Treasury Management in Financial Institutions (TMFI)

For AIBB

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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?

1. **Liquidity Management**: Ensures adequate cash reserves are available to meet the bank's obligations and customer withdrawals.
2. **Asset-Liability Management**: Manages the balance between the bank's assets and liabilities to optimize returns and mitigate risks.
3. **Foreign Exchange Management**: Handles currency exchange activities, managing risks associated with currency fluctuations.
4. **Interest Rate Risk Management**: Utilizes financial instruments to hedge against the adverse effects of interest rate changes on the bank's profitability.
5. **Capital Adequacy**: Ensures compliance with regulatory requirements for capital reserves to support the bank's risk profile.
6. **Investment Operations**: Manages the bank's investment portfolio to generate income, while adhering to policy constraints and risk tolerances.
7. **Funds Transfer Pricing**: Allocates costs and revenue to various business units within the bank for internal accounting and performance evaluation.
8. **Regulatory Compliance**: Monitors and ensures compliance with various financial regulations, including reporting and disclosure requirements.
9. **Operational Risk Management**: Identifies and mitigates risks arising from operational errors, system failures, or fraud.

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

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. Briefly describe the functions of Integrated Treasury. BPE-96th.

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.

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-8. Distinguish between the money market and FX market.

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
4.Market Participants	Banks, Mutual Funds, Corporations	Banks, Corporations, Individual Traders, Governments
5.Regulation	Highly regulated (central banks, financial institutions)	Less regulated, mostly over-the-counter (OTC)

Q-09. What do you understand by foreign exchange market? Describe the factors that influence the exchange rates in the market. BPE-97th. BPE-98th.

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-10. 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-11. Define ALM (Asset Liability Management) and its importance?

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-12. What are the advantages and disadvantages of asset liability management? BPE-98th.

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. 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-16. 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-17. 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-18. Distinguish between the money market and the capital market. BPE-98th.

Aspect	**Money Market**	**Capital Market**
1.Nature of Instruments	Deals with short-term debt securities and financial instruments.	Deals with long-term debt and equity securities.
2.Participants	Includes banks, financial institutions, corporations, and governments.	Involves corporations, investors, and governments issuing and trading securities.
3.Risk and Return	Typically, lower risk with lower returns compared to capital market.	Higher risk and potential for higher returns due to longer investment horizon.
4.Purpose	Provides short-term liquidity and financing for immediate needs.	Raises long-term funds for business expansion, projects, and investments.
5.Examples	Treasury bills, commercial papers, certificates of deposit (CDs).	Stocks, corporate bonds, government bonds with longer maturities.

Q-19. What are the three pillars on which the Asset Liability Management (ALM) process rests?

The ALM process rests on three pillars:

1. **ALM Information System:** This includes the Management Information System ensuring availability, accuracy, adequacy, and timeliness of information crucial for decision-making.
2. **ALM Organisation:** It encompasses the structure, responsibilities, and the level of involvement of top management in overseeing ALM activities.
3. **ALM Process:** This involves defining risk parameters, identifying risks, measuring them accurately, managing risks effectively, and establishing risk policies and tolerance levels to maintain financial stability and align with strategic goals.

Q-20. What are the key Macroeconomic Performance Indicators?

Macroeconomic Performance Indicators include:

1. **Gross Domestic Product (GDP):** Measures the total market value of goods and services produced within a country over a specific period, indicating economic output.
2. **Unemployment Rate:** Represents the percentage of the labor force that is unemployed and actively seeking employment, reflecting economic health and labor market conditions.
3. **Inflation Rate:** Indicates the rate at which the general price level of goods and services rises, measured typically by the Consumer Price Index (CPI), influencing purchasing power and economic stability.
4. **Fiscal Policy:** Involves government revenue and expenditure decisions impacting overall economic activity and GDP.
5. **Monetary Policy:** Managed by central banks to influence money supply, interest rates, and economic growth through banking and credit mechanisms. These indicators collectively assess a country's economic performance, guiding financial strategies and policy decisions.

Q-21. 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 requited 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.

Q-22. What are the classifications of items in the Balance of Payments (BOP) Account?

Items in the Balance of Payments (BOP) Account are classified into two main categories:

1. **Current Account:** Includes transactions related to goods, services, incomes, and unrequited transfers. This encompasses visible exports and imports, travel, transportation, investment income, and unilateral transfers.
2. **Capital Account:** Covers transactions involving financial assets and liabilities, including changes in reserve holdings. It details direct and portfolio investments, other capital flows, and reserve assets such

as monetary gold, SDR allocations, and IMF positions. Reserves are primarily held by central authorities and sometimes by deposit money banks under government control.

Q-23. What are the main components of the Monetary Accounts as detailed in the integrated financial surveys?

The Monetary Accounts are structured into three levels:

1. **Monetary Authorities (MA) Accounts:** These include assets like foreign reserves and claims on the public sector, and liabilities such as reserve money and government deposits.
2. **Deposit Money Banks (DMB) Consolidated Balance Sheet:** This level consolidates assets such as reserves and loans to the private sector, and liabilities like demand deposits and capital accounts.
3. **Monetary Survey:** This presents aggregated financial data from both MAs and DMBs, focusing on categories such as money (currency and demand deposits), quasi-money (savings deposits), and various types of credits and claims. This survey is crucial for monetary analysis and policy formulation, offering insights into the money supply and financial system liquidity.

Chapter End