap analysis in banking and its role in Asset and Liability Management (ALM).
- List and describe the two main types of gaps in ALM:
- Describe the impact of gaps on banking operations.
- Identify strategies for managing repricing risk, including:
- Identify strategies for managing liquidity risk, including:

Explain the process of generating cashflows for financial instruments

- Identify common types of financial instruments (loans, bonds, deposits, stocks) and explain their purpose
- Explain why cash flow generation is critical for banks and financial institutions.
- Differentiate between contractual cashflows and behavioral cashflows
- Identify common cashflow patterns across instruments (example: bonds, amortizing loans, instruments with a floating rate).
- Identify behavioral factors that impact cashflows.
- Describe key challenges in cashflow modeling

Explain run-off, constant growth, and balance sheet scenarios

- Define what a balance sheet scenario is and identify key components of a balance sheet (assets and liabilities).
- List the three common balance sheet assumptions: run-off, constant and growth and differentiate between the assumptions.
- Define the run-off scenario and its characteristics.
- Define the constant balance sheet approach.
- Define the growth scenario and its key characteristics:
- Explain its best use cases and identify its limitations.
- Compare Run-off, Constant, and Growth approaches across:

Define Hypothetical Portfolio Analysis and What-If Scenarios

- Identify what a hypothetical portfolio is and why it is used.
- List the steps involved in building a hypothetical portfolio.
- Explain the role of simulations in risk management
- Identify different categories of what-if scenarios.
- Explain the purpose of each scenario type.
- List key metrics used in portfolio evaluation.
- Describe how each metric influences decision-making.
- Identify components of a typical bank portfolio and explain why certain mixes are considered medium risk.

Define and Explain Duration Measures

- Define duration.
- List the three main types of duration measures.
- Explain the purpose of each measure type.
- State the formula assumption for modified duration.
- Identify instruments where modified duration is most suitable.
- Explain why effective duration is more realistic for complex instruments (e.g., mortgages, callable bonds).
- Explain why key rate duration is useful for complex portfolios and yield curve analysis.

- Compare modified, effective, and key rate durations in terms of best use cases and limitations.

Define key components of IRRBB framework

- Define IRRBB and identify its key components.
- Explain how interest rate changes create risk for banks.
- List the three main types of IRRBB risk exposure.
- Describe how each risk type affects a bank's financial position.
- State the purpose of Basel IRRBB standards and issuance date.
- Identify the three steps in the standardized measurement process.
- Describe how stress testing determines IRRBB exposure.
- List the four key governance elements.

Explain Fund Transfer Pricing (FTP) concepts

- Define Funds Transfer Pricing (FTP) and its purpose in banking operations.
- Identify the role of FTP as an internal pricing mechanism for funds within a bank.
- List the three primary roles of FTP.
- Describe how FTP tracks the cost of capital and assigns fair value to funds.
- Explain why FTP is critical for measuring true profitability of banking segments.
- Define Net Interest Margin (NIM) and explain its significance (50–90% of bank income).
- Identify the main steps in the FTP cycle.
- Explain the role of the treasury department in centralizing funds and setting transfer prices based on market rates.
- Explain how FTP data influences resource allocation decisions (e.g., mortgages vs. credit cards).

Explain Economic Value of Equity(EVE) and Net Interest Income (NII)

- Define Net Interest Income (NII) and explain its role in banking operations.
- Identify the formula for NII: Interest Income − Interest Expense.
- List common sources of Interest Income (e.g., mortgage loans, auto loans, credit cards, investments).

- List common sources of Interest Expense (e.g., savings accounts, CDs, money market accounts, borrowed funds).
- Describe the two main components of NII: Interest Income and Interest Expense.
- Match examples of financial products to their typical interest rates (e.g., credit cards ~18%, savings accounts ~0.5%).
- Explain the relationship between income and expense in determining profitability.
- Identify key factors influencing NII.
- Define Economic Value of Equity and its purpose in banking.
- Explain the formula for EVE: Present Value of Assets – Present Value of Liabilities.
- Explain the difference between NII (short-term profitability) and EVE (long-term value).
- Explain how interest rate changes affect both NII and EVE differently.
- Identify the time frames and purposes of each metric (NII: quarterly operations; EVE: long-term capital stability).
- Explain the impact of interest rate changes.

Define Liquidity Risk, LCR and NSFR

- Define liquidity and liquidity risk
- Identify why liquidity risk matters
- Define the different types of liquidity risk and cite examples of each type.
- Describe the connection between funding and market liquidity risk.
- Define LCR and its purpose
- Recall the LCR formula
- Identify components of LCR and examples of each
- Explain why LCR was introduced under Basel III. Liquidity risk, LCR and NSFR.
- Define NSFR and its purpose
- Recall NSFR formula
- Identify components of NSFR