

## **The Balance Sheet of a Bank**

- Describe the process of money creation by banks
- Give the balance sheet entries for money creation and for a share issue
- Distinguish between balance sheet items in regard to their contract term and their contractual interest term
- Distinguish between the different types of funding of a bank
- Explain the purpose of the cash reserves with the central bank
- Explain the difference between cash reserves and equity
- Identify the balance sheet items that qualify as liquid assets
- Identify the main risks in the balance sheet
- Define the loan to deposit ratio
- Calculate a loan to deposit ratio given a balance sheet
- Explain why the loan to deposit ratio cannot be used to determine the liquidity position of a bank
- Know the internationally applied regulations in regard to the balance sheet composition

## **ALCO and Treasury**

- Distinguish between the the roles of ALCO, ALM and treasury
- Know the members of the ALCO committee
- Know the responsibilities of a ALCO
- Know the responsibilities of a treasury department
- Distinguish between the different trading desks in the front office
- Explain why banks need to be active on the different sub-markets of the financial markets, i.e. money market, capital market fixed income, capital market equity, FX market
- Explain the difference between sales and trading
- Explain the similarities and the differences between an exchange broker and a market maker in the over-the-counter market
- Define market risk
- Explain the need for trading limits
- Outline the responsibilities of trading and risk management in regard to market risk
- Define credit risk
- Distinguish between lending risk, settlement risk and pre-settlement risk
- Calculate the replacement cost of an FX Forward in case of a default of the counterparty
- Explain the importance of contractual netting

## **Features and Applications of commonly used treasury products**

Understand the characteristics of the following instruments and explain their use for the asset and liability management of a bank and for its clients:

- Deposits
- Repurchase Agreements
- Certificates of Deposits, Commercial Papers
- T-Bills and T-Bonds
- Covered bonds, Contingent Convertibles, Securitization
- FX Spot
- FX Forward
- FX Swap
- Forward Rate Agreements and STIR futures
- Interest Rate Swaps

## **Solvency / Capital Management**

- Explain why banks have to hold capital
- Distinguish between regulatory capital and economic capital
- Know the different categories of capital under the Basel rules and categorize a given instrument as CET1, Additional Tier 1 or Tier 2
- Explain the difference between the capital conservation buffer and the countercyclical capital buffer
- Describe the consequences of non-compliance with the capital adequacy rule
- Describe the G-SIB surcharge and the local SIB surcharge
- Describe the capital adequacy ratio requirement as of 2019
- Define the leverage ratio
- Determine whether a bank is complying with the capital adequacy ratio
- Explain the difference between a bank in resolution and a bank in insolvency
- Distinguish between bail-in and bail-out
- Outline the FSB rules for banks in resolution
- Define TLAC and MREL
- Categorize a liability as TLAC or non-TLAC
- Explain the difference between expected loss and unexpected loss
- Describe the IFRS9 rules for provisions
- Calculate a stage 1 provision and a lifetime provision

## Cash Management

- Define cash management
- Explain the drivers of changes in the reserve balances at the central bank
- Describe how banks can increase their cash reserves at the central bank
- Explain why banks use correspondent accounts with other commercial banks
- Explain why it is necessary to have balances on a nostro account
- Explain how balances on a nostro account may be the result of taking up loans, buying the foreign currency or incoming foreign payments
- Explain the division of duties between the front office and the back office of the dealing room in regard to cash management
- Explain the relevance of nostro reconciliation for cash management
- Describe the process of making up a nostro balances report
- Explain the importance of an interface between the treasury back-office system and the cash management system
- Describe the difference between main accounts and sub-accounts and explain the concept of sweeping
- Describe the standing facilities of central banks
- Explain the working of open market operations of central banks
- Know the interest rates that are used by central banks
- Describe the cash reserve requirement
- Know the potential reasons why central banks impose a cash reserve requirement
- Explain the limitations of the cash reserve requirement as a tool to control liquidity risk and to control the money supply
- Explain the use of FX swaps in regard to cash management

## Liquidity Management

- Distinguish between availability risk and market liquidity risk
- Know the main principles for sound liquidity management as formulated by the BCBS
- Know the members of the liquidity committee of a bank
- Explain how a gap report is drawn up
- Assess the liquidity position of a bank given a simple gap report
- Identify signals that may point at liquidity problems
- Identify measures to prevent liquidity problems
- Define the LCR requirement
- Give the rationale for the LCR
- Explain why maturing assets are assigned a weighting under the LCR
- Explain why reverse repos backed by level 1 assets are assigned a weighting of 0%
- Describe the rationale of the stressed run-off percentages
- Identify additional stress cash outflows
- Define the HQLA ratio
- Explain the rationale of holding HQLA
- Explain what is meant by encumbered HQLA
- Distinguish between level 1 and level 2 HQLA
- Understand the use of a cap and a haircut for level 2 HQLA

- Calculate the HQLA of a bank
- Define the NSFR ratio
- Explain the rationale of the NSFR
- Explain the rationale of the weightings under NSFR
- Assign weightings of 0% 100% to individual assets and liabilities

### **Interest risk Management**

- Distinguish between interest rate risk in the banking book and in the trading book
- Describe different movements in the yield curve, i.e. parallel rise or fall, flattening curve, steepening curve
- Define parallel risk, non-parallel risk, basis risk and option risk
- Distinguish between behavioural options and automatic options
- Define the measures for interest rate risk, NII and EVE
- Identify the reporting requirements of interest rate risk under IRRBB
- Describe the procedure for the NII measure
- Explain why the NII measure can not be used as a tool to approach the interest risk for the longer term
- Know the six standardised interest rate shock scenarios under IRRBB 2018
- Plot the following instruments in an NII gap report: deposits, bonds, floating rate notes, future rate agreements, interest rate swaps
- Distinguish between the scenarios of a constant balance sheet, a run-off balance sheet and a dynamic balance sheet
- Calculate the effect of a parallel movement of the yield curve on the NII in the next reporting period given a simple gap report
- Calculate the effect of a non-parallel movement of the yield curve on the NII in the next reporting period given a simple gap report
- Define the most common behavioural options in a balance sheet
- Define CPR and TDRR
- Apply the CPR and TDDR multipliers under a given shock scenario
- Explain the difference between core NMD and non-core NMD
- Describe how core NMD and non-core NMD should be plotted in a gap report
- Explain for a given shock scenario how the changes in interest rates for individual terms are determined under IRRBB
- Define economic value of equity
- Calculate a discount factor for a period shorter than one year
- Calculate a discount factor for a whole number of coupon periods
- Calculate a discount factor for a broken period of more than one year by using continuous compounding
- Calculate the present value of a future cash flow given a discount factor
- Define notional repricing cash flow
- Explain why coupons are included in an EVE-gap report
- Calculate the economic value of equity given a simple gap report
- Calculate the change in economic value as a result of a given parallel rise in interest rates and given a simple gap report
- Describe how automatic options should be included in an EVE report

- Know the measures that supervisors can take in case of a too high interest rate risk
- Explain the concept of modified duration
- Calculate the modified duration of a single cash flow
- Define basis point value
- Calculate the basis point value of a single cash flow
- Calculate the basis point value of EVE given a simple gap report
- Calculate the modified duration of EVE given its basis point value
- Calculate the average duration of assets and liabilities given a simple balance sheet and given the modified durations of the balance sheet items
- Describe how equity should be treated in an EVE report that is made up for the supervisor and how equity may be treated in internal reports
- Describe how banks can change the modified duration of EVE by using traditional instruments and by using derivatives

### **Foreign Exchange Management**

- Know the sources of the balances on client foreign currency accounts
- Describe the relationship between the balances on the nostro accounts of a bank and the balances on the foreign currency accounts that clients hold with them
- Distinguish between the consequence of investing an end-of-day surplus on a nostro account for the interest result of the bank and for the FX position of the bank
- Know the items of the net open FX position of the bank
- Calculate the effect of a change in the FX rate on the equity position of a bank given a simple multi-currency balance sheet
- Calculate the effect of a change in the FX rate on the capital adequacy ratio of a bank given a simple multi-currency balance sheet and given the average weighting factors for the assets
- Calculate the required ratio between assets and liabilities in a foreign currency in order to protect the capital adequacy ratio of a bank against changes in the FX rate given the average weighting factors for the assets
- Describe the treatment of FX positions in general and of structural FX positions in regard to the Basel capital requirements.

## Funds Transfer Pricing

- Describe the role of treasury as in-house bank
- Explain the purpose of funds transfer pricing
- Know the factors that funds transfer prices are based on
- Explain what the rates in a swap curve stand for
- Explain why there are more than one LIBOR swap curves
- Define asset swap spread and credit default swap premium
- Understand the term liquidity premium and know how asset swap spreads and CDS premiums should be applied on a swap curve / a risk-free curve
- Calculate funds transfer prices for fixed rate loans and for floating rate loans
- Explain why banks allocate a cost of capital to loans, to loan facilities, to trading positions and to derivatives
- Calculate a weighted cost of fund for a loan
- Calculate a cost of capital for a trading position given its RWA
- Explain why banks allocate a liquidity charge to loan facilities, to trading positions, to client deposits and to derivatives
- Calculate the liquidity charge for a loan facility given is probability of exercise and for stable deposits given the run-off ratio
- Calculate the liquidity charge for a trading position given its holding period