

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