CHAPTER 2: FINANCIAL MANAGEMENT ENVIRONMENT

LEARNING OUTCOME

B5a : **Identify** and **explain** the main macroeconomic policy targets.

B5b : **Define** and **discuss** the role of fiscal, monetary, interest rate and exchange rate policies in achieving macroeconomic policy targets.

B5c : **Explain** how government economic policy interacts with planning and decision-making in business.

B5d : **Explain** the need for, and the interaction with, planning and decision-making in business of:
i) competition policy
ii) government assistance for business
iii) green policies
iv) corporate governance regulation."

B6a **Identify** the nature and role of money and capital markets, both nationally and internationally.

B6b **Explain** the role of financial intermediaries.

B6c **Explain** the functions of a stock market and a corporate bond market.

B6d **Explain** the nature and features of different securities in relation to the risk/return trade-off

B7a **Describe** the role of the money markets in:
i) providing short-term liquidity to the private sector and the public sector
ii) providing short-term trade finance
iii) allowing an organisation to manage its exposure to foreign currency risk and interest rate risk."

B7b **Explain** the role of banks and other financial institutions in the operation of the money markets.

B7c **Explain** the characteristics and role of the principal money market instruments:
i) interest-bearing instruments
ii) discount instruments
iii) derivative products."

2.1 The Economic Environment for Business

Learning Outcomes (ACCA Study Guide Area B)

B5a: Identify and **explain** the main macroeconomic policy targets.

B5b: Define and **discuss** the role of fiscal, monetary, interest rate and exchange rate policies in achieving macroeconomic policy targets.

B5c: Explain how government economic policy interacts with planning and decision-making in business.

B5d: Explain the need for, and the interaction with, planning and decision-making in business of:

I. competition policy
II. government assistance for business
III. green policies
IV. corporate governance regulation

INTRODUCTION

Economics is a social study that studies the production, distribution and consumption of goods and services.

A common distinction for academic purposes is as follows:

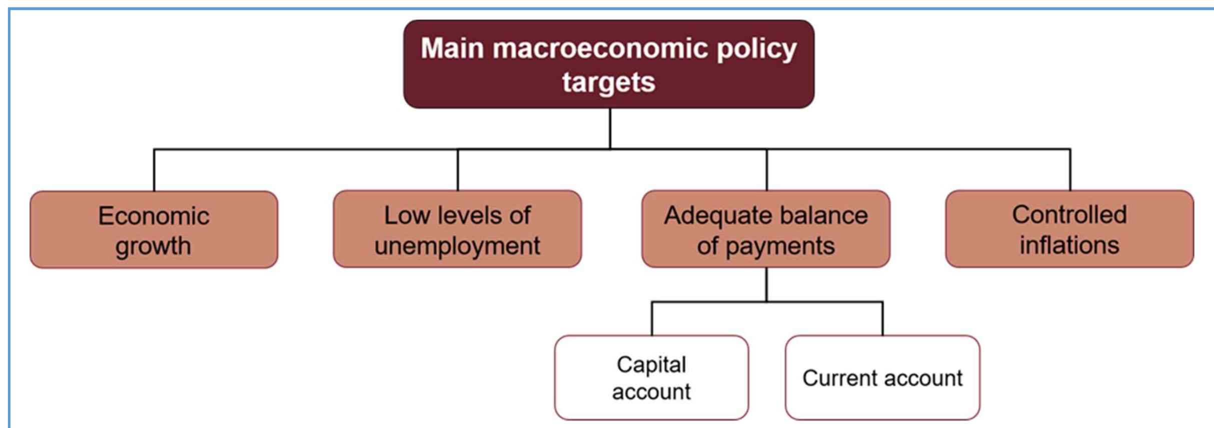
a. **Microeconomics** –examines the economic behaviour of agents (individual firms, households and consumers).
b. **Macroeconomics** – examines the economy at large, addressing issues of broad aggregates for example, national income and output, unemployment, inflation, and the effects of monetary and fiscal policy.

Macroeconomic policy setting incorporates the following agenda:

- Policy objectives – the definitive aims of economic policy
- Policy targets – quantified levels or ranges of desired outcome which economic policy intends to achieve
- Policy instruments – the tools employed to achieve the objectives

2.1.1 Main Macroeconomic Policy Targets

Diagram 2.1: Identify and explain the main macroeconomic policy targets



1. **Economic Growth**

- Gross Domestic Product (GDP) is the **broadest measure of economic activity**, measuring national income and output for a given country. Economic growth implies an increase in national income in real terms, therefore increases attributed to price inflation is not real growth at all. Therefore, real GDP (GDP adjusted for price levels) is the commonly used indicator to measure economic growth.

- GDP per capita is commonly interpreted as **an indicator of standard of living in an economy**, the rationale being all citizens stand to benefit from their country's increased economic production. This is generally true, as living standards tend to increase when GDP per capita is higher.

- A brief understanding of the business cycle is also critical in the understanding of economic growth. The business cycle is characterised by fluctuations in economic activity, and has two phases: expansion (real GDP increasing) and contraction or recession (real GDP decreasing). Recession is technically defined as a two-quarter decrease in real GDP. However, the National Bureau of Economic Research (USA) defines recession as "a significant decline in activity spread across the economy, lasting more than a few months, visible in industrial production, employment, real income, and wholesale-retail trade. A recession begins just after the economy reaches a peak of activity and ends as the economy reaches it trough. Between through and peak, the economy is in an expansion".

2. Low Levels of Unemployment

- Unemployment has both **economic and social effects**: people have less money to spend and in turn a reduction in consumer spending, increased government expenditure by way of unemployment benefits or welfare, increased crime rates and denying the economy from operating at full capacity (affecting potential GDP). It could, if uncontrolled, lead a lethal downward spiral into an unstable economy.

- Therefore, it is in the interest of the government and society at large to maintain a healthy range of low unemployment rate and involuntary unemployment is short-term.

3. Controlled Inflation

- Inflation erodes the **purchasing power of a currency** and results in less (or lower quality) goods and services purchased with a given amount of that currency. It reduces living standards of individuals and exerts pressure on wages to increase to commensurate with the increased price levels. Higher wages would in turn increase the general price of goods and services, and this may lead to a deadly upward spiral and in extreme situations, a case of hyperinflation frustrating business planning and decision-making.

- An erosion of the purchasing power of a given currency **will devalue a country's currency, making imports more expensive**, further stoking the fumes of inflation. Therefore, a stable general price level is critical for proper planning by the government and businesses alike.

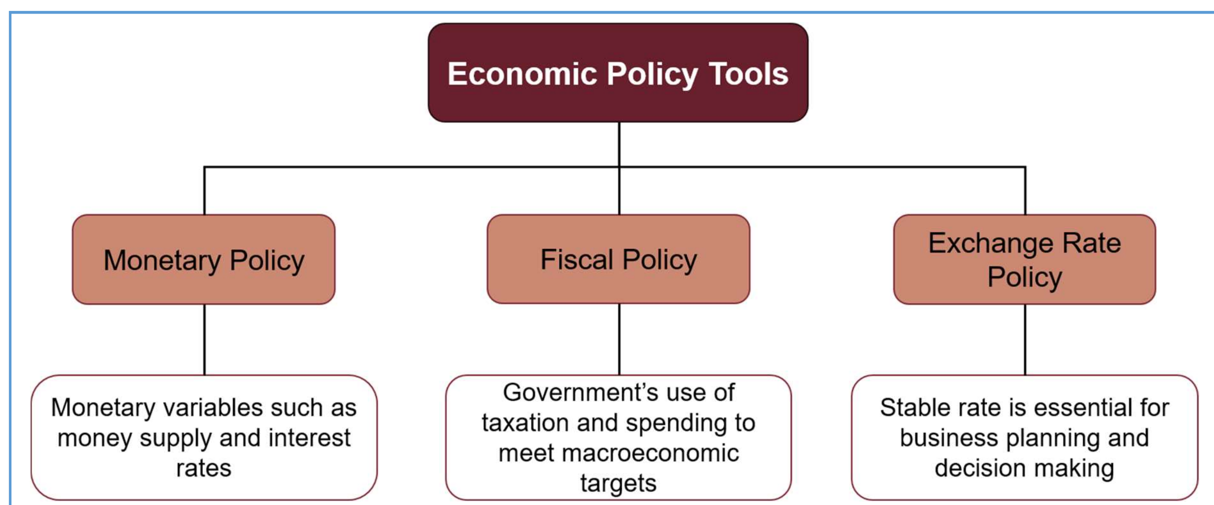
4. Adequate Balance of Payments

- Balance of payments is a measure of a country's creditworthiness in international trade. The balance of payments, akin to an accounting statement, is usually prepared in the domestic currency and reflects all payments and liabilities to foreigners (debits) and all payments and obligations received from foreigners (credits). It is further segregated into:
  i. the **current account** – comprising net change in international trade (import and export) of goods and services, net factor income (investment income from abroad) and net unilateral transfers (remittances from abroad for example, by emigrant workers, foreign aid and so forth);
  ii. the **capital account** – comprising foreign direct investments, portfolio investment (in stocks and bonds) and other transactions (in currency and bank deposits).

- Generally, countries would intend to achieve at least a balance of payments equilibrium or surplus to signify their ability to meet international payment obligations. This signals a strong creditworthiness which eases access to international funds to finance their domestic economy which is in turn central to domestic economic growth.

2.1.2 Economic Policy Tools

Diagram 2.1.2: Define and discuss the role of fiscal, monetary, interest rate and exchange rate policies in achieving macroeconomic policy targets



In order to achieve macroeconomic policy targets, government and central banks worldwide employs the following policy tools:

1. Monetary Policy

- Monetary policy is designed to influence **monetary variables such as money supply and interest rates**.
- It is important to understand that both labour and capital are key to economic output. Therefore, the availability of money supply (capital) has a direct positive correlation with economic growth while interest rates are the cost of money.
- An *expansionary policy* increases the total money supply in the economy (for example, lowering of interest rates) to accelerate economic growth or combat unemployment in a recession.
- A *contractionary policy* decreases the money supply and can be employed to combat periods of inflation. For example, by raising interest rates, firms and consumers defers consumption today in view of the higher cost of credit (borrowings) and invests for greater consumption tomorrow. A reduction in aggregate demand today would in turn cool inflationary pressures.

2. Fiscal Policy

- Fiscal policy refers to the **government's use of taxation and spending to meet macroeconomic targets**.
- A primary source of government revenue is from taxation, and any excess of development and operating expenditure over government revenue is called a budget deficit – which has to be financed by public sector borrowing (issuance of public bonds).
- Government spending is a component of GDP. *Increased government spending* (e.g. on infrastructure) can *serve as a stimulus for the domestic economy and accelerate economic growth*. A multiplier effect arises which amplifies the amount of money that trickles down the economy. This is sometimes used as a resort to counter a slowdown in the export sector owing to weakened external demand.
- Alternatively, a *reduction in tax rates* increases the disposable income of firms and households which can then be deployed for consumption. This stimulates demand for goods and services and encourages economic growth.
- Conversely, a *reduction in spending and an increase in tax rates* will assist in curbing an overheated economy and control inflation. However, this may be done at the expense of higher unemployment.

Exchange Rate Policy

- A stable exchange rate is essential for the proper business planning and decision-making. Significant fluctuations or movements on either direction can suppress business activities.
- For example, *uncontrolled appreciation of a country's domestic currency* has the following implications:
  - higher import values can lead to trade (current) account deficits affecting balance of payments;
  - cost of imports become relatively cheaper encouraging domestic consumers to opt for imported goods, endangering domestically produced goods and industries;
  - stronger domestic currency makes exported domestic goods more expensive and renders it uncompetitive in the international market.
  - Similarly, *an uncontrolled depreciation of a currency* also has dire consequences – for example resulting in the cost of servicing foreign currency denominated debt more expensive to service threatening solvency of a firm.

2.1.3 Government Economic Policy and Implications on Businesses

1. Contractionary Monetary Policy, Interest Rates Increases

In an overheated economy or undesired inflation levels, the government may decide to decelerate money supply and thereby increase interest rates. This makes the cost of borrowings more expensive and existing debt more expensive to service. Increased interest rates also impact negatively on the prices of a company's shares and fund-raising by way of issuance of new shares becomes more difficult. An increase in cost of capital will mean fewer commercially viable investments and therefore deter companies from expanding. A reduction in firm and household spending will also mean lower demand for the goods and services of that company.

These translate into trying times for management where survival, industry consolidation and cost-cutting become a dominant agenda.

2. Increased Government Spending and Tax Incentives

An increased spending on development expenditure (for example on infrastructure) will trickle into the economy with a multiplier effect and increase aggregate demand. Tax incentives in the promotion of certain sectors (tax exemption on planting of crops for biofuel use) can open up opportunities for companies to capture including both upstream (fertilizer) and downstream (refining) activities. A forecasted exponential increase in aggregate demand or demand for a company's goods and services will enable a company to ramp up production/resources to meet the demand or lose out on the opportunity.

3. Government allows Free Float of Currency – Domestic Currency Weakens without Intervention

Implications:

- Imported raw materials become more expensive increasing costs of production;
- Foreign goods become more expensive creating additional demand for domestically produced goods;
- Exported domestic goods become more competitive in the international market.

Business planning may then require the procurement department to source raw material elsewhere to remain competitive. A domestic goods producer may decide to increase production and marketing activities to capture the increased demand in both local and international markets.

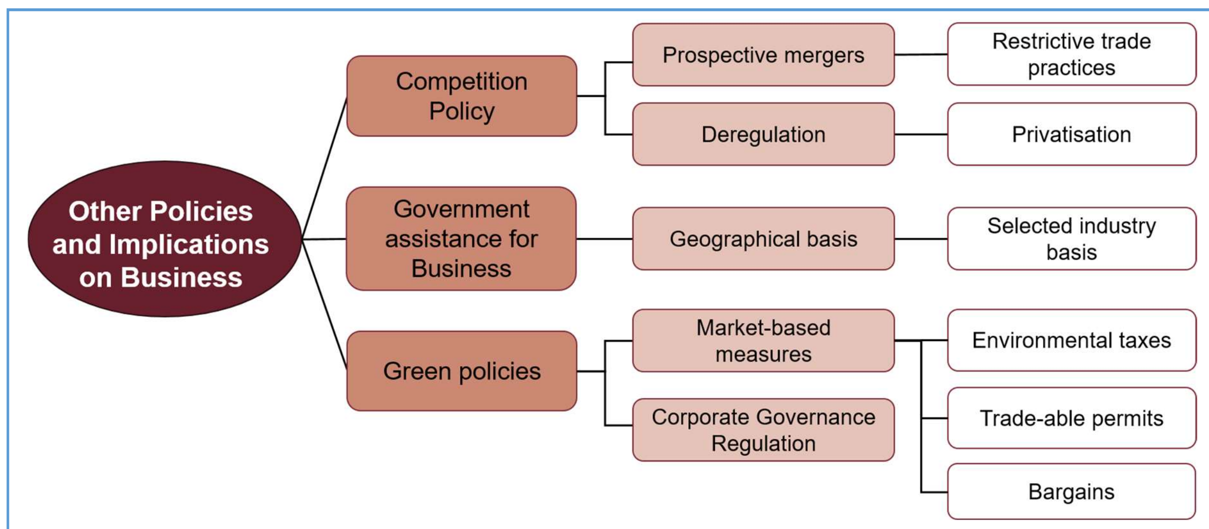
To remain competitive and mitigate foreign exchange risk, a company may wish to:

- Match revenues with costs in the same currency.
- Invoice sales in the domestic currency, effectively shifting the foreign exchange risk to their customers (if they have the bargaining power to do so).
- Deal only in stable currencies with less historical volatility.
- Enter into various hedging techniques to mitigate the impact of fluctuations in exchange rates.
- Outsource otherwise imported goods or services denominated in foreign currency to a domestic firm, with active supervision on quality assurance.

2.1.4 Other Policies and Implications on Businesses

In addition to the macroeconomic policy, there are other regulations, environmental and social policies that affect the planning and decision-making of businesses.

Diagram 2.1.4: Explain the need for, and the interaction with, planning and decision-making in business of competition policy, government assistance for business, green policies & corporate governance regulation



1. **Competition Policy**

   Market failure is the situation where the market mechanism fails to result in an efficient market, the result of which is suboptimal production and allocation of resources. It is also the occasion where the pursuit of self-interest leads to a result that can be improved from the society viewpoint.

In a free market, competition is necessary to arrive at equilibrium for the optimal allocation of resources by firms and marginal benefit by consumers. The absence of such competition (a monopoly situation) can have several adverse consequences:

i. Rooted bureaucracy in firms where there is no pressure to improve the efficiency resulting in suboptimal use of resources.
ii. No apparent incentive to improve the range or quality of monopolised products and services.
iii. Charging high prices on consumers who could not seek for competing substitutes.

While certain industries (for example, electricity generation) do require high economies of scale to minimise cost and in turn prices, a monopoly market shall be confined to industries that truly deserves it for proper functioning.

Therefore, regulations are imposed to enable free market forces to determine the market outcome and deter anti-competition arrangements. Regulation can take the form of any state interference to regulate free market action. This may involve regulating supply, demand, price, quality, and the removal of barriers to entry.
In certain markets, the participants (firms) themselves maintain a system of voluntary self-regulation, possibly to avert the imposition of government controls. Self-regulation often exists in certain professions for example, law society, medical associations, and other professional bodies.

i. Prospective mergers

In UK, the Office of Fair Trading (OFT) is an agency to ensure the smooth operation of a free market. A sub-committee, the Competition Commission (formerly known as Monopolies and Mergers Commission) is also established to oversee prospective mergers of two or more companies and investigate if the proposed merger is against public interest. This includes the investigation on possible breach of any anti-competition thresholds (a certain % of market share, % of total industry assets, value of asset transfers and so forth).

ii. Restrictive trade practices

Another branch of competition policy is the prevention of anti-competition practices such as price-fixing agreements. Under UK legislation, all such agreements must be forwarded to the OFT for examination to the satisfaction that they are in the public interest. Otherwise, such agreements may be deemed illegal or void.

iii. Deregulation

This refers to the removal of regulations to enable free market forces to determine the market outcome. This may include the removal of a statutory entry barrier to introduce more competition and improve efficiency in production and allocation of resources.

Drawback:

Loss of economies of scale, elimination of unprofitable but socially valuable services, dismantling protectionism for start-up industries which may be essential for survival.

iv. Privatisation

Privatisation is a measure of introducing private enterprises into previously government-owned industries. It may take the following forms:

- The deregulation of industries allowing private enterprises to compete against state-owned businesses;
- A transfer of assets ownership from government entities to private enterprises;
- Outsourcing government work to private enterprises, for example municipal council refuse collection and public hospital laundry work.

Advantages:

Eliminates allocative inefficiency of resources, industries become more cost-conscious since they are now answerable to profit-seeking shareholders/investors, instant source of revenue to for the government, less bureaucracy and political interference in rightful business affairs, and wider public share ownership.

Drawback:

Loss of economies of scale, profit-seeking motive may stand above public interest.

2. Government Assistance for Business

Governments may provide grants in the form of cash or other official assistance to develop the national economy. It may be provided to support national strategic interest, encourage industries to automate or move up the value chain or into fields of high technology, create employment opportunities, and so forth.

Such incentives could be offered on:

i. Geographical basis – to encourage industry start-up in less developed or economic depressed regions.

ii. Selected industry basis – to accelerate the development of certain industries for example, food innovation and robotics.

3. Green Policies

The impact of economic activities on the environment cannot be refuted anymore. Disturbances to the natural ecological system can have dire consequences on humankind, and therefore is it crucial for firms to adopt more environmentally friendly or 'green' policies. Government, in awareness, must design policies that motivate or force producers and consumers to observe environmental rules. The existing policies being practiced are described as follows:

i. Market-based measures

- Environmental taxes
  The polluter pays. Polluters are levied a tax equal to the cost of removing the effect of externality they generate. This will encourage firms to reduce emissions and research methods of permanently reducing pollution.
- Tradable permits
  The right to pollute. A safe level of pollutant is decided and this limit is divided between different constituents. Constituents that produces pollutants lower than the permitted quota is then allowed to sell the balance quota or 'right to pollute' to other constituents who exceeded their quota. An example will be the trading of carbon credits in international market between businesses.
- Bargains
  The sufferer pays. The sufferer shares the costs of controlling the pollution.

ii. Non-market-based measures

An alternative approach is the imposition of legislation and regulatory measures to govern pollution levels. Failure to comply with the mandatory standards shall then attract a penalty which ought to be high enough to motivate compliance.

Other measures may include the offering of tax incentives or subsidies by the government to persuade polluters to reduce output and in turn pollutant, or to outlay expenditure on environmentally friendly equipment for example, air cleaning equipment that reduces the discharge of pollutants.

4. Corporate Governance Regulation

Corporate governance can be broadly understood as the "system by which companies are directed and controlled." It comprises the following tenets: transparency and management integrity, risk management and internal controls, accountability to stakeholders, and the conduct of business in an ethical and effective way.

The **codes of best practice** include the following:

i. **Clear division of responsibility** at top management where the **roles of chairman and chief executive** be performed by different individuals;

ii. The board should include a **balance of executive and non-executive directors** (including independent non-executives) such that no individual or small group of individuals can dominate the board's decision-making;

iii. **Directors to attend board meetings** held regularly as a means of maintaining control and monitoring activities of executive directors;

iv. All **directors** should submit themselves for **re-election at regular intervals** or **at least every three years**;

v. **Remuneration committee** to be established consisting entirely of **independent non-executive directors**. Their responsibility is to set executive compensation at levels that commensurate with responsibilities and performance. No director should be involved in deciding his or her own remuneration;

vi. **Nomination committee** to be established to handle the **recruitment or nomination of new board members**, creating nomination policies and procedures, recruiting qualified board members, regularly reviewing performance, independence, skills and experience of existing board members, and preparing an executive management succession plan;

vii. **Audit committee** to be established to review the **adequacy of financial reporting** and **internal control systems**, serve as **final reporting line to internal auditors**, **resolve conflicts with the external auditors** and so forth.

2.2 Nature and Role of Financial Markets and Institutions

Learning Outcomes (ACCA Study Guide Area B)

B6a: Identify the nature and role of money and capital markets, both nationally and internationally.

B6b: Explain the role of financial intermediaries.

B6c: Explain the functions of a stock market and a corporate bond market.

B6d: Explain the nature and features of different securities in relation to the risk/return trade-off.

INTRODUCTION

The financial markets allow the trading of financial securities (stocks, bonds, commercial papers, short-term bills, etc.), commodities, and foreign exchange at low transaction costs and at prices that reflect closely the underlying fair value assuming the markets are efficient.

The financial markets can be broadly categorised into the following:

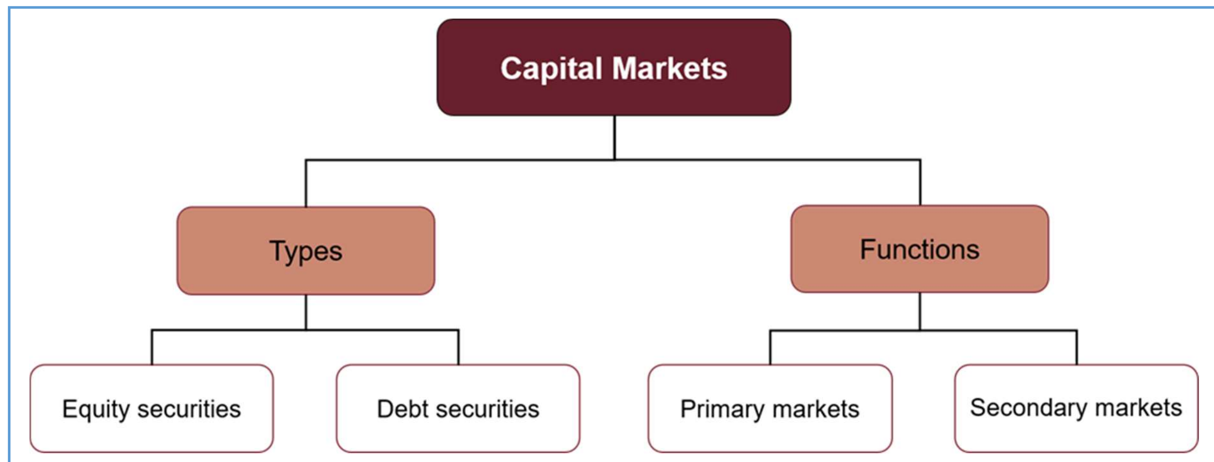
- Capital markets
- Money markets
- Commodities markets
- Foreign exchange markets
- Insurance markets
- Derivatives markets

The major financial markets are located in different geographical zones with complementing time zones – Tokyo, Sydney, London and New York. Thus, certain financial markets (foreign exchange) offer an almost 24-hour access as once a major market closes, another market opens.

For example, when the Tokyo market closes at 4pm, the London market would be just 1 hour from opening at 7am. By mid-day in London, the New York market would have just opened to make way for trading while analysts on Wall Street digest the latest news that transpired in London thus far.

2.2.1 Capital Markets

Diagram 2.2: Style of leadership appropriate to manage strategic change



Capital markets are markets to invest or raise *medium to long-term funds* via financial securities namely equities and debt securities. Among the various types of securities under the two categories are:

- **Equity securities** – ordinary shares and to a lesser extent, preference shares;
- **Debt securities** – government bonds, corporate bonds, medium term notes (MTNs), unsecured loan stock, convertible bonds, commercial papers.

The capital markets serve two main functions:

- as **primary markets**, where *organisations raise new finance* via the issuance of new equities or debt securities to financial institutions or private investors;
- as **secondary markets**, where *investors are allowed to trade in existing listed securities*, that is, sell their existing securities or buy new ones to manage their portfolios. The low transaction costs and enhanced liquidity facilitates the proper pricing of securities at fair value. The secondary markets in turn serve as a source of pricing information for the primary market, and assist the efficient allocation of new funds at the right price.

Today, the largest participants of the capital markets are the **institutional investors** comprising of sovereign wealth funds, pension funds, insurance companies, investment trusts, hedge and mutual funds, and venture capital organisations.

2.2.2 Money Markets

- Though the details and mechanisms of the money market vary greatly from country to country, in all cases its basic function is to enable those with surplus short-term funds to lend and those with the need for short-term credit to borrow for any period up to one year.
- It is operated by banks and other financial institutions, and largely involves lending and borrowing by banks, large corporations as well as the government.
- Amongst the transactions entered into (primarily fixed income instruments), are:

1. **Discounting of Bills**

   For example, high quality short-term bills of exchange are sold at a discounted price to an interested buyer. Upon maturity the buyer will collect the funds from the issuer on the face amount.

2. **Interbank Lending**

   Financial institutions may encounter periods/days of surplus/shortfall in available short-term funds and therefore lend/borrow wholesale to other financial institutions as part of their daily operations. The LIBOR (London Inter-Bank Offer Rate - based on polled by independent bankers on perception of cost of funds in the inter-bank market) serves as a reference rate on which the funds are priced.

3. **Commercial Papers**

   There are unsecured promissory notes issued by creditworthy financial institutions or large corporations to meet short-term obligations. Since it is not backed by any collateral, only firms with excellent credit rating are will be able to issue it at a reasonable price in the money market.

2.2.3 International Markets

International Money Market (Eurocurrency Market)

- Eurocurrencies are currencies held outside the country of domicile. For example, Eurodollars are dollar denominated deposits of U.S. banks deposited with their foreign branches or other foreign banks.
- They are accessible only by large financial institutions, multinationals and corporations since it deals with a considerable scale of short-term lending or borrowing.
- The functioning of multi-currency lending/borrowing to settle short-term trade obligations play an important role in international trade.

- Most eurocurrency transactions between banks of different countries take place in the form of negotiable certificates of deposits.

International Capital Markets

- A large multinational with a global presence may decide to embark on a new start-up in a foreign country, requiring foreign currency-denominated financing. If the quantum of financing is large enough, it may decide to seek the funds from international capital markets by issuing Eurobonds.
- International equity shares issues also exist (Euro-equity) but it is less highly developed. Multinationals instead opt for multi-country listings to gain access to foreign currency denominated funds.

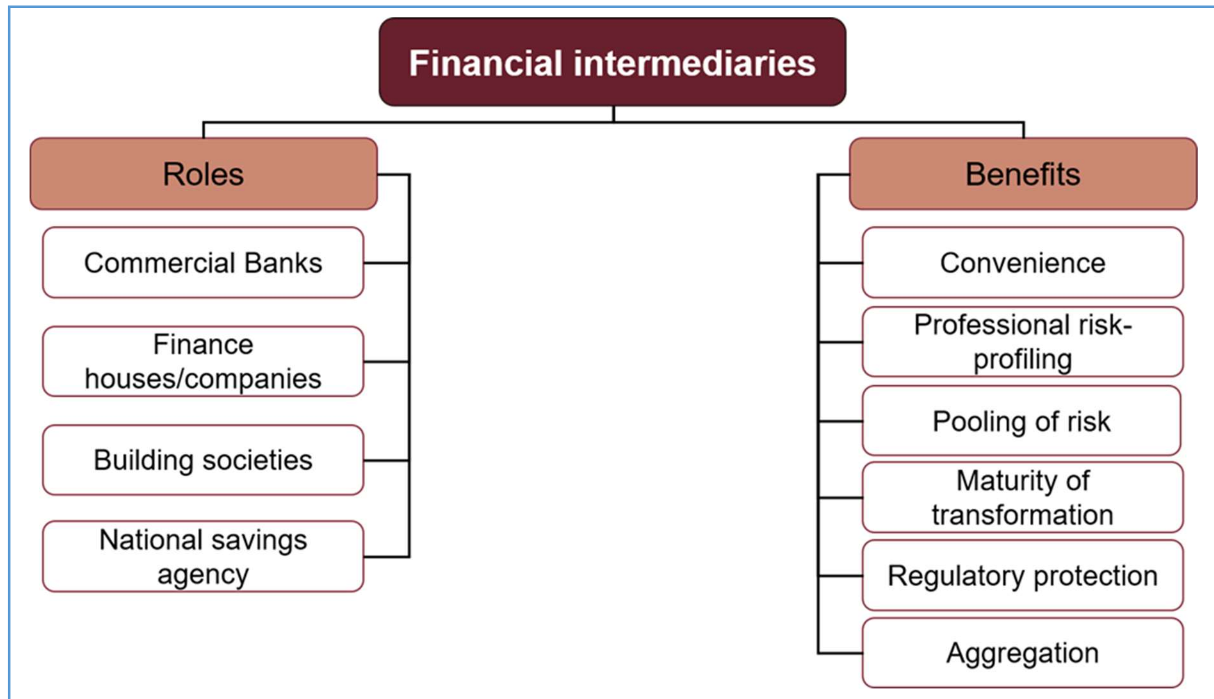
Eurobonds

- Eurobonds are bonds denominated in a currency other than the currency of the issuing country.
- It is typically for a long tenure (10-20 years) and is sold to interested investors in several countries at the same time.
- There also exists a secondary market where such bonds can be traded between bondholders.
- Eurobonds are **suitable to established multinationals** with excellent credit rating to:
  - raise large sums of money for major capital expansion programmes; and
  - enable access borrowings which is not subject to exchange control regulations of any given country; or
  - merely to take advantage of low interest rate regime borrowings (for example, Japan, and now USA).
- However, an exchange rate risk may arise should the income-earning asset generate income in a currency other than the Eurobond currency. This problem would not occur if the funds raised are employed on assets to earn income of the same currency as the Eurobond currency.
- Advantages of Eurobonds to investors are:
  1. **Security.** The issuer is normally a borrower with excellent creditworthiness.
  2. **Marketability**. There exists a ready market where the bonds can be bought and sold. The high-quality nature of such bonds also renders it readily negotiable.
  3. **Tax-free investment**. Since Eurobonds are not subject to direct regulation of any country, no tax is imposed.
  4. **Anonymity**. Eurobonds are *bearer securities* where the holder's name need not be registered under any registrar. As long as the holder retains the instrument/certificate, he is entitled to the rights under the security.

2.2.4 Financial Intermediaries

The world is divided into surplus units (lenders with surplus funds) and deficit units (potential borrowers with the need for funds). The role of financial intermediaries is to link those both lenders and borrowers, by obtaining deposits from lenders and re-lend them to borrowers. Thus in their role, financial intermediaries satisfy the investment need of surplus units and capital/consumption need of deficit units.

Diagram 2.2.4: Explain the role of financial intermediaries



Benefits of Financial Intermediation:

Convenience	An evidently conveniently manner in which lenders can invest surplus funds, with choice of amount, maturity dates and risk-return reward.
Aggregation	Borrowers can access a high quantum of fund with the desired tenure from one source (the financial intermediary) rather than seek them from individual lenders.
Professional risk-profiling	Financial intermediaries conduct appropriate risk-profiling on each loan type, customer and their repayment capabilities to assess default risk prior to lending to minimise default risk.
Pooling of risk	Any losses suffered from default are borne by the financial intermediary. Lenders in general share such losses where it is not possible with individual lenders.

Maturity transformation	As financial intermediaries access a continuous supply of surplus funds from lenders, it allows other lenders to access their deposits without the need for immediate repayment by borrowers. As such, intermediaries can enable borrowers to undertake longer repayment term.
Regulatory protection	As deposit-taking institutions, financial intermediaries are subject to strict regulatory requirements. Furthermore, there exist deposit insurance schemes legislated to protect depositors from losing their deposits (of a certain threshold) placed with a licensed financial institution.

2.2.5 Functions of a Stock Market and Corporate Bond Market

A stock market is a marketplace for the issuance and trading of company shares and derivatives. In the same way, a corporate bond market is a marketplace for the issuance and trading of corporate debt securities and derivatives.

Both the stock market and corporate bond market have certain identical functions:

Function	Explanation
Source of finance for companies	Organisations can raise funds from capital markets to finance their operations or expansion. The corporate bond market also serves as an alternative for companies to obtain financing directly from investors by issuing bonds without resorting to traditional bank finance. This is also the case where the quantum of financing is too high and the debt is syndicated amongst several banks to spread out the risk.
Source of investment for investors	Investors can invest in securities listed on the capital markets to generate return on surplus funds by assuming the associated risk. Generally, listed securities have greater liquidity enabling investors to dispose of the securities at a price close to fair value.
Reduced risk to buyers and sellers	In view of the strict regulatory environment surrounding both markets and the proper functioning of the exchange, traded securities exchange hands in a smooth manner. Buyers have the confidence that the securities purchased will be delivered on time, while sellers are assured of receiving the full sale value of the securities sold.

Efficient allocation of resources	The trade that ensues in an efficient market reflect the fair value of any given security. Performing/creditworthy companies with good corporate governance often enjoy a strong share price/credit rating, and therefore have no problem obtaining cheap funds. Thus, resources are efficiently allocated to deserving companies.
Facilitates economic growth	Capital (funds) is a key component of economic growth and has a direct positive correlation. The availability of funds promotes economic growth. In certain countries where a large percentage of GDP is listed, a stock market on the rise signals economic strength and boosts household wealth and consumption. This in turn increases aggregate demand and bodes well for the economy.
Creates employment opportunities	Employment opportunities are created in tandem with economic growth. At the same time, the capital markets also provide employment opportunities for analysts, bankers, traders, fund managers, risk management personnel, regulators, etc.
Market Integrity	The strict regulatory environment imposes various listing requirements to ensure the high quality of securities traded. Listed companies are required to be fair and transparent to their stakeholders, including the submission of relevant, reliable and timely financial information to the Securities Commission on a regular basis. Companies seeking to issue corporate bonds would need to obtain a credit rating from reliable rating agencies to have their repayment capabilities and default risk assessed.

2.2.6 Risk and Return Trade-Off

Type of Risks

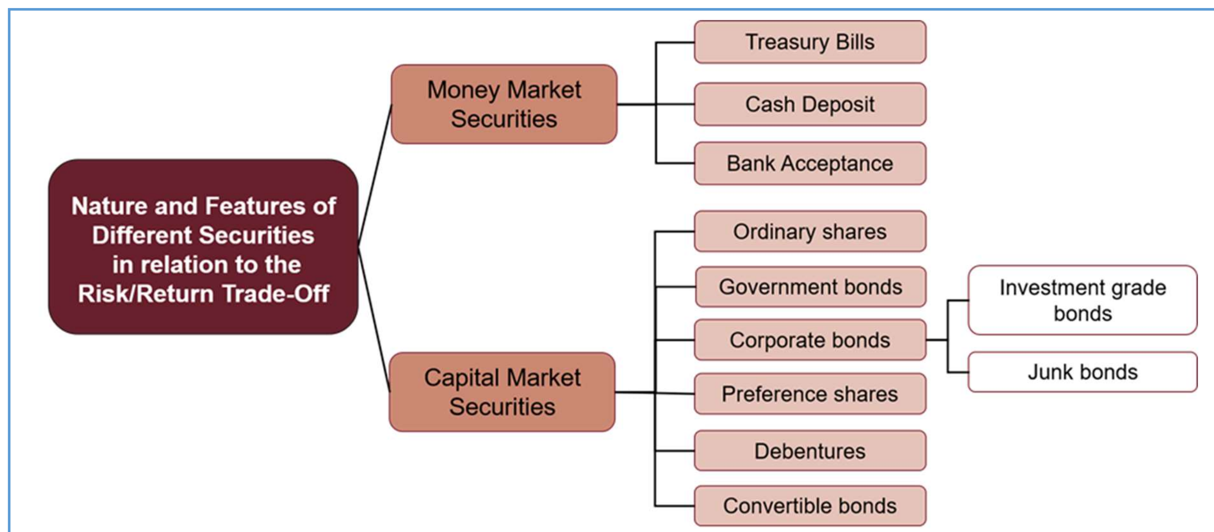
Securities often have one or more types of risks, and each added risk *increases the required rate of return on the security*. The types of risks include:

Type of Risk	Explanation
Default Risk	The risk that a borrower will not meet its obligations in a timely manner.
Liquidity Risk	The risk of receiving less than fair value for an investment if liquidated in a quick manner.

Maturity Risk	The risk that prices of securities may change owing to uncertainty in the duration of the investment, such as interest rate movements, which are more evident in longer-dated securities.
Inflation Risk	The risk that upon receiving back the invested amount, the purchasing power of the invested amount has already been eroded.

2.2.7 Nature and Features of Different Securities in Relation to The Risk/Return Trade-Off

Diagram 2.2.7: Explain the nature and features of different securities in relation to the risk/return trade-off



a. MONEY MARKET SECURITIES

i. Treasury Bills

Treasury bills are discount securities issued at below face value by the Treasury department. It comprises of short-dated securities (30/90/270 days) and the face value is paid to the investors upon maturity. In view of its short tenure and backing by the full faith and credit of the government, such instruments carry little risk.

ii. Certificate of Deposit (CD)

CDs are time/fixed deposits with a bank or financial institution bearing a predetermined interest rate and maturity date. The rate of return is slightly higher than government securities of a similar tenure. The obligation is backed by the creditworthiness of deposit-taking financial institutions, which are very strong. Furthermore, there exists deposit insurance (up to a

certain threshold) for such deposits. Therefore, the risk associated with such instruments is very low.

iii. **Commercial Paper (CP)**

CPs are unsecured promissory notes issued by financial institutions or large corporations with excellent credit ratings. The rate of return is higher than CDs since the risk is marginally higher (especially when issued by large corporations), and also owing to its unsecured nature (not backed by any collateral). The risk associated with such instrument is low, but again subject to the reliability of credit ratings assigned by rating agencies.

iv. **Bankers' Acceptance (BA)**

This instrument is in essence a bill issued by non-financial firms for a predetermined amount and maturity date, but accepted or guaranteed by a bank. Upon acceptance, the obligation to pay shifts to the bank. Therefore, the creditworthiness of the instrument is that of the accepting bank. The BA can then be sold in the money market prior to the maturity. The bank's acceptance minimises the credit risk associated with the underlying debt.

b. CAPITAL MARKET SECURITIES

i. **Government Bonds**

These are interest-bearing securities with coupon paid on a periodical basis, for example, semi-annually. In the UK, government bonds are commonly referred to as gilt, the maturity of which can range from 0-7 years (short), 7-15 years (medium) and more than 15 years (long). The risk associated with such securities is very low, and the yield is commonly employed as the nominal risk-free rate for the relevant periods to maturity.

ii. **Corporate Bonds**

The raising of finance by large corporations in the debt capital market require the assignment of a *credit rating* by rating agencies and approval by the Securities Commission. The interest rate applied on such bonds ranges, depending on the quality of the credit rating assigned by credit rating agencies (e.g. Standard and Poor, Moody's, Fitch). The credit ratings give an indication of credit risk (including default risk), and higher quality rating sanctions lower borrowing rates.

Corporate bonds can be broadly categorised into two types: investment grade bonds and high-yield bonds (sometimes referred to as junk bonds).

- **Investment grade bonds** are bonds that carry a credit rating of BBB- and above (S&P) and are evaluated as likely enough to meet payments. These bonds yield higher than that government bonds, but lower than junk bonds.
- **Junk bonds** carry significant risk of default and can trade at unreasonably higher yields in the event of economic distress when investors take a safety flight to quality. The required return on debt securities is also correlated with the availability of collateral. This is because in the event of a default on a collateralised debt; a lender may recover its investment wholly or partly by realising the collateral.

iii. Debentures

Debentures are loan agreements. It is common for debentures to be **unsecured** since in the event of a default the debenture holders become general creditors with rights over the unencumbered assets. Debentures may be also **secured** by creating a fixed or floating charge on the assets of the borrower. It may also contain **covenants** on the part of the borrower to observe, such as maintaining certain liquidity ratios or restriction on dividend pay-out. In the event of a breach of covenant or default, the debenture holders may appoint a receiver cum manager to manage the borrower in the interest of lenders/creditors.

iv. Convertible Bonds

Convertible bonds are hybrid securities, and are in essence a bond with an option by the holder to convert the bond into ordinary shares at a predetermined conversion rate and date. These instruments are sometimes issued with the *conversion option* as a sweetener for an otherwise expensive debt. For this reason, the *interest rate on convertible bonds* are somewhat lower than a straight bond (bond with no options attached). Again, the risk associated with such bonds varies and depends on the creditworthiness or credit rating of the issuer.

v. Preference Shares

These are by and large **fixed income securities** where investors earn a dividend at a predetermined rate. The return on such instrument is generally higher than other debt securities since it ranks below creditors in an orderly liquidation, but ranks above ordinary shares. The risk associated with such securities are dividend risk and to a lesser extent bankruptcy risk, especially for irredeemable non-cumulative preference shares.

vi. **Ordinary Shares**

These are a **highly risky asset class**, and therefore carry high required rates of return. The returns are in the form of dividend income and capital appreciation of the shares, which is linked to the performance of the company. But these are also subject to various risks beyond the control of investors and the invested corporation. If the stocks are traded on an exchange, there could be irrational behaviour by other investors to dispose of the stock at less than fair value – rendering high liquidity risk. This instrument is also highly risky as ordinary shareholders rank last to recoup their investment in an orderly liquidation of a company.

2.3 The Treasury Function

Learning Outcomes (ACCA Study Guide Area B)

B7a: Describe the role of the money markets in:

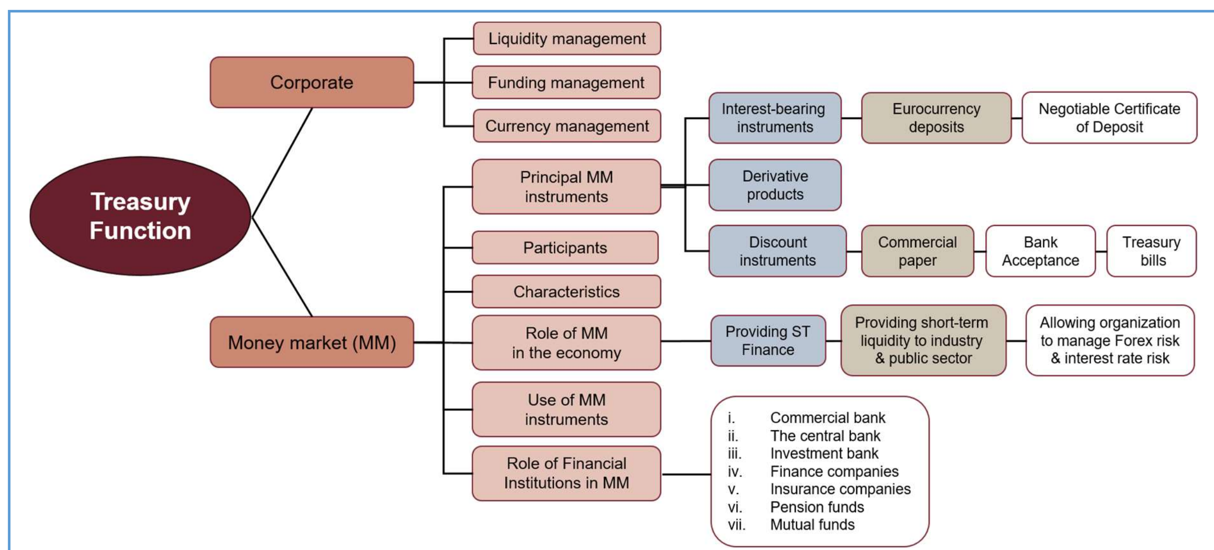
I. Providing short-term liquidity to industry and the public sector.
II. Providing short-term trade finance.
III. Allowing an organisation to manage its exposure to foreign currency risk and interest rate risk.

B7b: Explain the role of banks and other financial institutions in the operation of the money markets.

B7c: Explain the characteristics and role of the principal money market instruments:

I. Interest-bearing instruments
II. Discount instruments
III. Derivative products

OVERVIEW



2.3.1 The Corporate Treasury Function

The treasury management handles the company's banking and funding requirements as well as managing financial risk for the company. Every company has a treasury function that looks after the company's cash flows and investments. In some companies it is a part-time function of the accounts department but in larger companies it is a full-time function staffed by highly skilled professionals with banking expertise.

Main tasks of a treasury function are:

- **Liquidity management** – this involves working capital and cash management ensuring t the business has the liquid funds it needs, and that it invests surplus money in the most efficient manner.
- **Funding management** – this involves identifying suitable sources of funds, the cost of those sources, whether any security is required and how to manage interest rate risks.
- **Currency management** – this involves providing the business with forecasts of exchange rate movements, which in turn determines the procedures that will be used to manage exchange rate risks.

2.3.2 The Money Market

Money Market Participants

- In most countries, the ***government*** plays a major role in the money market, using the money markets to raise (borrow) short term funds as well as using its position to implement the monetary policy by influencing money supply and hence short-term interest rates.
- The money markets are also used by ***financial institutions and large corporates*** in the private sector to transfer large sums of money from parties with surplus funds to parties with a deficit.

Main Characteristics

- Money markets are largely unregulated and informal where most transactions are conducted over phone, fax, or online. There is no physical "money market". It does not refer to a particular place but is a system.
- Money markets provide financial institutions a means of covering deficits (shortages of money) and also profitable ways of lending surplus funds in the short term – **short term wholesale funds**.
- Examples of money market securities: negotiable certificates of deposit (CDs), bills of exchange, Treasury Bills, commercial paper, Eurodollar deposits and repurchase agreements (repos).
- Money market securities are considered highly liquid because they are short term and/or actively traded, and have low default risk because they are issued by the government, reputable firms or financial institutions. Most securities are sold in very large denominations with relatively low interest

rates. Maturities range from one day to one year; the most common are three months or less. Active secondary markets for most of the instruments allow them to be sold easily prior to maturity.

Use of Money Market Instruments

- Firms and financial institutions have various investment strategies for cash surpluses from business operations.
- Money market instruments often form part of a firm's (or bank's) investment portfolio. The firm (or bank) will usually have percentages of cash that are required to remain in cash and short-term investments, which are highly liquid with the rest of the cash being held in higher-interest investments to gain the maximum interest.
- The money market is important for businesses because it allows firms (or banks) with a temporary cash surplus to invest in short-term securities; conversely, firms or banks with a temporary cash shortfall can sell securities or borrow funds on a short-term basis often at a lower cost than normal bank loans or central bank loans respectively.

2.3.3 Role of The Money Market in The Economy

Providing short-term liquidity to Industry and the Public Sector

- Money markets provide those with funds (banks, money managers, and retail investors) a means for safe, liquid, short-term investments, and they offer borrowers (banks, broker/dealers, hedge funds, and large corporations) access to low-cost funds.
- The term "money market" is an umbrella that covers several market types, which vary according to the needs of the lenders and borrowers.
- Allows users of funds to access short term money to meet their short-term requirements at a realistic price.
- It also offers a focal point for central bank intervention for influencing liquidity in the economy.
- A well-developed money market is very efficient in that it enables large sums of money to be transferred quickly and at a low cost from one economic unit (business, government, bank, etc.) to another for relatively short periods of time.
- Businesses and government use these markets because the timing of cash inflows and outflows are not well-synchronised.
- Money markets provide a low-cost source of temporary funds to solve these cash-timing problems.
- The UK money markets *described briefly below* provide a basic understanding of how money markets serve the economy.

i. **UK Primary Money Markets**

- Consists of approved banks and securities firms in which other banks can place surplus funds for short term investment in interest bearing deposits.
- The Bank of England (BOE) uses this market to regulate interest rates by buying or selling Treasury bills or other short-term instruments to banks through **open market operations**:
  - The BOE holds deposits of cash from the government and banker's deposits.
  - When the banking system has surplus cash, the BOE will withdraw cash from the system by selling treasury bills in the primary market.
  - When the banking system runs short of cash, the BOE will buy bills from financial institutions.
  - The discount rates and purchase prices of treasury bills are used as a basis for determining lending rates to the banks customers.

ii. **UK Secondary Money Markets**

- ***Local authority market*** – special wholesale market for local authorities to borrow short term funds.
- ***Interbank market*** – market in unsecured loans between banks. Since banks are subject to regulations such as reserve requirements, they may face liquidity shortages at the end of the day. The interbank market allows banks to eliminate such temporary liquidity shortages.
- ***Commercial Paper market*** – market where CD's and promissory notes (unsecured) are bought and sold before maturity.
- ***Intercompany market*** – Companies with surplus funds can lend direct (through a broker) to institutional borrowers.
- ***Eurocurrency markets*** – a eurocurrency deposit is a foreign currency deposit in a UK bank.
- ***Commercial Bills market*** – market for bills of exchange issued by large corporations and sold at a discount to its face value. The lender earns return by holding the bill to maturity or sell the bill in the in the discount market before maturity.

How commercial banks manage liquidity using the money markets

The main objective of the commercial banks is to earn income from its reserves as well as maintain liquidity to meet the uncertain cash demand of the depositors. The excess reserves of the commercial banks are usually invested in near-money assets *(e.g.* short-term bills of exchange) in the money market and can be easily converted into cash. Thus, the commercial banks need to earn profits without losing liquidity.

A well-developed money market helps the commercial banks to become less reliant on the central bank for funds for which they have to pay a higher interest rate. They can meet fund cash shortages by recalling existing funds from the money market or issuing short term debt instruments like negotiable certificates of deposit.

a. Providing short-term trade finance

- Money market debt instruments are used by larger businesses and banks to cover temporary cash shortages. Bid and ask spreads are relatively small due to the large size and liquidity of the market. Thus, the money market helps the industries in securing short-term loans to meet their working capital requirements through the system of bills of exchange, commercial papers, etc. at reasonable cost.
- It plays crucial role in financing both internal as well as international trade. For example, commercial finance is made available to the traders through bills of exchange, which are discounted by the bill market. The acceptance houses and discount markets help in financing foreign trade.

b. Allowing an organisation to manage foreign currency risk and interest rate risk Interest rate risk

- Deals with changes in the interest rate and effects on financing costs, returns on investments and variations in the market price of securities held by the company, which can have a significant effect on profits. Companies with surplus cash manage interest rate risk on investments by shifting cash from long term investments into money market funds when they expect interest rates to rise in the near future, and vice versa. The money markets also provide short term financing at reasonable cost to companies requiring funds for working capital. Companies are able to do maturity matching for short term assets and liabilities more effectively, thus reducing exposure to interest rate risk that arises with longer term borrowing.
- **Cash market hedges** allow a business to hedge against expected interest rate increases on future short-term borrowings.
- **Currency risk** is one when a company's operations or an investment's value will be affected by adverse changes in currency exchange rate when the company conducts business transactions involving foreign currency. Currency risks can be managed using different hedging strategies involving the use of money market derivatives, Eurodollar deposits or bills of exchange.
- In a large corporate treasury department, a **money market desk** is responsible for funding and lending activities in the local currency and a **foreign currency desk** is responsible for funding and lending activities in foreign currencies.
- Hedging techniques for interest rate and foreign exchange risks are discussed in further detail in *Chapters 7 & 8.*

2.3.4 Role of Financial Institutions in The Money Market

The Central Bank

- The government is always a demander of money market funds and never a supplier.
- The central bank raises large sums in the money market by selling Treasury bills on behalf of the government.
- Treasury bills have the largest volume outstanding and the most active secondary market of any money market instrument in the US. Because bills are generally considered to be free of default risk, while other money market instruments have some default risk, bills typically have the lowest interest rate at a given maturity.
- The Bank of England (BOE) uses this market to regulate interest rates by buying or selling Treasury bills or other short-term instruments to banks through **open market operations.**

Commercial Banks

- Commercial banks are major participants in the interbank money market which is usually the most active money market.
- The interbank market deals with very short-term (maturities of one week or less, the majority being overnight) unsecured loans of immediately available money; that is, funds that can be transferred between banks within a single business day.
- The interbank market efficiently distributes reserves throughout the banking system which is important for a well-functioning and efficient banking system.
- In the UK, the interest rate charged is the London Interbank Offer Rate (LIBOR) which is used as the benchmark rate for determining lending rates and in the pricing of numerous financial instruments.
- Banks are major issuers of negotiable certificates of deposit, banker's acceptances and repurchase agreements. They trade in these securities on behalf of customers. Large banks often act as brokers matching buyers and sellers of money market instruments on a commission basis.
- Banks are often the counterparties to various money market transactions such as over-the-counter interest rate derivatives, as well as acting as intermediaries between other participants by making loans to those wishing to borrow in the market and borrowing from those wishing to lend in the market.

Investment Banks

- Large diversified investment banks (e.g. JPMorgan Chase & Co) often act as dealers in the money market. They "make a market" for securities by maintaining an inventory from which to buy or sell.
- These firms are very important to the liquidity of the money market because they ensure that investors can easily buy and sell their securities.

Finance Companies

- Finance companies raise funds (for consumer loans) in the money markets mainly by selling commercial paper.

Insurance Companies

- Insurance companies must maintain enough liquidity at all times, as their need for funds can be sudden and unpredictable.
- A large portion of their funds is invested in money market securities to ensure sufficient liquidity in the event of large claims.

Pension Funds

- Pension funds must have sufficient funds to meet pension obligations. As their obligations are reasonably predictable, pension funds do not invest a large portion of their funds in the money market.
- However, they often invest large sums in the money markets temporarily so that they can take advantage of favourable movements in the stock or bond markets.

Money Market Mutual Funds (Unit Trusts)

- Small investors are able to participate in the money market through these investment funds which aggregate their individual investments to invest in large denomination money market securities.

2.3.5 The Principal Money Market Instruments

a. INTEREST-BEARING INSTRUMENTS

i. **Negotiable Certificate of Deposit (NCD) –** banks can raise short term funds by issuing NCDs. An NCD is a bank-issued security for a fixed deposit with a specified interest rate and maturity date. It is a *bearer instrument* that can be bought and sold prior to maturity. In the US, denominations for NCD's are usually at least $1 million with a minimum face value of $100,000. The rates payable is negotiated between the bank and the customer. Banks are willing to tailor maturity dates to meet the needs of investors. NCDs offer the same security as a term deposit with the bank in question, but are fully negotiable before the date of maturity. They are can traded at a discount to face value in liquid secondary markets but cannot be cashed in before maturity. This makes it an attractive investment for pension funds, mutual funds and insurance companies.

ii. **Eurocurrency Deposits –** these refer to foreign currency deposits in local banks (e.g. USD deposits in British banks). Depositors receive a higher rate of return on Eurocurrency deposits than in the domestic market because multinational banks are not subject to the same regulations as in the domestic markets and are willing to accept narrower spreads.

b. DISCOUNT INSTRUMENTS

No interest is paid on these securities. Instead they are issued at a discount from par (value at maturity). The investor's earnings come from the increase in the value of the security between the time of purchase and the time it is sold or matures.

i. Treasury bills

- In the UK, the BOE issues bearer Treasury bills on behalf of the government as short term government borrowing (until tax revenues are received). They are considered to have virtually zero default risk.
- Inflation risk is also low because of their short-term to maturity. The issue price of the bills is usually determined by a tender process (with the highest bidder being satisfied first) or by invitation. The minimum investment is £500,000 nominal value. Government securities dealers are responsible for providing an active secondary market for Treasury bills. Unlike the US, the UK secondary market in Treasury bills has in recent years become illiquid.
- The Bank of England (BOE) regulates interest rates by buying or selling Treasury bills to banks through **open market operations.** When it sells bills, the money supply in the banking system reduces. When it redeems the bills, money supply increases. Treasury bill prices are used to determine short-term risk-free rates.

ii. Commercial Paper (CP)

- Since they are unsecured, only firms with excellent credit ratings from a reputable rating agency will be able to sell their commercial paper at a reasonable discount from face value.
- They are typically used by the non- bank businesses for the financing of accounts receivable, inventories and meeting short-term liabilities.
- A strong secondary market for commercial paper does not exist. Purchasers of CP are mainly commercial banks, large insurance companies and pension funds.

iii. Bankers' Acceptance (BA)

- It is an **order to pay** a specified amount of money to the bearer on a given date.
- They are used to finance goods that have not yet been transferred from seller to buyer. Because a BA is backed by a bank, it can be traded on the secondary market at a discount.

- BAs are essential for international trade. It enables the exporter to ship goods to overseas customers with the bank's credit standing substituted for that of the buyer, as well as receive funds before the maturity date of the BA by selling it in the secondary market.

c. DERIVATIVE PRODUCTS

Money market derivatives are financial products whose values come from the price of the underlying money market instruments. Money market derivatives are used by money market participants to help limit interest rate risk and foreign exchange risk. The most common money market derivatives include short term interest rate futures, forward rate agreements, interest rate options and swaps as well as caps and floors based on, for example, US Treasury bills, LIBOR and Eurodollar certificates of deposit.

These derivative products are discussed in further detail in **Chapters 7 and 8.**

2.4 Chapter 2 Summary