

206.Treasury Management in Financial Institutions (TMFI) For AIBB

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Edited By:

Mohammad Samir Uddin, CFA

Chief Executive Officer

A Leading Asset Management Company

Former Principal Officer of EXIM Bank Limited

CFA Chartered from CFA Institute, U.S.A.

BBA, MBA (Major in finance) From Dhaka University

Qualified in Banking Diploma and Islami Banking Diploma

Course instructor: 10 Minute School of 96th BPE

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Suggestion:

- Read 4 star and 5 star marked chapter if you have time shortage to read all chapter.
- Must read short questions and difference from all chapter.
- MetaMentor Center suggest to read whole note to find 100% common in exam. We cover everything in our note.

Important	Details	Number of Question common in previous years
***	Module-A: <i>Introduction to Treasury</i>	07
****	Module-B: <i>Money Market</i>	14
**	Module-C: <i>Foreign Exchange Management</i>	06
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*****All short questions and difference from all chapter and end of note *****		

Syllabus

Module A: Introduction to Treasury

Meaning and function of Integrated Treasury, Nature of Integration, Money Market, Foreign Exchange Market, Relationship between Money Market and Foreign Exchange Market, Guidelines of Asset Liability Management.

Module B: Money Market

Demand and Time Liabilities (DTL), Cash Reserve Ratio (CRR), Statutory Liquidity Ratio (SLR), why and how CRR and SLR maintained? Interbank Money Market - Participants, Money Market Instruments - Call Money (Overnight), Repo, Reverse Repo, Interbank Repo, SWAP, Treasury Bills and Treasury Bonds.

Module C: Foreign Exchange Management

Foreign Exchange Markets, Foreign Exchange Rate Calculations and Uses, Foreign Exchange Quote Conventions, Assessment Risk to Exposures, Foreign Exchange Trading.

Module D: Asset Liability Management

Liquidity Management, Tools of Liquidity Management- Liquidity Coverage Ratio (LCR), Net Stable Funding Ratio (NSFR), ADR / IDR, Wholesale Borrowing Limit (WB), Structural Liquidity Profile (SLP), Maximum Cumulative Outflow (MCO), Liquidity Contingency Plan (LCP). ALCO Formation, Responsibilities, ALM desk, ALCO Papers, Structure and functions of Front Office, Mid Office & Back office, Balance Sheet and Capital Planning, Transfer pricing of Assets & liabilities.

Module E: Derivatives

Forward contract, Futures contract, Options, Investment Derivatives, Commodity Derivatives, Credit Derivatives.

Module F: Fixed Income

Fixed Income Market, Fixed Income Investments, Bond Pricing-Yield to maturity, Duration and convexity, Primary and secondary market of Govt. Securities, DIBOR, Primary Dealer Activities.

Module G: Risk Management

- Risks Factors in Bank, Interest rate risk and exchange rate Risk management, Risk Management Limits and Reporting, Implication of BASEL-iii and Risk Management of Capital market Exposures.

Module A

Introduction to Treasury

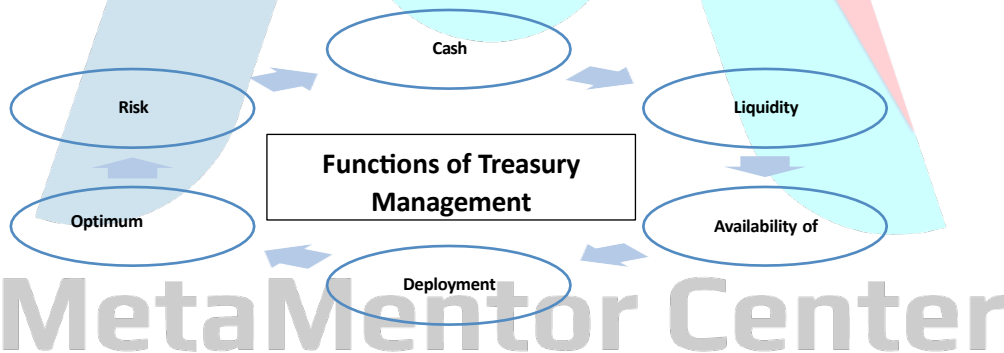
Q-01. What is Treasury Management? Objectives of Treasury Management?

Or, what are the objectives of the Treasury Department of a bank? BPE-97th.

Treasury Management is the specialized function within a business or financial institution responsible for managing the organization's liquidity, funding, risk, and financial assets. Essentially, it acts as the financial hub of an organization, overseeing cash flow, optimizing financial resources, and strategizing for financial growth and stability. Treasury Management encompasses a range of activities such as investment management, risk assessment, cash management, and capital raising, among others.

The **primary objectives** of Treasury Management are to ensure liquidity, minimize financial risks, and optimize financial performance. It aims to have adequate cash on hand to meet operational and strategic needs while avoiding excessive idle funds. Risk management, especially concerning foreign exchange and interest rates, is **another crucial objective** to protect against financial uncertainties. **Additionally**, treasury management seeks to enhance profitability through strategic investments and capital allocation while adhering to compliance and governance standards. Overall, it seeks to support the organization's financial operations efficiently and effectively.

Q-02. What are the functions of treasury management?



Treasury Management ensures the organization has enough cash to meet its obligations while optimizing the use of funds. Its main functions are:

1. **Cash Management:** Maintains an efficient system for collecting and paying funds.
2. **Liquidity Management:** Ensures adequate liquidity to meet financial obligations like payments to suppliers or employees.
3. **Fund Availability:** Guarantees sufficient funds at the right time for smooth daily operations.

4. **Fund Deployment:** Allocates funds for fixed assets, raw materials, and expenses like rent and salaries.
5. **Resource Utilization:** Aims to reduce operating costs and avoid liquidity shortages.
6. **Risk Management:** Identifies, measures, and mitigates financial risks to protect the company's performance.

The goal is to maximize returns by investing funds in low-risk, high-return opportunities.

Q-03. Describe about the nature and the benefits of integrated treasury. BPE-5th. Or What are the benefits of it? BPE-96th.

Or Mention some benefits of integrated treasury. BPE-7th

The **integrated treasury** in a bank is a centralized unit that combines various treasury functions like trading, risk management, and asset-liability management into a single, cohesive framework. This holistic approach allows for a more streamlined and effective management of a bank's financial resources.

Benefits:

1. **Efficiency:** Centralization enables quick decision-making and eliminates redundancy.
2. **Risk Mitigation:** Integrated risk assessment allows the bank to make informed decisions, reducing exposure to various financial risks such as currency fluctuations and interest rate changes.
3. **Cost Savings:** Lower operational costs due to reduced need for multiple software and manpower across departments.
4. **Compliance:** Simplifies the complexity involved in regulatory compliance by consolidating various functions, making it easier to meet industry standards and guidelines.
5. **Strategic Advantage:** Provides a comprehensive view of the bank's financial position, which aids in strategic planning and resource allocation.
6. **Customer Satisfaction:** Improves service delivery as funds can be managed more effectively to meet customer needs.
7. **Competitive Edge:** Advanced integrated systems can provide real-time data and analytics, giving the bank a competitive advantage in the marketplace.
8. **Profit Maximization:** Efficient capital allocation and risk management can lead to better returns on investments.

Q-04. What is Integrated Treasury? Briefly describe the functions of Integrated Treasury. BPE-96th. BPE-99th. BPE-96th. BPE-98th.

Or, What do you understand by integrated treasury? Briefly describe the functions of integrated treasury. BPE-6th.

Integrated Treasury refers to a unified approach to managing a bank's financial operations across multiple markets like domestic, international, and foreign exchange. This system consolidates activities traditionally split between forex dealing rooms and domestic treasury units, aiming for seamless asset-liability management, enhanced liquidity, and effective arbitrage opportunities.

An integrated treasury streamlines reserve management, liquidity, and fund allocation while handling market risks and capital adequacy. It enables banks to manage CRR/SLR commitments, optimize cash flows, and adopt hedging strategies through derivatives like swaps. By combining different trading and investment activities under one system, banks achieve better control, profitability, and regulatory compliance. The function of integrated treasury management involves several key responsibilities simplified as follows:

1. **Reserve Management and Investment:** Handling cash reserve and statutory liquidity requirements, and building an investment portfolio for optimal returns.
2. **Liquidity and Funds Management:** Balancing the bank's liabilities to fund its assets, analyzing cash flows, and advising on funding strategies.
3. **Asset Liability Management (ALM):** Optimizing the size and growth of the balance sheet and pricing assets and liabilities according to set guidelines.
4. **Risk Management:** Managing market risks related to both assets and liabilities, including interest rate fluctuations and asset-liability mismatches.
5. **Transfer Pricing:** Efficiently allocating the bank's funds across various markets while ensuring competitiveness in rates.
6. **Derivative Products:** Creating and offering products like interest rate swaps to manage risks and enhance client services.
7. **Arbitrage:** Maximizing profits by exploiting price differences in different markets for the same assets.
8. **Capital Adequacy:** Ensuring the quality of assets and monitoring profitability through metrics like Return on Assets (ROA).

Q-05. What are the key components of an integrated treasury structure?

An integrated treasury structure comprises four main components:

1. **Front Office:** Comprising dealers and traders who execute buying and selling transactions with external parties like banks, brokers, and customers.
2. **Mid Office:** Responsible for independent risk monitoring, measurement, and analysis, reporting directly to top management and providing risk assessments to the Asset Liability Committee (ALCO).
3. **Back Office:** Handles accounting, settlement, and reconciliation tasks, ensuring adherence to internal and regulatory procedures.

4. **Audit Group:** Independently audits daily operations of the treasury department to ensure compliance with established processes.

This structure enables banks to manage risk, optimize arbitrage opportunities, and maintain operational efficiency within their treasury functions.

Q-06. Define Money Market. Briefly describe the products of money market/ What are the common money market Instruments.

Or Briefly describe money market instruments available in Bangladesh. BPE-96th.

Or Briefly describe the money market products in the context of Bangladesh. BPE-99th.

Or, What is money market? Briefly describe the money market products in the context of Bangladesh. BPE-6th

The money market is a sector of the financial market in which financial instruments with high liquidity and short maturities, usually less than one year, are traded. The primary purpose of the money market is to provide a mechanism for the short-term borrowing and lending of money, often to meet immediate cash flow needs.

Products of Money Market:

1. **Treasury Bills:** Government-issued short-term debt instruments with maturities ranging from a few weeks to a year.
2. **Commercial Paper:** Short-term unsecured promissory notes issued by corporations to meet immediate cash needs.
3. **Certificates of Deposit (CDs):** Time-bound deposits offered by banks with a fixed interest rate.
4. **Repurchase Agreements (Repos):** Short-term borrowing, usually overnight, where a security is sold with an agreement to buy it back later at a higher price.
5. **Money Market Funds:** Mutual funds that invest in short-term, high-liquidity debt instruments.
6. **Banker's Acceptance:** A short-term credit investment guaranteed by a bank.

Q-07. How do you calculate the liquidity in the money market for a particular month in Bangladesh? What is the money market liquidity condition in Bangladesh. BPE-96th.

To calculate the liquidity in the money market for a particular month in Bangladesh, one would typically look at key financial metrics and indicators reported by financial institutions and the Bangladesh Bank. These indicators include the call money rate, which is the overnight interest rate at which banks borrow from each other, and the amount of borrowing from the Bangladesh Bank's facilities such as repo and liquidity support facilities.

In recent months, the money market liquidity condition in Bangladesh has been under strain. The call money rate reached 9.57% in January 2024, the highest average rate in

12 years. This high rate indicates a significant liquidity crisis, as banks are borrowing more from each other and the central bank to meet their short-term liquidity needs. The Bangladesh Bank's repo rate currently stands at 8%, reflecting efforts to manage this liquidity situation.

Additionally, the overall liquidity in the banking sector has decreased. **For example**, the volume of excess liquidity in the banking system dropped from Tk 269 billion in June 2022 to Tk 54.30 billion by November 2023. This decrease has been more severe for Islamic banks, with their excess liquidity plunging to only Tk 1.83 billion by November 2023.

These factors combined suggest that the liquidity crisis in Bangladesh's money market is due to a combination of slow deposit growth, a high volume of non-performing loans, and policy rate hikes by the Bangladesh Bank aimed at controlling inflation.

Q-08. What do you understand by foreign exchange market? Describe the factors that influence the exchange rates in the market. BPE-97th.

Or Write about Foreign Exchange (Forex) market. BPE-7th

Or What is the Foreign Exchange Market? (This answer also covers the short note)

The Foreign Exchange Market, commonly known as the Forex or FX market, is a decentralized global marketplace where currencies are traded. Unlike other financial markets, the Forex market doesn't have a centralized location; it operates 24/7 through a network of banks, corporations, and individual traders.

Factors influencing foreign exchange rates include:

1. **Interest Rates:** Higher interest rates usually strengthen a country's currency as they offer lenders higher returns, attracting foreign investment.
2. **Economic Indicators:** Metrics such as GDP growth, employment rates, and inflation can influence a country's currency value.
3. **Political Stability:** Countries that are politically stable are considered less risky, attracting foreign investment and strengthening the currency.
4. **Market Sentiment:** Psychological factors like investor perception, rumors, or geopolitical events can also affect currency value.
5. **Trade Balances:** A country exporting more than it imports usually sees an appreciation in its currency value.

Q-09. Why do we need foreign exchange market? BPE-97th.

The foreign exchange (Forex) market is crucial for several reasons:

1. **Facilitates International Trade and Investment:** By enabling the exchange of currencies, it supports global trade and investment by allowing businesses to convert profits from foreign sales into their domestic currency.

2. **Determines Exchange Rates:** It helps establish the value of currencies, which fluctuates based on supply and demand dynamics, influencing global trade competitiveness.
3. **Hedging Against Risk:** Companies and investors use the Forex market to hedge against potential losses caused by fluctuations in currency values, protecting their investments and financial planning.
4. **Liquidity and Accessibility:** Being the largest financial market globally, it offers significant liquidity, allowing large volumes of currencies to be traded without significantly affecting exchange rates, ensuring efficient transactions.
5. **Supports Speculation:** Traders can speculate on currency movements to generate profits, contributing to the market's depth and liquidity.

Overall, the Forex market is indispensable for supporting international economic activities, managing risk, and facilitating global financial stability.

Q-10. Define ALM (Asset Liability Management) and its importance?

Or Describe the importance of ALM of a bank. BPE-7th

Asset-Liability Management (ALM) is a strategic approach to balancing the assets and liabilities of financial institutions, such as banks, to mitigate risks related to liquidity gaps and interest rate changes. In essence, ALM aims to ensure that an organization can meet its financial obligations when they come due, without incurring unacceptable losses.

Importance:

1. **Risk Mitigation:** ALM helps in identifying, measuring, and managing various types of financial risks, including interest rate risk and liquidity risk.
2. **Profitability:** By optimizing the use of assets and effectively managing liabilities, ALM can enhance profitability.
3. **Regulatory Compliance:** ALM is often a regulatory requirement, ensuring that financial institutions maintain adequate levels of liquidity and capital.
4. **Strategic Planning:** It enables organizations to plan for growth and capital needs by assessing financial structures and projecting future asset and liability balances.
5. **Competitive Edge:** Institutions with robust ALM practices are better positioned to compete effectively in the financial market, as they are less exposed to unforeseen market shocks.

Q-11. What are the key scopes of Asset-Liability Management (ALM), and how does it address financial risks?

The **scope of ALM** includes:

1. **Liquidity Risk Management:** Ensures sufficient liquidity to meet current and future cash-flow obligations.

2. **Market Risk Management:** Manages exposure to fluctuating market conditions like interest rates and exchange rates.
3. **Trading Risk Management:** Handles risks from trading activities in financial markets.
4. **Funding and Capital Planning:** Aligns funding strategies and capital allocation with business objectives.
5. **Profit Planning and Growth Projection:** Develops strategies for sustainable profitability and growth.

ALM addresses key risks:

- **Interest Rate Risk:** Balances assets and liabilities impacted by rate changes.
- **Liquidity Risk:** Ensures cash-flow availability.
- **Currency Risk:** Manages mismatches in assets and liabilities across currencies.

These measures safeguard financial stability and operational efficiency.

Q-12. What are the advantages and disadvantages of asset liability management?

Advantages:

1. **Risk Management:** ALM effectively mitigates various financial risks, such as liquidity risk and interest rate risk, safeguarding an institution's financial stability.
2. **Regulatory Compliance:** Employing ALM strategies helps financial institutions meet regulatory requirements, avoiding penalties and maintaining market trust.
3. **Strategic Planning:** ALM provides valuable insights for long-term strategic planning, including capital allocation and growth opportunities.
4. **Profit Maximization:** ALM helps institutions to align their asset and liability portfolios optimally, thereby enhancing profitability.
5. **Competitive Advantage:** A well-executed ALM strategy provides a competitive edge, as the institution is better equipped to handle market volatility.

Disadvantages:

1. **Complexity:** ALM involves complex models and assumptions, which if incorrect, can lead to inaccurate risk assessment.
2. **Cost:** The implementation of ALM software and the need for specialized staff can be costly.
3. **Short-Term Focus:** There's a risk of focusing too much on short-term adjustments at the expense of long-term objectives.
4. **Market Limitations:** ALM cannot fully account for unpredictable market events or drastic economic changes, leaving some level of risk.

5. **Data Quality:** Effective ALM requires high-quality, up-to-date data; poor data quality can impair the effectiveness of ALM strategies.

Q-13. What are the major objectives of macroeconomics? Write a brief definition of each of these objectives. Explain carefully why each objective is important.

1. **Economic Growth:** The aim is to increase the nation's output (GDP). Growth is crucial for job creation and improving living standards.
2. **Full Employment:** This objective seeks to ensure that all who are willing and able to work have jobs. Employment directly impacts income levels and quality of life.
3. **Price Stability:** Macroeconomics aims to control inflation or deflation to keep prices stable. Price stability maintains the purchasing power of money and fosters business investment.
4. **Balance of Payments:** Achieving a balanced relationship between exports and imports is key for financial stability and international relations.
5. **Income Redistribution:** This involves modifying the distribution of income to reduce inequality, usually through taxation and welfare policies.

Q-14. Describe Macroeconomic Accounts in brief? What are the major components of macroeconomic accounts?

Macroeconomic accounts are statistical measurements that capture various aspects of a nation's economy. The three main accounts are the National Income and Product Accounts, the Balance of Payments Accounts, and the Flow of Funds Accounts. The National Income and Product Accounts, including Gross Domestic Product (GDP), gauge overall economic performance. The Balance of Payments Accounts detail a country's economic transactions with the rest of the world, including trade and capital flows. The Flow of Funds Accounts track the financial assets and liabilities of the different sectors within the economy. These accounts are essential for policy-making and economic analysis.

Macroeconomic accounts encompass four primary categories:

1. **National Income and Product Accounts:** These accounts quantify a nation's economic performance, measuring GDP, national income, and expenditures to provide insights into overall economic health.
2. **Government Financial Account:** This account tracks government revenues, expenditures, and debt levels, crucial for understanding fiscal policy impacts on the economy.
3. **Balance of Payments Account:** This account records a country's transactions with the rest of the world, including exports, imports, and financial flows, aiding in assessing international economic relationships.

4. **Monetary Accounts:** These accounts detail money supply, banking system reserves, and central bank operations, essential for monitoring monetary policy effectiveness and inflationary pressures.

Together, these macroeconomic accounts provide a comprehensive view of a country's economic activities, helping policymakers, analysts, and businesses make informed decisions.

Q-15. What are the key macroeconomic performance indicators and how are they influenced by fiscal and monetary policies?

Key macroeconomic performance indicators include GDP, unemployment rate, and inflation:

1. **GDP:** Measures the total output of goods and services in a year, reflecting economic performance.
2. **Unemployment Rate:** Indicates the percentage of the labor force without jobs but actively seeking employment.
3. **Inflation:** Measured by CPI, it shows price stability or changes in cost of living.

Influence of Policies:

- **Fiscal Policy:** Government spending boosts GDP, while taxation impacts disposable income and production costs.
- **Monetary Policy:** Central banks adjust money supply and interest rates to influence investment, consumption, and inflation.

These tools interact with aggregate demand and supply to stabilize output, employment, and price levels.

Q-16. What are the key variables of an open economy, and how do they interact in the loanable funds and foreign currency markets?

An open economy interacts with the world through **net exports**, **net capital outflow**, and **exchange rates**. These variables influence trade and capital movement.

1. Market for Loanable Funds:

- Savings and investments, including net foreign investment, are coordinated here.
- A higher interest rate encourages saving and discourages borrowing, affecting net foreign investment.

2. Market for Foreign Currency Exchange:

- People exchange domestic currency for foreign currency to buy goods or assets abroad.
- The exchange rate adjusts based on supply (net foreign investment) and demand (net exports).

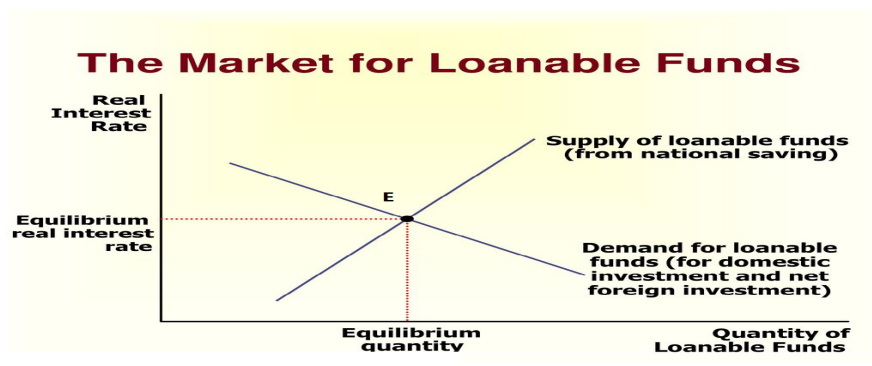
These markets are interlinked, as changes in one (e.g., higher interest rates reducing foreign investment) impact the other (e.g., currency supply in the forex market).

Q-17. What is the market for loanable funds, and how does the real interest rate influence it in an open economy?

The **market for loanable funds** connects savers and borrowers. Savings (S) supply funds, while demand comes from domestic investment (I) and net foreign investment (NFI). The equation $S = I + NFI$ defines the relationship.

The **real interest rate** is critical:

- **Higher Rates:** Encourage saving (more supply) but reduce borrowing (less demand).
- **Lower Rates:** Discourage saving but increase borrowing, boosting demand.



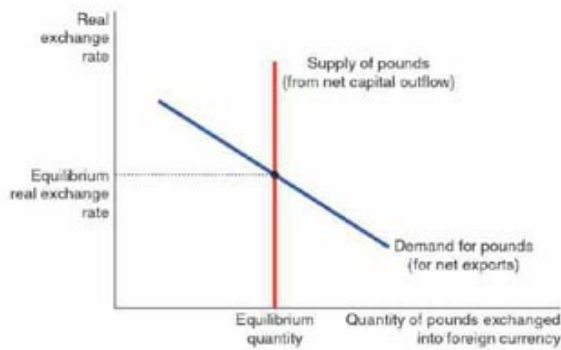
The graph illustrates this interaction:

- The **upward-sloping supply curve** represents savings, which increases as interest rates rise.
- The **downward-sloping demand curve** represents borrowing for domestic and foreign investment, which decreases as rates rise.

Equilibrium is reached where supply meets demand, setting the **equilibrium interest rate** and **quantity of funds**. If rates deviate, adjustments restore balance.

Q-18. What is the market for foreign-currency exchange, and how do supply and demand determine the real exchange rate?

The market for foreign-currency exchange facilitates the trading of domestic and foreign currencies. Supply comes from **net foreign investment (NFI)**, where domestic currency is exchanged to buy foreign assets. Demand comes from **net exports (NX)**, where foreign buyers need the domestic currency to purchase goods and services.



The **market for foreign-currency exchange** facilitates trading between domestic and foreign currencies.

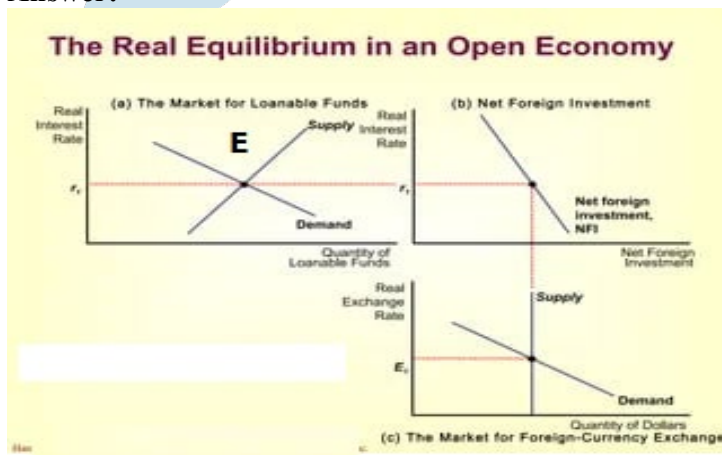
- **Supply (Vertical Curve):** Comes from **Net Foreign Investment (NFI)**, representing domestic currency exchanged to buy foreign assets. Supply is **fixed** as it depends on the real interest rate, not the real exchange rate.
- **Demand (Downward Sloping Curve):** Comes from **Net Exports (NX)**, as foreign buyers need domestic currency to purchase domestic goods. When the real exchange rate rises, domestic goods become expensive, reducing demand for exports.
- **Equilibrium:** The **real exchange rate** adjusts to balance supply and demand. The equilibrium point on the graph shows where the quantity of currency supplied equals the quantity demanded.

Graph Explanation:

The graph shows supply (vertical) and demand (sloping downward) curves. The intersection indicates the equilibrium real exchange rate and quantity, ensuring trade and investment flows balance.

Q-19. How do the markets for loanable funds and foreign-currency exchange achieve equilibrium in an open economy, and what role do the real interest rate and real exchange rate play?

Answer:



In an open economy, equilibrium is achieved through two interlinked markets:

1. **Market for Loanable Funds (Panel a):**

- **Supply:** Comes from national saving.
- **Demand:** Comes from domestic investment and net foreign investment (NFI).
- **Equilibrium Real Interest Rate (r_1):** Balances supply and demand, determining NFI.

2. **Market for Foreign-Currency Exchange (Panel c):**

- **Supply:** Comes from NFI, representing domestic currency exchanged for foreign assets.
- **Demand:** Comes from net exports (NX), as foreign buyers purchase domestic goods.
- **Equilibrium Real Exchange Rate (E_1):** Balances currency supply and demand.

The graph shows how the real interest rate affects NFI (Panel b), which influences the supply of currency (Panel c). These relative prices adjust to stabilize savings, investment, and trade balances.

Q-20. What are the major macroeconomic accounts, and how do they help analyze a country's economic activities?

Macroeconomic accounts provide an aggregate view of a country's economic activities. The four major accounts are:

1. **National Income and Product Accounts:**

- Measure the production of goods and services using three methods:
 - **Production Method:** Value added across sectors.
 - **Income Method:** Income earned by factors of production.
 - **Expenditure Method:** Total spending on final goods/services.

2. **Government Financial Accounts:**

- Record revenues, expenditures, grants, and financing. Performance indicators include **Overall Balance** (surplus/deficit) and **Current Account Balance** (savings or deficits).

3. **Balance of Payment (BOP) Accounts:**

- Reflect international transactions. Divided into **Current Account** (goods, services) and **Capital Account** (assets, reserves). Measures trade and payment imbalances.

4. **Monetary Accounts:**

- Capture financial data at three levels: Monetary Authorities, Deposit Money Banks (DMB), and overall liquidity through financial surveys.

These accounts guide policymakers in analyzing production, trade, government finances, and monetary health.

Q-21. What is balance of payment account? Write a brief note on BOP account.

The **balance of payments (BOP) account** is a comprehensive record of a country's economic transactions with the rest of the world over a specific period, typically a year. It captures all financial inflows and outflows, providing insights into a country's external economic position.

The BOP is divided into two main components:

1. **Current Account:** Records trade in goods and services, income from abroad (like dividends and interest), and current transfers. A surplus indicates the nation earns more from exports than it spends on imports, while a deficit shows the opposite.
2. **Capital and Financial Account:** Chronicles investments and financial transactions, like purchases of foreign assets or domestic assets by foreigners.

Together, these accounts should theoretically balance out, meaning the inflows and outflows should cancel each other out when combined. Any discrepancy is termed as a "statistical discrepancy". A persistent BOP imbalance can have implications for a country's currency value, monetary policy, and economic health.

Q-22. Describe the types of government transactions.

Government transactions can be broadly categorized into two types: revenue transactions and expenditure transactions.

1. **Revenue Transactions:**

- **Taxation:** Includes income tax, corporate tax, sales tax, and other forms of direct and indirect taxes.
- **Non-Tax Revenue:** Includes earnings from public enterprises, fees, fines, and grants.
- **Borrowing:** Loans from domestic or international sources, including bond issuance.

2. **Expenditure Transactions:**

- **Capital Expenditure:** Investments in infrastructure, education, health, and other long-term assets.
- **Current Expenditure:** Regular operational costs, including salaries of public servants, pensions, and welfare schemes.
- **Transfer Payments:** Includes unemployment benefits, subsidies, and social security payments.

Another important component is the **Contingent Liabilities**, which are potential future payments, such as guarantees or insurance claims, that the government may have to honor. Overall, these transactions are critical in shaping a nation's fiscal policy and have direct implications on economic health and public welfare.

Q-23. What are the classifications of government transactions in the Government Financial Accounts?

Government transactions in the Government Financial Accounts are classified into five groups:

1. **Revenue:** Includes all non-repayable receipts, divided into current (tax and non-tax revenue) and capital (receipts from sale of capital assets).
2. **Grants:** Unrequited, non-repayable receipts from other governments or international institutions.
3. **Expenditure:** Non-repayable payments for current or capital purposes, distinguishing between required payments for production and unrequited transfers for redistribution.
4. **Net Lending:** Transactions involving claims upon other sectors for public policy purposes, including loans, repayments, and equity transactions.
5. **Financing:** Represents the balance of revenue, grants, expenditure, and net lending, involving government's financial assets and liabilities managed for financial purposes rather than public policy.

Mathematical Problem**Q-01. If the CPI were 300 in 2020 and 315 in 2021, what would the inflation rate be for 2021?**

The Consumer Price Index (CPI) is commonly used to calculate the inflation rate from one period to another. The formula for calculating the inflation rate using CPI is:

$$\text{Inflation Rate} = \left(\frac{\text{CPI in later year} - \text{CPI in earlier year}}{\text{CPI in earlier year}} \right) \times 100$$

In this case, the CPI for the earlier year (2020) is 300, and the CPI for the later year (2021) is 315.

Substituting these values into the formula, we get:

$$\text{Inflation Rate} = \left(\frac{315 - 300}{300} \right) \times 100$$

$$\text{Inflation Rate} = \left(\frac{15}{300} \right) \times 100$$

$$\text{Inflation Rate} = 0.05 \times 100$$

$$\text{Inflation Rate} = 5$$

The inflation rate for 2021 would be 5%.

Q-02. If the Consumer Price Index (CPI) were 278 in the year 2022 and 305 in the year 2023, what would be inflation rate in 2023? BPE-5th.

Or If the Consumer Price Index (CPI) were 118.40 in 2023 and 131.25 in 2024, what would be the inflation rate in 2024? BPE-7th

Given that,

CPI in 2022 = 278

CPI in 2023 = 305

We know,

$$\text{Inflation Rate} = \frac{305 - 278}{278} \times 100$$

$$= (27 / 278) \times 100$$

$$= 9.71\%$$

Therefore, the inflation rate in 2023 is 9.71%.

Or,

Ans:

Given that,

CPI in 2023 = 118.40

CPI in 2024 = 131.25

We know,

$$\text{Inflation Rate} = \frac{131.25 - 118.40}{118.40} \times 100$$

$$= (12.85 / 118.40) \times 100$$

$$= 10.85\% \text{ (approximately)}$$

Therefore, the inflation rate in 2024 is 10.85%.

Q-03.

- **Revenue = 3,800**
- **Grants = 200**
- **Expenditure = 4,600**
- **Net lending = 100**
- **Domestic borrowing = 300**
- **External borrowing = 200**
- **Other financing = X**

Questions:

- (a) Calculate Overall Balance = Revenue + Grants – Expenditure – Net Lending.
- (b) Identify deficit amount.
- (c) Using financing identity, compute Other Financing (X).
- (d) Explain how Overall Balance matches Financing.

Ans:

(a) Calculate the Overall Balance

Overall Balance = Revenue + Grants – Expenditure – Net Lending

Putting the values:

$$= 3,800 + 200 - 4,600 - 100$$

$$= 4,000 - 4,700$$

$$= -700$$

Overall Balance = -700 (Tk. billion)

(b) Identify the deficit amount

A negative overall balance means a deficit.

Deficit Amount = Tk. 700 billion

(c) Using the financing identity, compute Other Financing (X)

Financing Identity:

Overall Deficit = Domestic Borrowing + External Borrowing + Other Financing

Substitute values:

$$700 = 300 + 200 + X$$

$$700 = 500 + X$$

So,

$$X = 700 - 500$$

$$X = 200$$

Other Financing (X) = Tk. 200 billion

(d) Explain how Overall Balance matches Financing

In Government Financial Accounts:

- The Overall Balance shows how much the government is short (deficit) after covering expenditures and net lending.
- The Financing section shows how the government covers this deficit using various sources such as domestic borrowing, external borrowing, and other financing.
- In this case, the Tk. 700 billion deficit is fully financed through:
 - Domestic borrowing = 300
 - External borrowing = 200
 - Other financing = 200
- When added together, these equal the total deficit ($300 + 200 + 200 = 700$).

Therefore, the financing side exactly matches (balances) the Overall Balance.

Case Study

Case 1: Liquidity Shock and ALM Failure in Sunrise Bank Ltd.

Case Scenario: Sunrise Bank Ltd. is a second-generation commercial bank in Bangladesh. The bank has traditionally relied on short-term deposits to fund its loan portfolio, which includes retail loans, SME loans, and a growing corporate lending book. Over the last two years, the bank expanded aggressively without strengthening its Treasury and Asset–Liability Management (ALM) framework.

Due to rapid credit growth, the bank's maturity mismatch widened: long-term fixed-rate loans were being funded by volatile short-term customer deposits. The Treasury unit repeatedly warned senior management about increasing liquidity risk, but the ALCO meetings were irregular and key decisions were often delayed.

A sudden rise in market interest rates and tightening liquidity in the money market created additional stress. Several large depositors withdrew their funds, causing the bank's Liquidity Coverage Ratio (LCR) to fall to 72%, far below regulatory requirements. At the same time, the bank had not maintained enough High-Quality Liquid Assets (HQLA).

Recent data reported by the Treasury Department include:

1. CRR and SLR positions are barely above minimum regulatory requirements.
2. Structural Liquidity Profile (SLP) shows severe gaps in the 1–30 day bucket.
3. Funding mix is heavily dependent on wholesale borrowing.
4. Interest rate risk increased because the bank holds a large amount of long-term fixed-rate assets.
5. ALCO has not met for the last two months, and MIS for liquidity monitoring is outdated.

The Board has now requested an expert review on how the bank can stabilize liquidity and strengthen its Treasury operations in line with Module-A principles.

Tasks / Questions:

- (a) Based on the above information, what were the major causes of Sunrise Bank's liquidity crisis?
- (b) Why are ALM Information System and ALCO functioning critical for liquidity stability?
- (c) How can integrated treasury operations help Sunrise Bank reduce market risk, interest rate risk, and liquidity mismatch?
- (d) Suggest practical steps Sunrise Bank should take to restore liquidity and rebuild a strong Treasury Management framework.

Ans:

(a) Major causes of Sunrise Bank's liquidity crisis:

Sunrise Bank's liquidity crisis mainly resulted from its aggressive credit expansion without strengthening its Treasury and ALM framework. The bank relied heavily on short-term deposits to fund long-term fixed-rate loans, creating a serious maturity mismatch. As market interest rates increased, depositors shifted funds, causing sudden outflows and reducing the bank's Liquidity Coverage Ratio to a critically low level. The bank also failed to maintain an adequate stock of High-Quality Liquid Assets (HQLA). ALCO did not meet regularly, leading to delayed decisions and poor oversight of liquidity risks.

(b) Why ALCO functioning and ALM Information System are critical:

ALCO plays a central role in managing liquidity, interest rate risk, and balance sheet structure. If ALCO meetings are irregular or ineffective, the bank cannot assess emerging liquidity gaps or take timely corrective actions. A strong ALCO ensures strategic decisions on funding sources, pricing, investment planning, and HQLA maintenance. Similarly, an ALM Information System provides real-time data on cash flows, maturity profiles, deposit concentration, and liquidity ratios. Without updated MIS, the bank cannot detect early warning signals such as rising outflows or short-term gaps. Both ALCO and MIS ensure proactive monitoring, accurate forecasting, and fast decision-making. Their failure exposes the bank to unanticipated liquidity shortages, higher funding costs, and regulatory non-compliance. Together, ALCO and MIS form the backbone of liquidity governance.

(c) How integrated treasury operations help reduce risks:

An integrated treasury helps coordinate funding, investment, liquidity, and risk management under one framework. It continuously monitors market movements and ensures the bank maintains adequate HQLA to withstand short-term stress. Treasury manages interest rate risk by matching asset and liability maturities, hedging exposures, and adjusting the portfolio based on rate forecasts. Liquidity mismatch is reduced through active monitoring of cash inflows and outflows, optimizing the funding mix, and diversifying sources of liquidity. The integrated structure allows Treasury, ALM, and Risk units to share information quickly, enabling timely actions during market volatility. It also ensures compliance with regulatory ratios such as CRR, SLR, LCR, and NSFR. Overall, integrated treasury operations strengthen stability by aligning funding decisions with market conditions and risk appetite.

(d) Steps Sunrise Bank should take to restore liquidity:

Sunrise Bank should immediately rebuild its stock of HQLA to improve its LCR. It must diversify funding sources by attracting stable retail deposits and reducing dependence on wholesale borrowing. Strengthening CRR and SLR positions is essential to meet regulatory requirements. The bank should reconvene ALCO meetings regularly and implement a modern ALM MIS for real-time monitoring. Pricing strategies for deposits and loans should be reviewed to reduce mismatches. Long-term assets may be securitized or refinanced to ease short-term pressures. Treasury must reassess liquidity gaps and update contingency funding plans. The bank should also limit aggressive lending until liquidity stabilizes.

(e) (Extra) How CCB and CCyB help during downturns:

The Capital Conservation Buffer (CCB) ensures that banks maintain an additional layer of capital above the minimum requirement so they can absorb losses during periods of stress. When economic conditions worsen, banks with strong CCBs can continue lending without breaching capital rules. This prevents a sudden credit crunch. The Countercyclical Capital Buffer (CCyB) is designed to counter excessive credit growth. Regulators activate the CCyB during economic booms, requiring banks to build extra capital. During downturns, this buffer can be released, giving banks more capacity to absorb losses and maintain lending activities. Both buffers improve resilience by ensuring banks have sufficient capital to withstand shocks. They reduce procyclicality, support financial stability, and help banks navigate recessions without severe disruptions.

Compare and contrast

Q-01. Distinguish between the money market and the capital market. BPE-98th. BPE-5th.

Aspect	Money Market	Capital Market
Instruments	Short-term instruments.	Long-term instruments.
Participants	Banks and institutions.	Investors and companies.
Risk–Return	Low risk, low return.	Higher risk, higher return.

**Q-02. Distinguish between the money market and FX market. BPE-99th.
Or, Money Market vs Foreign Exchange Market BPE-7th BPE-96th. BPE-98th. BPE-99th.**

Criteria	Money Market	FX Market (Foreign Exchange Market)
1.Nature	Deals in short-term debt instruments	Involves trading of currency pairs
2.Example	Treasury Bills, Commercial Paper	USD/EUR, GBP/JPY
3.Purpose	To fulfill short-term liquidity needs	Currency conversion for trade, hedging, or speculation

Q-03. What are the major differences between Integrated Treasury and Traditional Treasury Management? BPE-96th. BPE-98th.

Aspect	Treasury Management	Integrated Treasury
Scope	Manages liquidity and cash separately.	Manages all treasury activities together.
Structure	Separate units work independently.	Centralized single system.
Decision Making	Department-based decisions.	Real-time, organization-wide decisions.

Q-04.Distinguish between GDP at Market Price and GDP at Factor Cost.

Aspect	GDP at Market Price (MP)	GDP at Factor Cost (FC)
Meaning	Value at prices paid by buyers.	Value based on producers' income.
Taxes & Subsidies	Includes taxes, excludes subsidies.	Excludes taxes, includes subsidies.
Price Basis	Market price.	Factor income.

Q-05.Current Account vs Capital account.BPE-6th

Aspect	Current Account	Capital Account
Meaning	Records trade and income transactions.	Records capital and investment flows.
Components	Goods, services, income, transfers.	FDI, loans, investments.
Nature	Routine flow transactions.	Asset and liability changes.

End of First Chapter

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