



UNIVERSITY OF CALICUT
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III SEMESTER

**FINANCIAL MARKETS &
INSTITUTIONS**



2015-16
Admn. onwards

UNIVERSITY OF CALICUT
SCHOOL OF DISTANCE EDUCATION

MC3C11: FINANCIAL MARKETS AND INSTITUTIONS

M.Com

III SEMESTER

(2015-16 Admn. onwards)

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Layout & Settings: Computer Section SDE

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Preface

Financial markets are exceptionally imperative to the general fitness of an economy. Financial markets cater to the credit need of individuals and institutions. Mobilization of savings and their channelization into more productive uses, facilitates price discovery, provides liquidity to financial assets and reducing the cost of transactions are the most important functions of any financial market.

This book is prepared with the intention of benefitting SDE students of the Commerce and Management Studies in University of Calicut. The function of the book is to put a base in the minds of post graduate students, on the subject 'Financial Markets and Institutions'. I have taken every effort to make the content of this book simple, precise and instructive. I acknowledge with thanks the support provided by my colleagues, especially the Doctoral Research Scholars, Mr. Hareesh Kumar A.G and Ms. Febina. K, in the preparation of this study material.

I expect the book will be helpful to students who are eager to learn the subject, but are restrained due to lack of foundation in Economics and Commerce.

To enrich and develop the contents of the book, suggestions are welcome at all times.

Dr. Thomas Paul Kattookaran

Thrissur

30-08-2016

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MODULE I

AN OVERVIEW OF FINANCIAL MARKETS

Unit 1 Financial Markets: An Introduction

Introduction

The economic development of any nation is reflected by the progress of the various economic units, broadly classified into corporate sector, government and household sector. These units are always placed in a surplus/deficit/balanced situation, which gives rise to the process of lending and borrowing. There are units or people with surplus funds and there are those with a deficit.

A financial system or financial sector functions as an intermediary and facilitates the flow of funds amongst the various units. People from the areas of surplus provide funds to the areas of deficit. It forms the economic foundation of an economy and it is a composition of various institutions, markets, regulations and laws, practices, money managers, analysts, transactions, claims, assets and liabilities. The **financial system** plays the key role in the economy by stimulating economic growth, influencing economic performance of the units, affecting economic welfare. This is achieved by financial infrastructure, in which entities with funds allocate those funds to those who have potentially more productive ways to invest those funds.

A financial system makes it possible a more efficient transfer of funds. As one party of the transaction may possess superior information than the other party, it can lead to the information asymmetry problem and inefficient allocation of financial resources. By overcoming the information asymmetry problem the financial system facilitates balance between those with funds to invest and those needing funds. The word "system", in the term "financial system", implies a set of complex and closely connected or interlined financial institutions, agents, practices, markets, transactions, claims, assets and liabilities in the economy helping to facilitate the movement of funds in order to enhance development. The economic development of any nation, is therefore, reflected by the progress of the various economic units, broadly classified into corporate sector, government and the household sector. They contribute to the economic growth by providing funds and encouraging investment and other sustainable activities.

Financial system-Meaning and definition

According to Howells and Bain, financial system is defined as "A set of markets for financial instruments, and the individuals and institutions that trade in those markets, together with the regulators and supervisors of the system". A financial system is a system that allows the exchange of funds between lenders, investors and borrowers. They consist of complex, closely related services, markets, and institutions used to provide an efficient and regular linkage between investors and depositors. In other words, financial system is a set of specialized and non specialized financial institutions, organized and unorganized financial markets, financial services and instruments which facilitate transfer of funds. It is an institutional arrangement through which financial surplus in the economy are mobilized from the surplus units and transferred to the deficient units.

Functions of financial system

The basic function of the financial system is to transfer resources from those with excess funds for investment, to those who require more funds for investment. A financial system also performs the following functions in order to provide growth and sustainability to the economy:

- (i) It serves as a link between savers and investors. It helps in utilizing the mobilized savings of scattered savers in all the communities in a more efficient and effective manner.
- (ii) It assists in the selection of the projects to be financed and also reviews the performance of such projects periodically, making sure that funds are not wasted on unprofitable investments.
- (iii) It provides a payment mechanism for the proper exchange of goods and services.
- (iv) It provides a mechanism for the transfer of resources across geographic boundaries, from zones with surpluses to zones where funds are scarce and needed for profitable investments.
- (v) It provides a mechanism for managing and controlling the risk involved in mobilizing savings and allocating credit.
- (vi) It promotes the process of capital formation by bringing together the supply of savings and the demand for investible funds.
- (vii) It helps in lowering the cost of transaction and increases returns. It also helps in reducing the cost of funds and motivates the people to save more.
- (viii) It provides the detailed information to the operators/ players in the market such as individuals, business houses, Governments and creditors to help them decide on future investment opportunities.

The **financial system** plays the key role in the economy by stimulating economic growth, influencing economic performance of the actors, affecting economic welfare. This is achieved by financial infrastructure, in which entities with funds allocate those funds to those who have potentially more productive ways to invest those funds. A financial system makes it possible a more efficient transfer of funds. As one party of the transaction may possess superior information than the other party, it can lead to the information asymmetry problem and inefficient allocation of financial resources. By overcoming the information asymmetry problem the financial system facilitates balance between those with funds to invest and those needing funds.

Components of Indian financial system

The following are the four important components of Indian financial system. They are:

- I. Financial markets
- II. Financial institutions
- III. Financial instruments
- IV. Financial services

Financial Markets¹

Financial markets facilitate the flow of funds in order to finance investments by corporations, governments and individuals. **Financial institutions** are the key players in the financial markets

¹ Financial Markets, Leonardo Da Vinci programme project (2010)

as they perform the function of intermediation and thus determine the flow of funds. The **financial regulators** perform the role of monitoring and regulating the participants in the financial system.

Financial markets studies, based on capital market theory, focus on the financial system, the structure of interest rates, and the pricing of financial assets. An **asset** is any resource that is expected to provide future benefits, and thus possesses economic value. Assets are divided into two categories: tangible assets with physical properties and intangible assets. An *intangible asset* represents a legal claim to some future

economic benefits. The value of an intangible asset bears no relation to the form, physical or otherwise, in which the claims are recorded.

Financial assets, often called **financial instruments**, are intangible assets, which are expected to provide future benefits in the form of a claim to future cash. Some financial instruments are called *securities* and generally include stocks and bonds.

Any transaction related to financial instrument includes at least two parties:

- 1) The party that has agreed to make future cash payments and is called the *issuer*;
- 2) The party that owns the financial instrument, and therefore the right to receive the payments made by the issuer, is called the *investor*.

Financial assets provide the following key economic **functions**.

1. They allow the transfer of funds from those entities, who have surplus funds to invest to those who need funds to invest in tangible assets;
2. They redistribute the unavoidable risk related to cash generation among deficit and surplus economic units.

The claims held by the final wealth holders generally differ from the liabilities issued by those entities who demand those funds. Their role is performed by the specific entities operating in financial systems, called **financial intermediaries**. The latter ones transform the final liabilities into different financial assets preferred by the public.

Financial markets and their economic functions

A financial market is a market where financial instruments are exchanged or traded. The positive contribution expected from the financial market ranges from assemblage of savers and users from complicated economic development. So the financial market is presumed to be an agent of economic development. It mobilizes the precious savings of the people and hands it to the productive ventures. The ventures, after using the funds, provide rewards through these financial markets.

Financial markets provide the following three major **economic functions**:

- 1) Price discovery
- 2) Liquidity
- 3) Reduction of transaction costs
- 4) Mobilization of Savings
- 5) Economic Development

1) **Price discovery** function means that transactions between buyers and sellers of financial instruments in a financial market determine the price of the traded asset. At the same time the required return from the investment of funds is determined by the participants in a financial market. The motivation for those seeking funds (deficit units) depends on the required return that investors demand. It is these functions of financial markets that signal how the funds available from those who want to lend or invest funds will be allocated among those needing funds and raise those funds by issuing financial instruments.

2) **Liquidity** function provides an opportunity for investors to sell a financial instrument, since it is referred to as a measure of the ability to sell an asset at its fair market value at any time. Without liquidity, an investor would be forced to hold a financial instrument until conditions arise to sell it or the issuer is contractually obligated to pay it off. Debt instrument is liquidated when it matures, and equity instrument is until the company is either voluntarily or involuntarily liquidated. All financial markets provide some form of liquidity. However, different financial markets are characterized by the degree of liquidity.

3) The function of **reduction of transaction costs** is performed, when financial market participants are charged and/or bear the costs of trading a financial instrument. In market economies the economic rationale for the existence of institutions and instruments is related to transaction costs, thus the surviving institutions and instruments are those that have the lowest transaction costs.

4) **Mobilization of savings**: Capable financial markets mobilize the savings from different strata to mediate the same to productive ventures. Banks, Capital Markets and other non bank mediators efficiently collect the surplus money from the people and hand the same to the productive ventures. Depending up on the circumstances and characteristics of the economy, these intermediaries determine about the type of sector in which the savings must be mobilized. Thus different avenues- agriculture, industry and service sector got funds for their long term and short term requirements. Apart from the selection of sectors, these mediators are required to select proper instruments to make financial intermediation more meaningful.

5) **Economic Development**: Surplus of income after consumption properly channelized to productive sectors and thus more employment is made. This way, a cyclic one, shall be strengthened or catalyzed with the proper functioning of financial market. Augmented demand of products automatically augments the demand for financial products. This is because; long term and short term funds are important components of production. This surplus, generally given by the users of the products, flows through financial markets. Users of the products are the factor providers to the firm.

Geert Bekaert and Campbell R Harvey (1997) explored the link between financial markets and economic growth with a special emphasis on the stock market and capital market integration. They stressed the role of regulators in making financial markets an engine for economic growth. So the role of powerful regulators shall not be overemphasized to augment the growth.

Financial intermediaries and their functions

Financial intermediary is a special financial entity, which performs the role of efficient allocation of funds, when there are conditions that make it difficult for lenders or investors of funds to deal directly with borrowers of funds in financial markets. Financial intermediaries include depository institutions, insurance companies, regulated investment companies, investment banks, and pension funds.

The role of financial intermediaries is to create more favourable transaction terms than could be realized by lenders/investors and borrowers dealing directly with each other in the financial market. Financial intermediaries obtain funds from lenders or investors and lending or investing the funds that they borrow to those who need funds.

The funds that a financial intermediary acquires become, depending on the financial claim, either the liability of the financial intermediary or equity participants of the financial intermediary. The funds that a financial intermediary lends or invests become the asset of the financial intermediary.

Financial intermediaries are engaged in transformation of financial assets, which are less desirable for a large part of the investing public into other financial assets—their own liabilities—which are more widely preferred by the public.

Structure of Financial Markets

Money market is the sector of the financial market that includes financial instruments that have a maturity or redemption date that is one year or less at the time of issuance. These are mainly **wholesale markets**. The **capital market** is the sector of the financial market where long-term financial instruments issued by corporations and governments trade. Here “long-term” refers to a financial instrument with an original maturity greater than one year and perpetual securities (those with no maturity). There are two types of capital market securities: those that represent shares of ownership interest, also called **equity**, issued by corporations, and those that represent indebtedness, or **debt** issued by corporations and by the state and local governments.

Financial markets can be classified in terms of **cash market** and **derivative markets**. The **cash market**, also referred to as the **spot market**, is the market for the immediate purchase and sale of a financial instrument. In contrast, some financial instruments are contracts that specify that the contract holder has either the obligation or the choice to buy or sell another something at or by some future date. The “something” that is the subject of the contract is called the *underlying (asset)*. The underlying asset is a stock, a bond, a financial index, an interest rate, a currency, or a commodity. Because the price of such contracts derives their value from the value of the underlying assets, these contracts are called **derivative instruments** and the market where they are traded is called the **derivatives market**.

When a financial instrument is first issued, it is sold in the **primary market**. A **secondary market** is such in which financial instruments are resold among investors. No new capital is raised by the issuer of the security. Trading takes place among investors. Secondary markets are also classified in terms of organized stock exchanges and over-the counter (OTC) markets.

Unit 2 Players in Financial Markets

Financial Institutions

A financial institution (FI) is a company engaged in the business of dealing with monetary transactions, such as deposits, loans, investments and currency exchange. Financial institutions encompass a broad range of business operations within the financial services sector, including banks, trust companies, insurance companies, and brokerage firms or investment dealers.

Financial institutions are the intermediaries who facilitate smooth functioning of the financial system by creating a link between savers and borrowers. They mobilize savings of the surplus units and allocate them in productive investments promising a better rate of return. Financial institutions also provide services to entities seeking advice on various issues ranging from restructuring to diversification of investments. They provide a whole range of services to the entities who want to raise funds from the markets and elsewhere. Financial institutions act as financial intermediaries, because they act as middlemen between savers and borrowers.

Types of financial institutions

These financial institutions may be of two types:

1. Banking institutions
2. Non-Banking institutions

1. Banking Institutions

A banking institution (also referred to as a universal or commercial bank) can range from a large financial institution with a highly visible brand name and an international presence to a small organization with a local presence. A banking institution's financing activities generally involve various types of lending, such as corporate finance, housing, project finance, retail, short-term finance, small-medium enterprises, trade, and others. Alternatively, the focus of a banking institution may be only on specific transactions with clients that meet certain requirements and within certain industry sectors. Banking institutions may also provide financial products with a focus on environmental business opportunities. The main legislation governing commercial banks in India is the banking regulation act, 1949. Indian banking institutions can be broadly classified into two categories:

1. Organized sector
2. Unorganized sector

1) Organized sector

The organized banking sector consists of commercial banks, cooperative banks, regional rural banks and foreign banks.

a) Commercial banks

Commercial banks form a significant part of the country's Financial Institution System. Commercial Banks are those profit seeking institutions which accept deposits from general public and advance money to individuals like household, entrepreneurs, businessmen etc. with the prime objective of earning profit in the form of interest, commission etc. The operations of all these banks are regulated by the Reserve Bank of India, which is the central bank and

supreme financial authority in India. The main source of income of a commercial bank is the difference between these two rates which they charge to borrowers and pay to depositors.

The Banking Companies Act of 1949 defines banking company as "accepting for the purpose of lending or investment of deposit money from the public, repayable on demand or otherwise and withdrawable by cheque, drafts, order or otherwise".

b) Cooperative banks

Cooperative banks serve an important role in the Indian economy, especially in rural areas. In urban areas, they mainly serve small industry and self-employed workers. They are registered under the Cooperative Societies Act, 1912. They are regulated by the Reserve Bank of India under the Banking Regulation Act, 1949 and Banking Laws (Application to Co-operative Societies) Act, 1965. Anyonya Sahakari Mandali, established in 1889 in the province of Baroda, is the earliest known cooperative credit union in India.

c) Regional rural banks

Regional Rural Banks in India are an integral part of the rural credit structure of the country. Since the very beginning, when the Regional Rural Banks in India (RRBs) were established in October 2, 1975, these banks played a pivotal role in the economic development of the rural India. The main goal of establishing regional rural banks in India was to provide credit to the rural people who are not economically strong enough, especially the small and marginal farmers, artisans, agricultural labours, and even small entrepreneurs.

d) Foreign banks

The story of foreign banks in India goes back to the 19th century when the colonial economy brought with it the need for modern banking services, uniform currency and remittances by British army personnel and civil servants. The opening-up of the economy to increased participation by foreign players created greater opportunities for foreign banks to work with their multinational clients in India. In the more recent past, foreign banks have followed Indian corporate entities in their outbound expansions. The survival of the banking system in India through the financial crisis has demonstrated its strengths and most foreign banks present in India believe that India is a market with undeniable potential.

2. Unorganized sector

The unorganized banking sector include indigenous bankers, money lenders etc.

a) Indigenous bankers

Indigenous bankers are private firms or individuals who operate as banks and as such both receive deposits and give loans. Like banks, they are also financial intermediaries. They should be distinguished from professional moneylenders whose primary business is not banking but money lending. A pure moneylender lends his own funds an indigenous banker raises a part of his loanable funds from the public in deposits or other forms. A moneylender conducts his transactions in cash, while a large part of the transactions of an indigenous banker are based on dealings in short term credit instruments like hundis and commercial bills.

The system of indigenous banking in India dates back to ancient times. Until the middle of the nineteenth century the indigenous financial agencies constituted the bulk of the Indian financial

system. They provided credit not only to traders and producers but also to the governments of the day.

b) Money lenders

A moneylender is a person or group who typically offers small personal loans at high rates of interest and is distinct from banks and financial institutions that typically provide such loans. The high interest rates charged by them are justified in many cases by the risk involved. They play an active role in lending to people with less access to banking activities, such as the unbanked or under-banked or in situations where borrowers do not have good credit history. They sometimes lend to people like gamblers and compulsive shoppers who often get into debt. Many countries have laws in place that require moneylenders to be registered, and set limits on the interest rates that may be charged. For example, in India licensed moneylenders are governed by Money Lenders Acts of respective states.

B) Non Banking Financial Institutions

Non Bank financial Institutions engage in financial intermediation other than banking activities. Here, Insurance companies, development financial institutions, stock broking agents etc, constitute the non banking institutions. In short, the financial institutions other than the banks are non banking financial institutions.

Types of Non Banking Financial Entities (Regulated by RBI)

1. Non-Banking Financial Company
2. Equipment leasing company (EL)
3. Hire purchase finance company (HP)
4. Investment company (IC)
5. Loan company (LC)
6. Residuary non-banking company (RNBC)
7. Mutual Benefit Financial Company (MBFC)
8. Mutual Benefit Company (MBC) i.e., potential *Nidhi* company
9. Miscellaneous non-banking company (MNBC)

Non Banking Finance Company (NBFC)

NBFCs are financial intermediaries engaged primarily in the business of accepting deposits, delivering credit. NBFCs supplement the role of banking sector in meeting the increasing financial needs of the corporate sector, delivering credit to the unorganized sectors to small local borrowers. Apart from the corporate requirements, NBFCs cater the micro credit requirements of households. However these companies, generally, does not engage in the conventional banking activities like issuance of cheques etc. In terms of the Section 45-1(f) read with Section 45-i(c) of the RBI Act, 1934, as amended in 1997, their principal business is that of receiving deposits or that of a financial institution, such as lending, investment in securities, hire purchase finance or equipment leasing.

Financial instruments

A financial instrument can be classified by the type of claims that the investor has on the issuer. A financial instrument in which the issuer agrees to pay the investor interest plus repay

the amount borrowed is a **debt instrument**. A debt instrument also referred to as an *instrument of indebtedness*, can be in the form of a note, bond, or loan. The interest payments that must be made by the issuer are fixed contractually. For example, in the case of a debt instrument that is required to make payments in Euros, the amount can be a fixed Euro amount or it can vary depending upon some benchmark. The investor in a debt instrument can realize no more than the contractual amount. For this reason, debt instruments are often called **fixed income instruments**.

Fixed income instruments form a wide and diversified fixed income market. In contrast to a debt obligation, an **equity instrument** specifies that the issuer pays the investor an amount based on earnings, if any, after the obligations that the issuer is required to make to investors of the firm's debt instruments have been paid. **Common stock** is an example of equity instruments. Some financial instruments due to their characteristics can be viewed as a mix of debt and equity. **Preferred stock** is a financial instrument, which has the attribute of a debt because typically the investor is only entitled to receive a fixed contractual amount. However, it is similar to an equity instrument because the payment is only made after payments to the investors in the firm's debt instruments are satisfied. Another "combination" instrument is a **convertible bond**, which allows the investor to convert debt into equity under certain circumstances. Because preferred stockholders typically are entitled to a fixed contractual amount, preferred stock is referred to as a **fixed income instrument**.

From the perspective of country origin, its financial market can be broken down into an internal market and an external market. The **internal market**, also called the **national market**, consists of two parts: the domestic market and the foreign market. The **domestic market** is where issuers domiciled in the country issue securities and where those securities are subsequently traded.

The **foreign market** is where securities are sold and traded outside the country of issuers. **External market** is the market where securities with the following two distinguishing features are trading: 1) at issuance they are offered simultaneously to investors in a number of countries; and 2) they are issued outside the jurisdiction of any single country. The external market is also referred to as the **international market**, **offshore market**, and the **Euromarket** (despite the fact that this market is not limited to Europe).

Financial Services

Financial Services can be described as the process of acquiring the financial good. It involves the transaction required to obtain the financial good. The financial sector covers many different types of transactions in such areas as real estate, consumer finance, banking, and insurance. The financial services intermediaries (Financial Sector Intermediaries) cover a broad spectrum of investment funding, including securities. It channels money from savers to borrowers, and it matches people who want to lower risk with those willing to take on that risk. An individual may not have expertise to deal with the complicated mediation function as it necessitates prudential buying and selling. Time factor also contribute in these transactions. Lending and

collecting payments are complicated and risky, and savers often don't have the expertise or time to do so. So it is necessary to entrust some mediator to deal. Thus the financial intermediaries are experts with distinguished capability to mediate the financial transactions. Banks, Insurers, Non Banking Financial Institutions are financial Service providers. Intermediary matches people who want to lower risk with those willing to take on that risk. Financial services are crucial to the functioning of an economy. Without them, individuals with money to save might have trouble finding those who need to borrow, and vice versa. And without financial services, people would be so intent on saving to cover risk that they might not buy very many goods and services². There are two types of financial services;

- a. **Fund Based financial Services:** Hire purchases, Installment etc are the fund based financial services provided by some financial intermediaries. These firms provide short term and long term financial support to purchase the asset (or in the form of assets itself). They charge interest as their remuneration.
- b. **Fee Based Financial Services:** Specialized institutions charge interest for their advices. Share issue management, IPO management, Portfolio investment advices are some of the fee based financial services provided by the financial service providers. Fee is the main source of income for such type of service providers.

Financial market regulation

In general, financial market regulation is aimed to ensure the fair treatment of participants. Many regulations have been enacted in response to fraudulent practices. One of the key aims of regulation is to ensure business disclosure of accurate information for investment decision making. When information is disclosed only to limited set of investors, those have major advantages over other groups of investors. Thus regulatory framework has to provide the equal access to disclosures by companies³. In India, there is a broad coverage of norms, regulations and rules that are timely developed by various institutions headed by the Union Government. Securities and Exchange Board of India (SEBI), Reserve Bank of India (RBI), Companies Act are some of them. A brief description of such bodies and type of regulation will be followed in the following discussion

Financial Derivatives

Financial derivatives are financial instruments that are linked to a specific financial instrument or indicator or commodity, and through which specific financial risks can be traded in financial markets in their own right. Transactions in financial derivatives should be treated as separate transactions rather than as integral parts of the value of underlying transactions to which they may be linked. The value of a financial derivative derives from the price of an underlying item, such as an asset or index. Unlike debt instruments, no principal amount is advanced to be repaid

² Irena Asmundson (2011), What Are Financial Services?, Back to Basics, Finance & Development.

³ Financial Markets, Leonardo da Vinci programme project (2010)

and no investment income accrues. Financial derivatives are used for a number of purposes including risk management, hedging, arbitrage between markets, and speculation.

Financial derivatives enable parties to trade specific financial risks -- such as interest rate risk, currency, equity and commodity price risk, and credit risk, etc -- to other entities who are more willing, or better suited, to take or manage these risks, typically, but not always, without trading in a primary asset or commodity. The risk embodied in a derivatives contract can be traded either by trading the contract itself, such as with options, or by creating a new contract which embodies risk characteristics that match, in a countervailing manner, those of the existing contract owned.

Financial derivatives contracts are usually settled by net payments of cash, often before maturity for exchange traded contracts such as commodity futures. Cash settlement is a logical consequence of the use of financial derivatives to trade risk independently of ownership of an underlying item. However, some financial derivative contracts, particularly involving foreign currency, are associated with transactions in the underlying item⁴.

Derivatives markets

Derivatives are traded either on organized exchanges or in OTC (Over the Counter) markets. The differences between the exchange-traded and OTC derivatives are not limited to where they are traded but also how. In exchange-traded markets, derivatives contracts are standardized with specific delivery or settlement terms. Derivative trades in OTC markets are bilateral in nature. All contract terms such as delivery quality, quantity, location, date and prices are negotiable between the two parties. Transactions can be arranged by telephone or other communication means and prices are not reported publicly⁵. Trading in derivatives of securities in India started in June 2000 with the enactment of enabling legislation in early 2000. SEBI allowed the derivative segment of two stock exchanges, i.e. NSE and BSE, and their clearing house/corporation to commence trading and settlement in approved derivative contracts.

Derivatives Market in India⁶

The first step towards introduction of derivatives trading in India was the promulgation of the Securities Laws (Amendment) Ordinance, 1995, which withdrew the prohibition on options in securities. The market for derivatives, however, did not take off, as there was no regulatory framework to govern trading of derivatives. SEBI set up a 24-member committee under the Chairmanship of Dr. L. C. Gupta on November 18, 1996 to develop appropriate regulatory framework for derivatives trading in India. The committee submitted its report on March 17, 1998 prescribing necessary pre-conditions for introduction of derivatives trading in India. The committee recommended that derivatives should be declared as 'securities' so that regulatory framework applicable to trading of 'securities' could also govern trading of securities. SEBI also set up a group in June 1998 under the chairmanship of Prof. J. R. Varma, to recommend measures for risk containment in derivatives market in India. The report, which was submitted in

⁴ Financial Derivatives(1998), Statistics Department, International Monetary Fund

⁵ (Chui, 2008)

⁶ Securities Market (Basic) Module- NCFM, National Stock Exchange Of India Limited

October 1998, worked out the operational details of margining system, methodology for charging initial margins, broker net worth, deposit requirement and real-time monitoring requirements.

The SCRA was amended in December 1999 to include derivatives within the ambit of 'securities' and the regulatory framework was developed for governing derivatives trading. The act also made it clear that derivatives shall be legal and valid only if such contracts are traded on a recognized stock exchange, thus precluding OTC derivatives. The government also rescinded in March 2000, the three-decade old notification, which prohibited forward trading in securities.

Derivatives trading commenced in India in June 2000 after SEBI granted the final approval to this effect in May 2000. SEBI permitted the derivatives segments of two stock exchanges NSE and BSE, and their clearing house/ corporation to commence trading and settlement in approved derivatives contracts. To begin with, SEBI approved trading in index futures contracts based on S&P CNX Nifty and BSE-30 (Sensex) index. This was followed by approval for trading in options which commenced in June 2001 and the trading in options on individual securities commenced in July 2001. Futures contracts on individual stocks were launched in November 2001. Futures and Options contracts on individual securities are available on more than 200 securities. Trading and settlement in derivative contracts is done in accordance with the rules, byelaws, and regulations of the respective exchanges and their clearing house/corporation duly approved by SEBI and notified in the official gazette.

Unit 3 Securities Market in India

Securities Market in India

The securities markets in India have witnessed numerous policy initiatives, which has developed the market micro-structure, modernized operations and broadened investment choices for the investors. The irregularities in the securities transactions in the last quarter of 2000-01, hastened the introduction and implementation of several reforms. A Joint Parliamentary Committee was constituted to go into the irregularities and manipulations in all their ramifications in all transactions relating to securities and decisions were taken to complete the process of demutualization and corporatization of stock exchanges to separate ownership, management and trading rights on stock exchanges and to effect legislative changes for investor protection, and to enhance the effectiveness of SEBI as the capital market regulator. Rolling settlement on T+5 basis was introduced in respect of most active 251 securities from July 2, 2001 and in respect of balance securities from 31st December 2001. Rolling settlement on T+3 basis started for all listed securities from April 1, 2002 and subsequently on T+2 basis from April 1, 2003⁷.

The Indian stock market regulator, Securities & Exchange Board of India (SEBI) allowed the direct market access (DMA) facility to investors in India on April 3, 2008. To begin with, DMA was extended to the institutional investors. In addition to the DMA facility, SEBI also decided to

⁷ Securities Market (Basic) Module- NCFM, National Stock Exchange of India Limited

permit all classes of investors to short sell and the facility for securities lending and borrowing scheme was operationalised on April 21, 2008.

Stock Exchanges

Stock Exchange means –

(a) Any body of individuals, whether incorporated or not, constituted before corporatisation and demutualization under sections 4A and 4B, or

(b) a body corporate incorporated under the Companies Act, 1956 (1 of 1956) whether under a scheme of corporatisation and demutualization or otherwise, for the purpose of assisting, regulating or controlling the business of buying, selling or dealing in securities.

SEBI is authorised to call for periodical returns from the recognised Stock Exchanges and make enquiries in relation to their affairs. Every Stock Exchange is obliged to furnish annual reports to SEBI. Recognized Stock Exchanges are allowed to make bylaws for the regulation and control of contracts but subject to the previous approval of SEBI and SEBI has the power to amend the said bylaws. The Central Government and SEBI have the power to supersede the governing body of any recognized stock exchange. The Central Government and SEBI also have power to suspend the business of the recognized stock exchange to meet any emergency as and when it arises, by notifying in the official gazette.

The National Stock Exchange (NSE)

The National Stock Exchange (NSE), established in 1992, is India's leading stock exchange covering various cities and towns across the country. NSE was set up by some leading institutions to provide a modern, fully automated screen-based trading system with the aim of national reach. The Exchange has brought about unparalleled transparency, speed & efficiency, safety and market integrity. It has set up facilities that serve as a model for the securities industry in terms of systems, practices and procedures. NSE has played a catalytic role in reforming the Indian securities market in terms of microstructure, market practices and trading volumes. The market today uses state-of-art information technology to provide an efficient and transparent trading, clearing and settlement mechanism, and has witnessed several innovations in products & services viz. demutualization of stock exchange governance, screen based trading, compression of settlement cycles, dematerialization and electronic transfer of securities, securities lending and borrowing, professionalization of trading members, fine-tuned risk management systems, emergence of clearing corporations to assume counterparty risks, market of debt and derivative instruments and intensive use of information technology.

The investor community gets easy access to liquidity and markets through a network of more than 200,000+ NSE terminals across 600 districts through more than 34000+ NSE member branches. In addition, investors can also access the NSE platform through internet and mobile applications. NSE has also introduced services like DMA, FIX capabilities and co-location facilities for more evolved categories of investors. NSE has made its global presence felt with a wide range of cross-listing arrangements with leading global exchanges across American, European and Asian markets.

Trading System

The NSE trading system called 'National Exchange for Automated Trading' (NEAT) is a state-of-the-art, fully automated, screen-based trading system which adopts the principle of an order-driven market. It facilitates an automated online system providing a nationwide anonymous, order-driven, screen-based trading platform. In addition to the NEAT system, NSE has provided a web-based system, NOW (NEAT on Web) that allows its users to trade in all the products being ordered by NSE.

National Securities Clearing Corporation Limited (NSCCL) is the clearing and settlement agency for all deals executed on the Derivatives (Futures & Options) segment. NSCCL acts as legal counterparty to all deals on NSE's F&O segment and guarantees settlement. A Clearing Member (CM) of NSCCL has the responsibility of clearing and settlement of all deals executed by Trading Members (TM) on NSE, who clear and settle such deals through them.

Mutual Funds Service System (MFSS)

NSE launched India's first Mutual Fund Service System (MFSS) on November 30, 2009. It is an online system that allows purchase and redemption of mutual fund schemes. It is essentially an order collection system that eliminates the physical paper-based mechanism that is currently prevalent in the mutual fund industry⁸.

Derivatives on Volatility Index (NVIX), Securities Lending & Borrowing Scheme (SLBS) are some of the current innovative offerings of NSE.

Table I Trading Value of different market segments NSE Ltd (Crores)

Segment/Year	2011-12	2012-13	2013-14	2014-15	2015-16
Capital Market	2,810,893	2,708,279	2,808,488	4,329,655	4,236,983
Equity Futures & Options	31,349,732	31,533,004	38,211,408	55,606,453	64,825,834
Wholesale Debt Market	633,179	792,214	851,434	772,369	569,495
Currency F&O *	4,674,990	5,274,465	4,012,513	3,023,908	4,501,886
Interest Rate Futures **	3,959	0.22	30,173	421,558	526,425
Total	39,472,753	40,307,962	45,914,017	64,153,943	74,660,622

Source: Fact Book 2016 NSE Ltd

*Trading in Currency Futures commenced on August 28, 2008

** Trading in Interest Rate Futures were Relaunch on January 21,2010

Table II Performance of NSE Indices during the year 2015-16

Indices	Record high		Closing index values (31-03-16)	Avg. Daily Volatility (%)	Y-o-Y Returns
	Value	Date			
Nifty 50	8,844.80	15-Apr-2015	7,738.40	1.09	-8.86
Nifty 100	8,895.20	15-Apr-2015	7,832.15	1.09	-8.07

⁸ National Stock Exchange of India Limited, Corporate Brochure

Nifty 500	7,299.55	15-Apr-2015	6,452.15	1.10	-7.54
Nifty FMCG	21,659.50	15-Apr-2015	19,764.15	1.16	-0.58
Nifty IT	12,369.40	15-Apr-2015	11,309.30	1.14	-6.40
Nifty Free Float Midcap 100	14,237.60	10-Aug-2015	12,752.60	1.27	-1.91
Nifty Next 50	21,730.80	10-Aug-2015	18,756.60	1.25	-3.52
Nifty Financial Services	7,886.35	16-Jul-2015	6,579.40	1.39	-12.84
Nifty Midcap 50	3,581.70	15-Apr-2015	3,200.60	1.62	-5.13
IISL CNX Petrochemicals*	23,680.40	29-Jul-2015	17,655.12	1.63	-16.32
IISL CNX Pharmaceuticals*	21,968.24	8-Apr-2015	17,830.90	1.40	-12.79

Source: Fact Book 2016 NSE Ltd

Note: * Closing Record High, Other - Record Intra-day High

Note: Volatility is calculated as standard deviation of the Natural Log of returns for the respective month/year.

Bombay Stock Exchange (BSE)

History of Bombay Stock Exchange is the excerpts of national history itself. Established in 1875, BSE (formerly known as Bombay Stock Exchange Ltd.), is Asia's first & the Fastest Stock Exchange in world with the speed of 6 micro seconds and one of India's leading exchange groups. Over the past 140 years, BSE has facilitated and conditioned the growth of the Indian corporate sector by providing it an efficient capital-raising platform. Popularly known as BSE, the bourse was established as "The Native Share & Stock Brokers' Association" in 1875. BSE is a corporatized and demutualised entity, with a broad shareholder-base which includes two leading global exchanges, Deutsche Bourse and Singapore Exchange as strategic partners. BSE provides an efficient, effective and transparent market for trading in equity, debt instruments, derivatives, mutual funds. It also has a platform for trading in equities of small-and- medium enterprises.

More than 5500 companies are listed on BSE making it world's No. 1 exchange in terms of listed members. This can be understood from the volume of market capitalization. The companies listed on BSE command a total market capitalization of USD 1.64 Trillion as of Sep 2015. It is also one of the world's leading exchanges (5th largest in September 2015) for Index options trading (Source: World Federation of Exchanges).

BSE is providing a host of other services to capital market participants including risk management, clearing, settlement, market data services and education. It has a global reach with abundant customers around the world and a nation-wide presence. BSE systems and processes are designed to safeguard market integrity, drive the growth of the Indian capital market and stimulate innovation and competition across all market segments. BSE is the first exchange in India and second in the world to obtain an **ISO 9001:2000 certification**. It is also the first Exchange in the country and second in the world to receive Information Security Management System Standard BS 7799-2-2002 certification for its On-Line trading System (BOLT). It operates one of the most respected capital market educational institutes in the country (the BSE

Institute Ltd.). BSE also provides depository services through its Central Depository Services Ltd. (CDSL) arm.

BSE's popular equity index - the **S&P BSE SENSEX** - is India's most widely tracked stock market benchmark index. It is traded internationally on the EUREX as well as leading exchanges of the BRICS nations (Brazil, Russia, China and South Africa). Its recent milestones include the launching of BRICSMART indices derivatives, BSE-SME Exchange platform, S&P BSE GREENEX to promote investments in Green India.

The Over the Counter Exchange of India (OTCEI)

It is also known as the Over-the-Counter Exchange of India and is based in Mumbai, Maharashtra. It is India's first exchange for small companies, as well as the first screen-based nationwide stock exchange in India. OTCEI was set up to access high-technology enterprising promoters in raising finance for new product development in a cost-effective manner and to provide a transparent and efficient trading system to investors. **Stock exchanges** are central trading locations where financial instruments are traded. In contrast, an OTC (Over the Counter) market is generally where unlisted financial instruments are traded. OTCEI is promoted by the Unit Trust of India, the Industrial Credit and Investment Corporation of India, the Industrial Development Bank of India, the Industrial Finance Corporation of India, and other institutions, and is a recognized stock exchange under the SCR Act.

Securities and Exchange Board of India (SEBI Act), 1992:

The SEBI Act, 1992 was enacted to empower SEBI with statutory powers for (a) protecting the interests of investors in securities, (b) promoting the development of the securities market, and (c) regulating the securities market. Its regulatory jurisdiction extends over corporates in the issuance of capital and transfer of securities, in addition to all intermediaries and persons associated with securities market. It can conduct enquiries, audits and inspection of all concerned and adjudicate offences under the Act. It has powers to register and regulate all market intermediaries and also to penalize them in case of violations of the provisions of the Act, Rules and Regulations made there under. SEBI has full autonomy and authority to regulate and develop an orderly securities market⁹.

It has been given necessary autonomy and authority to regulate and develop an orderly securities market. All the intermediaries and persons associated with securities market, viz., brokers and sub-brokers, underwriters, merchant bankers, bankers to the issue, share transfer agents and registrars to the issue, depositories, Participants, portfolio managers, debentures trustees, foreign institutional investors, custodians, venture capital funds, mutual funds, collective investments schemes, credit rating agencies, etc., shall be registered with SEBI and shall be governed by the SEBI Regulations pertaining to respective market intermediary.

Constitution of SEBI

The Central Government has constituted a Board by the name of SEBI under Section 3 of SEBI Act. The head office of SEBI is in Mumbai. SEBI may establish offices at other places in India. SEBI consists of the following members, namely:-

- (a) A Chairman;
- (b) Two members from amongst the officials of the Ministry of the Central Government dealing with Finance and administration of Companies Act, 1956;
- (c) One member from amongst the officials of the Reserve Bank of India;

⁹ Securities Market (Basic) Module- NCFM, National Stock Exchange Of India Limited

(d) Five other members of whom at least three shall be whole time members to be appointed by the Central Government.

The general superintendence, direction and management of the affairs of SEBI vests in a Board of Members, which exercises all powers and do all acts and things which may be exercised or done by SEBI. The Chairman also has powers of general superintendence and direction of the affairs of the Board and may also exercise all powers and do all acts and things which may be exercised or done by the Board. The Chairman and members referred to in (a) and (d) above shall be appointed by the Central Government and the members referred to in (b) and (c) shall be nominated by the Central Government and the Reserve Bank respectively. The Chairman and the other members are from amongst the persons of ability, integrity and standing who have shown capacity in dealing with problems relating to securities market or have special knowledge or experience of law, finance, economics, accountancy, administration or in any other discipline which, in the opinion of the Central Government, shall be useful to SEBI.

Functions of SEBI

SEBI has been obligated to protect the interests of the investors in securities and to promote and development of, and to regulate the securities market by such measures as it thinks fit.

The measures referred to therein may provide for:-

- (a) Regulating the business in stock exchanges and any other securities markets;
- (b) Registering and regulating the working of stock brokers, sub-brokers, share transfer agents, bankers to an issue, trustees of trust deeds, registrars to an issue, merchant bankers, underwriters, portfolio managers, investment advisers and such other intermediaries who may be associated with securities markets in any manner;
- (c) Registering and regulating the working of the depositories, participants, custodians of securities, foreign institutional investors, credit rating agencies and such other intermediaries as SEBI may, by notification, specify in this behalf;
- (d) Registering and regulating the working of venture capital funds and collective investment schemes including mutual funds;
- (e) Promoting and regulating self-regulatory organizations;
- (f) Prohibiting fraudulent and unfair trade practices relating to securities markets;
- (g) Promoting investors' education and training of intermediaries of securities markets;
- (h) Prohibiting insider trading in securities;
- (i) Regulating substantial acquisition of shares and take-over of companies;
- (j) Calling for information from, undertaking inspection, conducting inquiries and audits of the stock exchanges, mutual funds, other persons associated with the securities market, intermediaries and self-regulatory organizations in the securities market;
- (k) Calling for information and record from any bank or any other authority or board or corporation established or constituted by or under any Central, State or Provincial Act in respect of any transaction in securities which is under investigation or inquiry by the Board;
- (l) Performing such functions and exercising according to Securities Contracts (Regulation) Act, 1956, as may be delegated to it by the Central Government;
- (m) Levying fees or other charges for carrying out the purpose of this section;
- (n) Conducting research for the above purposes;
- (o) Calling from or furnishing to any such agencies, as may be specified by SEBI, such information as may be considered necessary by it for the efficient discharge of its functions;
- (p) Performing such other functions as may be prescribed.

Unit 4 International Stock Markets

Characteristics of Global Financial Markets¹⁰

1. The global financial system is vast and varied; it consists of many different types of financial institutions, as well as financial markets in stocks, bonds, commodities, and derivatives.
2. The global financial system promotes economic growth by:
 - a. creating money and money-like claims;
 - b. facilitating specialization and promoting trade;
 - c. facilitating risk management, enabling individuals and firms to be insured against adversity in bad states of the world, thereby increasing investment and global economic growth;
 - d. Mobilizing resources globally and thereby improving the effectiveness with which local challenges are met;
 - e. Obtaining information for the evaluation of businesses and individuals and allocating capital, thereby managing problems of asymmetric information that make it difficult or costly for individuals and firms to obtain capital and
 - f. Increasing the group of opportunities available to companies, individuals and businessmen to engage to and participate in and contribute to global economic growth.
3. The global financial system is highly interconnected. This interconnectedness increases its complexity and the need for international harmonization of regulation.
4. Firms use the global financial markets to raise capital. The depth and liquidity of the global financial markets help companies reduce their capital costs, improve access to financing, invest more, and grow.
5. Global financial system promotes global trade through financing mechanisms outside the banking system, such as trade credit.

International Stock Markets

There are 16 stock exchanges (bourse) in the world that have a market capitalization of over US\$ 1 trillion each. They are sometimes referred to as the "\$1 Trillion Club". These 16 exchanges accounted for 87% of global market capitalization in 2015. New York Stock Exchange (US), NASDAQ (US), London Stock Exchange Group (London), Japan Exchange Group (Tokyo), Shanghai Stock Exchange (Shanghai), Hong Kong Stock Exchange (Hong Kong), Euronext (European Union), Shenzhen Stock Exchange (Shenzhen), TMX Group (Toronto), Deutsche Borse (Frankfurt), BSE, and NSE are prominent among them¹¹.

New York Stock Exchange (NYSE)

The exchange offers many kinds of financial products and services, including cash equities, futures, options, exchange-traded products, bonds, market data, and commercial technology solutions. It is the world's largest stock exchange by market capitalization of its listed companies at US\$19.3 trillion as of June 2016. With many Chinese companies deciding to list on the NYSE, it is a well-known bourse in China. The average daily trading value was approximately US\$169 billion in 2013. The NYSE is owned by Intercontinental Exchange, an American holding company it also lists (NYSE: ICE). Previously, it was part of NYSE Euronext (NYSE).

¹⁰ International Financial Markets: A diverse System is the Key to Commerce, Winter 2015, Anjan Thakor, Centre for Capital Markets Competitiveness, Olin School of Business, Washington University in St. Louis.

¹¹ <https://en.wikipedia.org>

which was formed by the NYSE's 2007 merger with the fully electronic stock exchange Euronext. NYSE and Euronext now operate as divisions of Intercontinental Exchange.

NASDAQ Stock Market,

NASDAQ (currently stylized as **Nasdaq**), is an American stock exchange. It is the second-largest exchange in the world by market capitalization, behind only the New York Stock Exchange. The exchange platform is owned by Nasdaq, Inc., which also owns the OMX stock market network and several other US stock and options exchanges. **NASDAQ** is an acronym of **National Association of Securities Dealers Automated Quotations**. NASDAQ was founded in 1971 by the National Association of Securities Dealers (NASD), which divested itself of NASDAQ in a series of sales in 2000 and 2001. NASDAQ is owned and operated by Nasdaq, Inc., the stocks of which were listed on its own stock exchange marketing July 2, 2002, under the ticker symbol NDAQ.

The **London Stock Exchange Group plc** is a British-based stock exchange and financial information company. It is headquartered in London, United Kingdom. It owns the Borsa Italiana, MillenniumIT, Russell Investments, FTSE International, Exactpro, majority stake in LCH, majority stake in MTS and the London Stock Exchange.

Japan Exchange Group (JPX) is an Asian financial services corporation that operates multiple securities exchanges including Tokyo Stock Exchange and Osaka Securities Exchange. It was formed by the merger of the two companies on January 1, 2013. It is the world's third largest (behind NYSE Euronext and NASDAQ OMX Group) and Asia's largest bourse.

Shanghai Stock Exchange is a stock exchange that is based in the city of Shanghai, China. It is one of the two stock exchanges operating independently in the People's Republic of China, the other being the Shenzhen Stock Exchange. Shanghai Stock Exchange is the world's 5th largest stock market by market capitalization at US\$3.5 trillion as of February 2016, and 2nd largest in East Asia and Asia. Unlike the Hong Kong Stock Exchange, the Shanghai Stock Exchange is still not entirely open to foreign investors due to tight capital account controls exercised by the Chinese mainland authorities and often manipulated by the decisions of the Central Government.

The Stock Exchange of Hong Kong Limited (SEHK) is a stock exchange located in Hong Kong. It is East Asia's and Asia's third largest stock exchange in terms of market capitalization behind the Tokyo Stock Exchange and Shanghai Stock Exchange, and the sixth largest in the world before Euronext. As of 30 November 2013, SEHK had 1,615 listed companies, 776 of which are from mainland China, 737 from Hong Kong and 102 from abroad (e.g. Cambodia, Italy, Kazakhstan, etc.) Hong Kong Exchanges and Clearing owns SEHK and is itself listed on SEHK.

Euronext NV is a European stock exchange seated in Amsterdam, Brussels, London, Lisbon and Paris. In addition to cash and derivatives markets, the Euronext group provides listing market data, market solutions, custody and settlement services. Its total product offering includes equities, exchange-traded funds, warrants and certificates, bonds, derivatives, commodities and indices. As of the first quarter of 2014, Euronext was the largest in continental Europe with 1,300 issuers representing a €2.6 trillion market capitalization. Euronext merged with NYSE Group, Inc. on April 4, 2007 to form NYSE Euronext (NYX). On November 13, 2013 Intercontinental Exchange (NYSE: ICE), completed acquisition of NYSE Euronext. In June 2014 Euronext completed an initial public offering making it a standalone company again.

International Markets Overview

Table I Major Stock Indexes as on 26/Aug/2016

	Last	Chg	% Chg
Global Dow	2449.10	-1.52	-0.06
DJ Global Total Stock Market	3325.00	-2.98	-0.09
DJ Global exUS TSM	2194.59	-4.04	-0.18
DJ Asia-Pacific TSM	1456.90	-6.70	-0.46
Australia: S&P/ASX*	5515.50	-26.40	-0.48
China: Shanghai Composite*	3070.31	1.98	0.06
Hong Kong: Hang Seng*	22909.54	94.59	0.41
India: S&P BSE Sensex*	27782.25	-53.66	-0.19
Japan: Nikkei 225*	16360.71	-195.24	-1.18
Taiwan: TAIEX*	9131.72	16.25	0.18
Stoxx Europe 600	341.77	-0.25	-0.07
Belgium: Bel-20	3538.25	3.41	0.10
France: CAC 40	4403.17	-3.44	-0.08
Germany: DAX	10506.54	-23.05	-0.22
Italy: FTSE MIB	16625.89	-84.89	-0.51
Sweden: OMX Stockholm	505.07	0.87	0.17
UK: FTSE 100	6821.59	4.69	0.07
DJ Americas TSM	5256.72	1.04	0.02
Argentina: MerVal*	15900.77	85.65	0.54
Brazil: Bovespa*	57722.14	4.25	0.01
Canada: S&P/TSX*	14630.72	4.48	0.03

Source: The Wall Street Journal, US Edition, 26/Aug/2016, * Closing, I 7:27 a.m. EDT 08/26/16,

Analysis of International Financial Centers

Public markets with **strong institutional environments** and **robust governance** rules are better positioned to **attract foreign companies** because they make it possible for these firms to certify their quality. Again, Capital markets with stronger and better corporate governance requirements provide a more **transparent financial setting** for global investors and are therefore a more attractive place for internationally active firms to raise capital. The importance of financial integration is further underscored by the significance of the trade openness score. Larger and broader equity markets operating in countries or regions with higher economic growth and stronger economic fundamentals are better able to attract foreign listings and retain their own domestic issuing companies. Corporate issuers also tend to flock to equity markets operating in economic regions **with open trade policies** and stronger commitment to **internationalization**. Significant political events in many parts of the world including India and strong economic growth among developed and emerging-market economies like Asian Countries have led to deeper pools of capital and to more liquid and sophisticated financial markets adhering to better corporate governance principles. Analysis of aggregate global IPO inflows alone captured by raw volumes and in degree measures reveals that U.S. exchanges held a lead clear position of

dominance throughout the 1990s. U.S. stock exchanges have so far kept a leading position in primary equity activity, competition from the new and up-and-coming financial centers is rising. The greater propensity of foreign companies to issue domestically does not necessarily mean that U.S. stock markets are becoming less attractive in an absolute sense; instead, this trend may indicate that capital markets in developed countries have simply caught up with their U.S. counterparts¹².

Market making in international capital markets¹³

Financial intermediaries have played a significant role in the stock market design in the USA and Germany since the inception of stock markets in the nineteenth century. Even in today's electronic era, market makers continue to be widely used in one form or another as liquidity providers, stabilizers and order managers of the market.

Four factors are proposed that regulatory authorities in emerging markets should consider when deciding whether, and which of, the three market-making systems they should implement. These are:

- a. Current exchange design and the costs of restructuring,
- b. International and domestic investors' sentiment towards the exchange,
- c. Size of the emerging market and
- d. The market designs in countries hosting the target foreign capital.

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Questions

Short Answer Type Questions

1. What do you mean by Financial Market?

¹² Nicola Cetorelli, Stavros Peristiani (2009), Prestigious Stock Exchanges: A Network Analysis of International Financial Centers, Staff report No 384, Aug 2009, Federal Reserve Bank of New York.

¹³ Market making in international capital markets, Challenges and benefits of its implementation in emerging markets, Andreas Charitou, Marios Panayides (2009), *IJMF*.

2. Mention any two International Stock Exchanges
3. What do you mean by financial derivatives?
4. What are the financial instruments used in a financial system?
5. What is Money market?
6. What is NBFI?
7. Write a short note on the trading system of NSE
8. Write a short note on the OTCEI
9. Enumerate different types of financial services
10. What are the characteristics of global financial markets?

Essay Type Questions

1. What is the role of SEBI in regulating the financial market in India? Evaluate the recent initiatives of SEBI in this respect.
2. International Financial centers are the resulting ventures of strong institutional environments and robust governance. Comment
3. "Financial markets play a great role in the economic development of any country". In the light of the recent global financial issues and developments, appreciate the performance of major players in the financial market in India.
4. Evaluate the role and functions of major stock exchanges in India.

MODULE II

INTEREST RATES

Unit 5 Interest Rates

The Traditional Banking System

Before the 1970s, banks were the primary means of credit extension between lenders and borrowers. In traditional banking, the lenders are primarily households with savings and businesses with excess cash to deposit; the borrowers are households and businesses requiring loans for homes, goods, and capital investment. Banks, as financial intermediaries, are agents that undertake three critical activities: maturity, liquidity, and credit transformation. Meaningful financial intermediation takes place when these three activities are being taken place with the help of these banks. As the three elements are the fundamentals of banking, a short description of the same is given

- a. *Maturity Transformation*: Banks use short-term deposits to fund longer-term loans. Traditional deposits are a bank's liabilities, collected in the form of savings and checking accounts and redistributed as loans to consumers and businesses. Because short-term deposits are a bank's liabilities and long-term loans are its assets, there is an inherent risk in maturity transformation. Because the maturity of the loans is longer than that of the liabilities, a bank assumes interest rate risk. When interest rates increase, the value of a bank's assets declines more than the value of its liabilities, assuming all else holds equal. Interest rate risk was once a significant concern, but interest rate hedges now commonly reduce its effects.
- b. *Liquidity Transformation*: Closely related to maturity transformation, liquidity transformation refers to the fact that a bank's assets are less liquid than its liabilities. Depositors' money (the liabilities that fund the assets) is available "on demand" at any time, while the loans (a bank's assets) have a longer, often fixed life. Most banks worldwide are required to hold only a fraction of bank deposits as cash on hand, available for withdrawal. This allows the banking system to "create money" after meeting the reserve requirements mandated by central banks. If all depositors simultaneously withdraw their funds, a bank is forced to sell assets to meet depositor demand. Such mass exits at fire-sale prices can cause bank insolvency as the value of assets declines below the value of liabilities.
- c. *Credit Transformation*: While any individual loan carries risk specific to that transaction, a bank diffuses its overall risk exposure by lending to a large number of borrowers. Despite this diversification, the riskiness of a bank's assets usually exceeds that of its liabilities. The credit quality of the debt issued by an intermediary is enhanced by the priority of claims. Senior deposits are of better credit quality than the underlying loan portfolio because the intermediary's junior equity is available to absorb any losses. Taking on this credit risk is typically how banks earn a return above the cost of their liabilities, a concept known as net interest margin. Assuming banks hedge interest rate risk, they can earn the difference between their cost of funds (the weighted average rate paid on liabilities) and the weighted average rate at which they lend (Luttrell, Rosenblum, & Thies, 2012).

Walter Wriston (1986), renowned banking leader and former chief executive officer of Citicorp (later, Citigroup) from 1967 to 1984, described commercial banks as depository institutions that

will take your money for safekeeping, pay you a rent called interest for the use of your money, and then lend it to a third Party- if possible, at a rate sufficiently higher than the rent to cover their costs of operation and, if managed properly, makes a profit to finance their future growth."

Theories of Interest Rates

Borrowers and lenders think mostly in terms of real interest rates. There are two economic theories explaining the level of real interest rates in an economy;

1. The loanable funds theory
2. Liquidity preference theory

Loanable funds theory

In an economy, there is a supply of loanable funds (i.e., credit) in the capital market by households, business, and governments. The higher the level of interest rates, the more such entities are willing to supply loan funds; the lower the level of interest, the less they are willing to supply. These same entities demand loanable funds, demanding more when the level of interest rates is low and less when interest rates are higher. The extent to which people are willing to postpone consumption depends upon their **time preference**. The term 'loanable funds' simply refers to the sums of money offered for lending and demanded by consumers and investors during a given period. The interest rate in the model is determined by the interaction between potential borrowers and potential savers.

The loanable funds theory was formulated by the Swedish economist Knut Wicksell in the 1900s. According to him, the level of interest rates is determined by the supply and demand of loanable funds available in an economy's credit market (i.e., the sector of the capital markets for long-term debt instruments). This theory suggests that investment and savings in the economy determine the level of long-term interest rates. Short-term interest rates, however, are determined by an economy's financial and monetary conditions. Here, in this context, it must be remembered that, the overall effect of the short term and long-term interest rate be in the functioning of commercial banking sector.

Liquidity preference theory

This theory is another one aimed at explaining interest rates. J. M. Keynes has proposed (back in 1936) a simple model, which explains how interest rates are determined based on the preferences of households to hold money balances rather than spending or investing those funds. In this context, we can assume that, the household preferences had more importance in that time. Money balances can be held in the form of currency or checking accounts, however it does earn a very low interest rate or no interest at all. A key element in the theory is the motivation for individuals to hold money balance despite the loss of interest income. Money is the most liquid of all financial assets and, of course, can easily be utilized to consume or to invest. The quantity of money held by individuals depends on their level of income and, consequently, for an economy the demand for money is directly related to an economy's income. There is a trade-off between holding money balance for purposes of maintaining liquidity and investing or lending funds in less liquid debt instruments in order to earn a competitive market interest rate. The difference in the interest rate that can be earned by investing in interest-bearing debt instruments and money balances represents an opportunity cost for maintaining liquidity. The lower the opportunity cost, the greater the demand for money balances; the higher the opportunity cost, the lower the demand for money balance. According to the liquidity preference theory, the level of interest rates is determined by the supply and demand for money balances. The money supply is

controlled by the policy tools available to the country's Central Bank. Conversely, in the loan funds theory the level of interest rates is determined by supply and demand, however it is in the credit market.

Generally, the reward taken by the banks is in the form of excess interest given by the depositors. A lot of theories are there to explain the mechanism of interest. However, prominent theory which elaborately describe about each and every elements of interest is Keynes's monetary theory of interest.

Keynes's monetary theory of interest

From a practical perspective, Keynes's primary concern was the arrangement of domestic and international monetary systems to permit the full and stable utilization of resources, and to prevent crisis, rather than the use of fiscal policy in the event of crisis. Prevention of crisis was corollary concern for major economists. Because, the consequences followed by the crisis would affect an effective financial mediation, at global level. Keynes was, from his first contributions, a monetary economist. His later celebrations of Alfred Marshall's contributions to the development of monetary theory show that Keynes considered his work to be in direct succession to Marshall's own. Equally, from the very beginning, Keynes's work was aimed at practical ends. The dominant economic policy issue of the day was the monetary developments in India in the wake of the bimetallic controversy. In 1893, India had suspended its silver standard and adopted an innovative exchange policy that Keynes saw as the first manifestation of exchange or currency management systems. His choosing to begin his Civil Service career in the India Office was no coincidence.

Keynes successfully championed these systems for the greater part of his life. He held that central banks should preserve exchange parities through purchases and sales in the currency market, rather than through interest rate action. Under these systems in India, the rupee was not convertible to gold internally but was convertible into other currencies at a fixed exchange rate in terms of gold. Fundamentally, these arrangements did not involve the manipulation of the discount rate, which was then freed to be aimed at internal rather than external considerations.

"The classical economists" was a name invented by Marx to cover Ricardo and James Mill and their predecessors that is to say for the founders of the theory which culminated in the Ricardian economics. One may become accustomed, perhaps perpetrating a solecism, to include in "the classical school" the followers of Ricardo, those, that is to say, who adopted and perfected the theory of the Ricardian economics, including (for example) J. S. Mill, Marshall, Edgeworth and Prof. Pigou.

Keynes argue that the *postulates of the classical theory are applicable to a special case only and not to the general case*, the situation which it assumes being a limiting point of the possible positions of equilibrium. Moreover, the characteristics of the special case assumed by the classical theory happen not to be those of the economic society in which we actually live, with the result that its teaching is misleading and disastrous if we attempt to apply it to the facts of experience.

The analysis of the propensity to consume, the definition of the marginal efficiency of capital and the theory of the rate of interest are the three main gaps in our existing knowledge which it will be necessary to fill. When this has been accomplished, we shall find that the theory of prices falls into its proper place as a matter which is subsidiary to our general theory. We shall discover, however, that *money plays an essential part in our theory of the rate of interest*; and

we shall attempt to disentangle the peculiar characteristics of money which distinguish it from other things¹⁴.

Term Structure of Interest Rates

We can define the term structure of interest rates as calculation of the relation between the yields on default-free securities which only differ in their term to maturity. This relationship has several determinants, such as interest rates and yield curves, which are always concerned by economics to establish the term structure. Investors and economists strongly believe that the shape of the yield curve reflects the conditions for monetary policy and the market's future expectation for interest rates. In other words, term structure is important for us because it integrates the market's anticipations of future events by offering a complete schedule of interest rates across time. Thus, the understanding of the explanation of the term structure gives us a way to extract this information and to predict how changes in the underlying variables will affect the yield curve (Irturk, 2006). The variety of interest rates that exist in the economy and the structure of interest rates is subject to considerable change due to different factors. Such changes are important to the operation of monetary policy. Interest rates vary because of differences in the time period, the degree of risk, and the transactions costs associated with different financial Instruments. The relationship between the yields on comparable securities, but different maturities is called the **term structure of interest rates**. The primary focus here is the Treasury market. The graphic that depicts the relationship between the yield on Treasury securities with different maturities is known as the **yield curve** and, therefore, the maturity spread is also referred to as the **yield curve spread**.

The term structure of interest rates looks the relationship among the yields on default-free securities that differ only in their term to maturity. The factors of this relationship have long been an interesting topic for economists. The term structure embodies the market's anticipations of future events. It is possible by offering a complete schedule of interest rates across time. Anticipations, risk aversion, investment alternatives, and preferences about the timing of consumption all play a role in determining the term structure¹⁵. Accordingly, the term structure may be affected by the domestic happenings and the regional background related with the risk perception.

Financial repression and interest rate

"Financial repression" refers to a wide array of policies that allow a government to place its debt with financial institutions at relatively low interest rates. Financial repression policies should only be used when two conditions are met: The government has an urgent need to issue debt and, because of worries about its willingness to repay its debts—that is, concerns about financial credibility¹⁶.

Financial repression refers to the notion that a set of government regulations, laws, and other non-market restrictions prevent the financial intermediaries of an economy from functioning at their full capacity. The policies that cause financial repression include interest rate ceilings, liquidity ratio requirements, high bank reserve requirements, capital controls, and restrictions on market entry into the financial sector, credit ceilings or restrictions on directions of credit allocation, and government ownership or domination of banks. However, government restricts the intermediaries on the grounds of equity, sustainability and inclusion. In Indian changing ideology has great role in constructing the above said policies. So usually, political

¹⁴ (Keynes, 2003.)

¹⁵ (Cox, Jr, & Ross, 1986)

¹⁶ (Chari, Devis, & Kehoe, 2016)

arrangements are eagerly observed by the mediators. The level and type of control vary according to the type and stage of development of economy. In India, materialization of liberalization demands a free intermediation. The volume of free enterprises determines the type of restrictions.

Economists have commonly argued that financial repression prevents the efficient allocation of capital and thereby impairs economic growth. The possible negative effect of financial repression on economic growth does not automatically mean that countries should adopt a laissez-faire stance on financial development and remove all regulations and controls that create financial repression. Many developing countries that liberalized their financial markets experienced crises partly because of the external shocks that financial liberalization introduces or amplifies (World Economy Financial Repression).

Using financial repression governments create a type of "sheep shearing" framework. For maximum efficiency, all of investors, depositors or policy holders are sheared whenever they buy government bonds. Using capital requirements and the creation of regulatory incentives and governments can effectively force the institutions to take on investments that pay less than the rate of inflation. Institutions take their margins, and pass through lower real return to their depositors and policyholders. Eventually, the last ones pay government's debts with private savings.

A little dose of financial repression could be justified in a normal economic environment. Slightly negative real interest rates could generate stronger present-day demand by reducing savings and increasing borrowing. GDP growth would rise and unemployment fall. But nowadays, when the debt leverage is too high, that type of actions aims only at providing cheap funding for government spending and debt servicing. Eventually, once more in the history, the weaker economic players have to pay for the mistakes of the stronger ones¹⁷.

China has been experiencing financial repression for a long time. The main feature of this repression is a regulated interest rate system. This result in private firms' low likelihood of getting money from the official banking system, and at the same time seeded the emergence of the shadow banks, which introduces uncontrollable risks into the Chinese economy. Also, other policy goals, such as monetary policy efficiency, cross-border capital mobility and a free-floating exchange rate, have to be sacrificed to maintain the dictated interest rates. If the state-owned firm continues to have priority getting credit from the official banks, an interest rate liberalization may not deliver a convergence of the two interest rate systems and a shrinkage of the shadow banking industry¹⁸.

Periods of high indebtedness have historically been associated with a rising incidence of default or restructuring of public and private debts. Sometimes the debt restructuring is more subtle and takes the form of "financial repression". Consistent negative real interest rates are equivalent to a tax on bond holders and, more generally, savers. In the heavily regulated financial markets of the Bretton Woods system, a variety of financial domestic and international restrictions facilitated a sharp and rapid reduction or "liquidation" of public debt from the late 1940s to the 1970s. The restrictions or regulatory measures of that era had their origins in what would now come under the heading of "macro prudential" concerns in the wake of the severe banking crises that swept many countries in the early 1930s. The surge in public debts that followed during the Great Depression and through World War II only made the case for stable and low interest rates and directed credit more compelling to policymakers. The resurgence of financial repression in the wake of the 2007-2009 financial crises

¹⁷Zieliński. T, (2014)

¹⁸ Hu, (2014)

alongside the surge in public debts in advanced economies is documented here. This process of financial "de-globalisation" may have only just begun¹⁹.

As observed by Maxwell Fry [1997] and others, financial repressive policies in developing countries typically originate as restrictions on financial activities adopted in the interest of a variety of development and social objectives. Eventually, the primary role of policies that require financial intermediaries to hold large percentages of their assets in government debt, usually at below-market rates of interest, that control domestic rates of interest and that restrict residents access to international financial markets is fiscal. Governments seek to finance the gap between public spending and conventional tax revenues plus seignorage by borrowing at subsidized rates from commercial banks. Under such policies, governments absorb relatively large shares of domestic credit and use restrictions on international capital flow to collect more inflation tax revenues at lower rates of inflation than would otherwise be possible. India provides a premier example of how financial restrictions initially imposed for the purpose of directing investment resources toward development projects became important instruments of fiscal policy²⁰.

Financial Repression, Fiscal Policy and Exchange Rate Management in India

For most of the past half century, India imposed very tight restrictions on international trade in goods, services and financial assets. International commodity and services trade were restricted by a wide variety of quantitative restrictions and tariff rates. International capital inflows and outflows were restricted by outright prohibition and administrative controls on the purchase of foreign assets by residents, direct investment by foreigners and private external borrowing. Domestic economic reforms and progressive liberalization of the trading regime began in the late 1980s. After 1991, the government gradually began to relax restrictions on capital inflows and direct investment. It also began to relax restrictions on the convertibility of the currency for current account transactions in 1992 and made the rupee fully convertible for current account transactions in August 1994 with Indian acceptance of the obligations of Article VIII of the Articles of Agreement of the International Monetary Fund. The government continues to maintain effective controls on the acquisition of foreign financial assets by the private sector and the currency is not convertible for capital account transactions for residents. Foreign investment income is fully convertible, and limits of foreign equity participation were recently liberalized. After 1991, the rate of tariff reduction and elimination of quantitative restrictions on imports increased. The average tariff rate fell from 125 percent in 1991 to 50 percent in 1995²¹.

Financial repression in India

The financial system of India was relatively unrestricted until the 1960s when the government began to impose controls for the purpose of allocating credit towards development programs. Interest rate controls were adopted and liquidity requirements on banks were raised progressively during the decade. The government also established state banks and nationalized the largest commercial banks (in 1969), allowing a greater degree of control over the allocation of credit by sector and enterprise. Throughout the 1970s and early 1980s, directed credit was a rising share of domestic lending and interest rate subsidies for individual sectors became common. The government began to reverse this process in 1985 with the partial deregulation of bank deposit rates. These controls were reinstated in 1988, but the government began to relax ceilings on lending rates the same year. By 1990, progressive reductions in controls on deposit rates and on lending rates and reductions in directed lending began. There was a gradual reduction of these instruments of financial repression throughout the 1990s. Demetriades and

¹⁹ (Reinhart, 2011)

²⁰ (Lo & Rogoff, 2014)

²¹ Kletzer & Kohli, (2001)

Luintel [1997] calculate an index of financial repression based on quantitative controls on financial intermediation which reveals an upward trend from 1969 through 1984 and the beginning of the downward trend in 1988. The tendency towards deficit financing of the public sector in India with the government resorting to seignorage and financial repression to generate revenues has been widely observed and documented. Important means for the government to raise revenues through financial repression are the reserve requirements imposed on commercial banks. Two such requirements are imposed, the cash reserve ratio (CCR) and the statutory liquidity ratio (SLR). The first requires banks to hold cash assets in proportion to their liabilities, while the second imposes a lower bound on bank holdings of government interest-bearing (domestic-currency denominated) debt. These are held at below-market rates of interest. Both requirements vary significantly over time and are used as active instruments of monetary policy. The reserve and liquidity requirements vary over time and reports ratios of commercial bank lending to the government. Two patterns are evident - the requirements vary within years, sometimes significantly, and they decrease over time the 1990s.

Unit 6 The yield curve

Introduction

A yield curve is a plot of a specific set of bond yields as a function of their maturity. The yield curve, which plots a set of interest rates of bonds of different maturities, describes the relationship among short-term, medium-term, and long-term rates at a given point in time²². It is an important tool in fixed-income investing. Investors use the yield curve as a reference point for forecasting interest rates, pricing bonds and creating strategies for boosting total returns. The yield curve has also become a reliable leading indicator of economic activity.

The yield curve is a line graph that plots the relationship between yields to maturity and time to maturity for bonds of the same asset class and credit quality. The plotted line begins with the spot interest rate, which is the rate for the shortest maturity, and extends out in time, typically to 30 years²³.

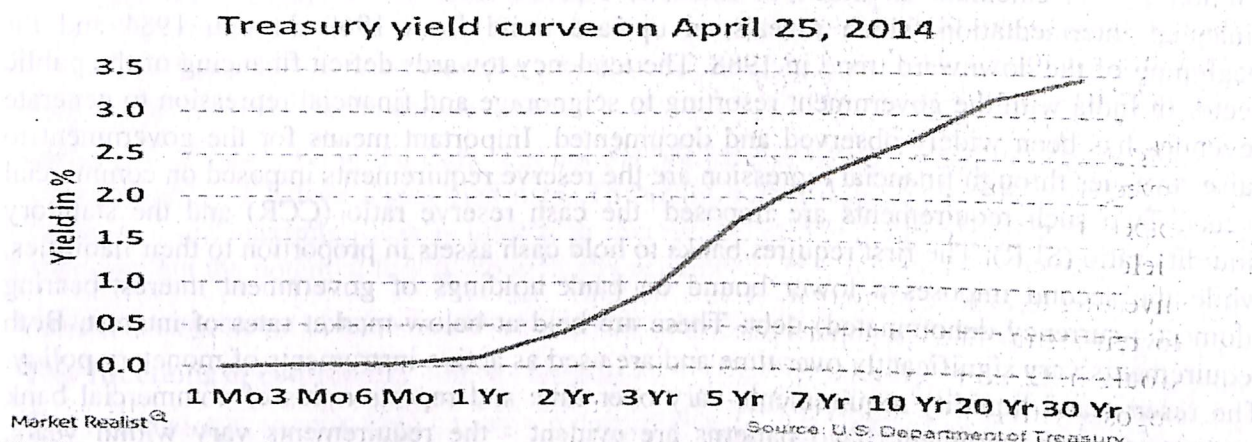
From a conceptual perspective, the yield curve determines the value that investors place today on nominal payments at all future dates—a fundamental determinant of almost all asset prices and economic decisions. From a practical perspective, the U.S. Treasury market is one of the largest and most liquid markets in the global financial system. In part because of this liquidity, U.S. Treasuries are extensively used to manage interest rate risk, to hedge other interest rate exposures, and to provide a benchmark for the pricing of other assets²⁴.

²² FRBSF Economic Letter (2003)

²³ (Basics, 2004)

²⁴ (Gurkaynak, Sack, & Wright, 2006)

Chart I Yield Curve



Yield curve estimation

If the Treasury issued a full spectrum of zero coupon securities every day, then we could simply observe the yield curve and have a complete set of the yields and forward rates described in the previous section. That, unfortunately, is not the case. Treasury has instead issued a limited number of securities with different maturities and coupons. Hence, we usually have to infer what the yields would be across the maturity spectrum from the prices of existing securities. For each date, we know the prices (and therefore yields) of a number of Treasury securities with different maturities and coupon payments. Accounting for the differences in maturities and coupons is not a problem; the estimation will simply view coupon bearing bonds as baskets of zero-coupon securities, one for each coupon payment and the principal payment. The more significant problem is the fact that we do not have securities at all maturities. To come up with yields across the complete maturity spectrum, we have to interpolate between the existing securities. This exercise is what constitutes yield curve estimation. Primary purpose in estimating the yield curve is to understand its fundamental determinants such as macroeconomic conditions, monetary policy prospects, perceived risks, and investors' risk preferences. Considering this purpose, we will employ a parametric yield curve specification. As will be seen below, this specification will allow for very rich shapes of the forward curve while largely ruling out variation resulting from a small number of securities at a given maturity²⁵.

If the term structure is plotted at a given point in time, based on the yield to maturity, or the spot rate, at successive maturities against maturity, one of the three shapes of the yield curve would be observed. The type of yield curve, when the yield increases with maturity, is referred to as an **upward-sloping yield curve** or a **positively sloped yield curve**. A distinction is made for upward sloping yield curves based on the steepness of the yield curve. The steepness of the yield curve is typically measured in terms of the maturity spread between the long-term and short-term yields. A **downward-sloping** or **inverted yield curve** is the one, where yields in general decline as maturity increases. A variant of the **flat yield** is the one in which the yield on short-term and long-term Treasuries are similar but the yield on intermediate-term Treasuries are much lower than, for example, the six-month and 30-year yields. Such a yield curve is referred to as a **humped yield curve**.

What determines the shape of the yield curve?

Most economists agree that two major factors affect the slope of the yield curve:

²⁵ (Gurkaynak et al., 2006)

Investors' expectations for future interest rates and certain "risk premiums" that investors require to hold long-term bonds. Four widely followed theories have evolved that attempt to explain these factors in detail:

Theories of term structure of interest rates²⁶

1. The Pure Expectations Theory holds that the slope of the yield curve reflects only investors' expectations for future short-term interest rates. Much of the time, investors expect interest rates to rise in the future, which accounts for the usual upward slope of the yield curve. The pure expectations theory assumes that investors are indifferent between investing for a long period on the one hand and investing for a shorter period with a view to reinvesting the principal plus interest on the other hand. For example an investor would have no preference between making a 12-month deposit and making a 6-month deposit with a view to reinvesting the proceeds for a further six months so long as the expected interest receipts are the same. This is equivalent to saying that the pure expectations theory assumes that investors treat alternative maturities as perfect substitutes for one another. The pure expectations theory assumes that investors are risk-neutral. A risk-neutral investor is not concerned about the possibility that interest rate expectations will prove to be incorrect, so long as potential favourable deviations from expectations are as likely as unfavourable ones. Risk is not regarded negatively. However, most investors are risk-averse, i.e. they are prepared to forgo some investment return in order to achieve greater certainty about return and value of their investments. As a result of risk-aversion, investors may not be indifferent between alternative maturities. Attitudes to risk may generate preferences for either short or long maturities. If such is the case, the term structure of interest rates (the yield curve) would reflect risk premiums.
2. The Liquidity Preference Theory, an offshoot of the Pure Expectations Theory, asserts that long-term interest rates not only reflect investors' assumptions about future interest rates but also include a premium for holding long-term bonds, called the term premium or the liquidity premium. This premium compensates investors for the added risk of having their money tied up for a longer period, including the greater price uncertainty. Because of the term premium, long-term bond yields tend to be higher than short-term yields, and the yield curve slopes upward. Some investors may prefer to own shorter rather than longer term securities because a shorter maturity represents greater liquidity. In such case they will be willing to hold long term securities only if compensated with a premium for the lower degree of liquidity. Though long-term securities may be liquidated prior to maturity, their prices are more sensitive to interest rate movements. Short-term securities are usually considered to be more liquid because they are more likely to be converted to cash without a loss in value. Thus there is a liquidity premium for less liquid securities which changes over time. The impact of liquidity premium on interest rates is explained by liquidity premium theory.
3. Another variation on the Pure Expectations Theory, the Preferred Habitat Theory states that in addition to interest rate expectations, investors have distinct investment horizons and require a meaningful premium to buy bonds with maturities outside their "preferred" maturity, or habitat. Proponents of this theory believe that short-term investors are more prevalent in the fixed-income market and therefore, longer-term rates tend to be higher than short-term rates. Preferred habitat theory is a variation on the market segmentation theory. The preferred habitat theory allows for some substitutability between maturities. However the preferred habitat theory views that interest premiums are needed to entice investors from their preferred maturities to other maturities. According to the market segmentation and preferred habitat explanations, government can have a direct impact on the yield curve. Governments borrow by selling bills and bonds of

²⁶ Financial Markets, Leonardo da Vinci programme project (2010)

various maturities. If government borrows by selling long-term bonds, it will push up long-term interest rates (by pushing down long-term bond prices) and cause the yield curve to be more upward sloping (or less downward sloping). If the borrowing were at the short maturity end, short-term interest rates would be pushed up.

4. According to the *market segmentation theory*, interest rates for different maturities are determined independently of one another. The interest rate for short maturities is determined by the supply of and demand for short-term funds. Long-term interest rates are those that equate the sums that investors wish to lend long term with the amounts that borrowers are seeking on a long-term basis. According to market segmentation theory, investors and borrowers do not consider their short-term investments or borrowings as substitutes for long-term ones. This lack of substitutability keeps interest rates of differing maturities independent of one another. If investors or borrowers considered alternative maturities as substitutes, they may switch between maturities. However, if investors and borrowers switch between maturities in response to interest rate changes, interest rates for different maturities would no longer be independent of each other. An interest rate change for one maturity would affect demand and supply, and hence interest rates, for other maturities.

Since the 1980s, economists have argued that the slope of the yield curve—the spread between long- and short-term interest rates—is a good predictor of future economic activity. Monetary policy can influence the slope of the yield curve. A tightening of monetary policy usually means a rise in short-term interest rates, typically intended to lead to a reduction in inflationary pressures. When those pressures subside, it is expected that a policy easing—lower rates—will follow. Whereas short-term interest rates are relatively high as a result of the tightening, long term rates tend to reflect longer term expectations and rise by less than short-term rates. The monetary tightening both slows down the economy and flattens (or even inverts) the yield curve. Changes in investor expectations can also change the slope of the yield curve. Consider that expectations of future short term interest rates are related to future real demand for credit and to future inflation. A rise in short-term interest rates induced by monetary policy could be expected to lead to a future slowdown in real economic activity and demand for credit, putting downward pressure on future real interest rates. At the same time, slowing activity may result in lower expected inflation, increasing the likelihood of a future easing in monetary policy. The expected declines in short-term rates would tend to reduce current long-term rates and flatten the yield curve. Clearly, this scenario is consistent with the observed correlation between the yield curve and recessions. The multiplicity of channels through which the predictive power of the yield curve may manifest itself makes it difficult to give one simple explanation for that power. However, it also suggests certain robustness to the relationship between the yield curve and economic activity: if one channel is not in play at any one time, other channels may take up the slack. The conceptual relationships outlined here also have implications for the signals provided by the yield curve indicator. First, the fact that long-term investor expectations figure so importantly in these relationships means that the yield curve may be more forward-looking than other leading indicators. Second, the signals provided by the yield curve may be very sensitive to changes in financial market conditions. The precise effect of these changes on the yield curve will depend on whether they stem from technical factors or economic fundamentals. For example, because different maturities of fixed income securities appeal to different clienteles, a permanent shift in the relative importance of clienteles could produce permanent shifts in the slope of the yield curve. Alternatively, a temporary change in the demand for assets of a given maturity—say, a change resulting from hedging activities—could affect the slope of the yield curve for a short time before the yield curve returns to values determined by economic fundamentals. These considerations suggest that the signals produced by the yield curve must show some degree of persistence if they are to be meaningful. The interest rates used to compute the spread between long term and short-term rates vary across the literature on the yield curve's predictive power. For example, market analysts often choose to focus on the difference between the ten-year and two year Treasury rates, while some academic researchers have favored the spread between the ten-year Treasury rate and the federal funds rate. Other rates explored in the literature vary as to maturity, obligor, and computational basis. In

choosing the most appropriate rates, one should consider a number of criteria, including the ready availability of historical data and consistency in the computation of rates over time. It is also important to consider the role of risk premiums and coupons, although at present there is no standard way of dealing with these issues²⁷.

Practical guidelines for the use of the yield curve to predict recessions in real time:

1. Defining recessions as the periods between NBER peaks and troughs—counting the troughs but not the peaks—produces clear results.
2. Treasury rates are most likely to produce accurate forecasts.
3. The best maturity combination may be three months and ten years. Other choices lead to results that are highly correlated with our own, but whatever combination is selected should be used consistently in both analysis and prediction.
4. The three-month rate is best represented by the secondary market rate, expressed on a bond-equivalent basis to match the ten-year rate.
5. The ten-year constant maturity rate produces good results.
6. Levels of the spread are more informative than changes²⁸.

Unit 7 Interest Rate, Savings and Investment

Interest rates and savings

The interest elasticity of saving is defined as the percent change in saving that results from a one-percent change in the interest rate. There is disagreement among economists about both the sign and magnitude of this elasticity, as existing theory and empirical evidence do not appear to offer any clear conclusions.

Individuals hold financial wealth that falls into both categories. For example, the prices of stocks and bonds fall when interest rates rise, and the value of debt with a fixed interest rate—such as fixed-rate mortgages and most auto loans—falls when interest rates rise. At the same time, the value of bank accounts and debt with a floating interest rate—such as adjustable-rate mortgages and credit card balances—does not change when interest rates change. Thus, the effect of interest-rate changes on the wealth of particular individuals depends on the types of financial assets and liabilities that they hold.

An individual's income is unaffected by a change in the interest rate, and therefore that the change in her saving equals the negative of the change in her consumption.

It is true that an increase in the interest rate will raise the income of individuals who hold bank accounts, but it will lower the income of bank owners by an equal amount. Aggregate income must be unchanged because the productive capacity of the economy is unchanged (in the short run). And the redistribution of income has no additional effect on the behavior of lifecycle consumers after allowing for the revaluation of wealth.

The change in personal saving for the entire economy is simply the sum of the saving responses of all of the nation's households. Because households differ in the economic environment they face, their willingness to substitute consumption over time, their preference for consumption today relative to consumption in the future, and even the model that underlies their decisions, aggregation is an interesting and challenging problem.

There is also evidence that some people are *more* forward-looking than implied by the lifecycle model, in that their saving decisions reflect concern for their children as well as for themselves. These people save not only to finance their own future consumption but also to finance bequests to their children. Deaton (1992) argues that if consumption is always close to income for many people, then "the *prima facie* supposition must be that interest rates are not very important" in determining consumption and saving. But consumption is not that close to income for people who *are* doing the saving in the

²⁷ (Estrella & Trubin, 2006)

²⁸ (Estrella & Trubin, 2006)

economy, so there is no reason to presume that the *savers'* decisions are unaffected by interest rates or other factors.

To summarize, the lifecycle model clearly does not describe everyone's consumption and saving decisions, although it may describe the source of most aggregate saving. Further It is not possible to provide a precise estimate of the interest elasticity of saving with any confidence. Nevertheless, the models that likely describe the behavior of the people who account for most of aggregate saving imply positive elasticities, so the aggregate interest elasticity of saving is probably positive²⁹.

Appropriate monetary and fiscal policies are also important factors in maintaining the stability of savings and loan associations. Sharp increases in interest rates during recent years have been associated with rising prices. The real rate of return on loans and investments has been relatively stable. The rising prices can be associated with expansive fiscal and monetary actions. Thus, an important factor in maintaining relatively stable interest rates is the maintenance of fiscal and monetary policies that are conducive to stable prices. Monetary and fiscal policies which contribute to greater price stability should alleviate most requests for assistance by savings and loan associations. Such policies will reduce the rate of inflation, which in turn is incorporated into interest rates, thus moderating rate increases³⁰.

Indian context shows the narrowed financial resource gap in 2014-15 in an environment characterized by ongoing fiscal consolidation, decline in global commodity prices and moderation in net capital formation. Currency and deposits remained the most preferred financial instruments in India. The symptoms of financial interconnectedness highlight the augmented capacity of non-bank financial corporations as suppliers of finance in the economy³¹.

a. Deposit rate dynamics

The decreased spreads between market and deposit rates may reflect a combination of structural changes in the market. Among these factors we could mention (i) the smaller cross-subsidisation by savings deposits of other banking products, (ii) lower servicing costs of savings deposits thanks to advances in technology, and (iii) changes in the competitive conditions.

b. Deposit balance dynamics

Either general market conditions or idiosyncratic events (Death, divorce, house renovation etc) may cause depositors to withdraw all or part of their balances. Savings deposit balance growth rates are affected by depositors' opportunity cost, i.e. the maximum return that the deposited funds could earn if the funds were not deposited in a savings account.

c. Measuring the interest rate risk of savings deposits

Deposit rate and balance dynamics of savings accounts are clearly intertwined. In practice and to limit the repricing impact of deposit rate changes, banks only sluggishly adjust savings deposit rates. However, if savings deposits are not fully and immediately repriced with market rates, this may entail an outflow of deposits, which banks will have to replace at a higher cost. In the end, the volume and repricing effects have to be taken into account simultaneously in the interest rate risk management of banks. To measure the interest rate risk of savings deposits, two approaches can be adopted. The first one centres on banks' profitability and net interest income at risk. If the sensitivity of deposit rates and balances to market interest rate increases is underestimated, bank profitability will decline unexpectedly, as deposit rates are repriced more quickly and deposit balances are withdrawn more quickly than anticipated. If the sensitivity to market rate increases is overestimated, the bank may as a result invest in relatively short-term assets to hedge the interest rate risk and thus forego more profitable long-term investments.

Alternatively, the assessment can be based on the impact on banks' solvency or market value of equity at risk. In case of a move in market interest rates, it is important to measure the market value sensitivity

²⁹ "The Effect Of Interest-Rate Changes On Household Saving And Consumption: A Survey" Douglas W. Elmendorf
Federal Reserve Board June 1996

³⁰ Interest Rate Controls— Perspective, Purpose, and Problems (CLIFTON B. LUTTBELL)

³¹ Flows of Funds Accounts of the Indian Economy: 2014-15, RBI Bulletin, August 2016

of savings deposits, since savings deposits value changes may partially offset the value change in the other direction on the asset side, thereby acting as a hedge for the market value of equity³².

Theory predicts that people smooth out consumption over time by saving when their incomes are high and dissaving when their incomes are low. The direct implication is that consumers with rising incomes should start spending more immediately so as to enjoy the benefits of future income growth³³.

Since the early 1980s China has witnessed a rapid increase in its national savings rate to one of the highest rates in the world. Unlike the socialist period when consumption was repressed in order to redirect resources to investment, most of these savings are voluntary.

High Savings Returns

The very high savings rates in rapid growth economies seem to preclude this explanation. Because the supply of savings is so high, interest rates are often quite low. For instance, savings in Taiwan and Japan in the 1970s were extremely high even though real interest rates were nearly zero. More evidence that savings supply are the key factor is seen from the speed with which Japan and Taiwan became capital exporters. Only South Korea has followed the predicted model of being a capital importer. In the case of China, real interest rates on savings have varied widely but in many periods have been negative. So the pattern would seem to be similar to that of Taiwan and Japan. However, capital markets in China have been so restricted that is hard to rule out a role for high savings returns. For instance, households might save in the hope of later capital liberalization that will allow a higher rate of return. Arguing against this possibility is the fact that savings rates have remained high as capital markets have liberalized and as competitive pressures have forced down profit rates. Moreover, China is steadily moving toward to becoming a capital exporter. Foreign reserves of nearly \$400 billion are now almost equal to the entire accumulated foreign direct investment in China of \$450 billion. Even as portfolio investment rises in China, there is no indication that China is substantially increasing its net capital inflows. This is seen most readily from its continued trade surplus³⁴.

Implications for China's Economy

China's high savings rates are widely recognized as one of the determining factors in China's successful transition from a planned, low-income economy to a market-based, middle-income economy. First, they appear to have played an early role in China's successful transition by allowing China to maintain rapid investment growth throughout the reform period, even in the early period when foreign capital was difficult to attain. While much of this investment was inefficient in the early period, and the savings were not all voluntary, China was able to avoid the collapse in investment witnessed by Eastern Europe and Russia. Second, since rapid growth is itself a generator of high savings, China has been able to enjoy a virtuous cycle of high savings leading to high growth, and then even higher savings leading to even higher growth. By maintaining high investment rates in the early reform years, government policies encouraged rapid growth which then helped induce high savings rates, and high investment has subsequently been maintained even as public savings have become dramatically less important. Even in the basic life-cycle model this virtuous cycle can arise due to the interaction of demographic factors and growth. In the habit persistence and falling behind the Joneses models, this cycle is even more powerful. Third, China's high savings rates have promoted exports by inducing a trade surplus in accordance with standard theories. Rather than being a large importer as is common in developing countries, China has typically run a trade surplus. The promotion of exports has allowed China to rapidly move into new industries that might not otherwise have developed, to enjoy the learning-by-doing that results, and move into more technologically advanced industries. Fourth, high savings rates have helped China maintain stability in its external accounts by inducing a trade surplus. This surplus has allowed China to keep the exchange rate stable over a long period, making investment by domestic and foreign companies less risky, and reducing pressure on domestic prices. It has also allowed China to reduce the need for international debt and accumulate large foreign exchange reserves, thereby reducing the risk of financial

³² Maes.K, & Timmermans.T, (2005)

³³ (Harbaugh, 2004)

³⁴ (Harbaugh, 2004)

crises such as the 1997 Asian crisis. Similarly, the surplus has allowed China to follow its own strategy of slowly moving toward capital account convertibility, thereby further reducing the risk of such a crisis. Fifth, China's high savings rates have helped domestic financial stability. Because of clear inefficiencies in the state-run banking sector, it has long been predicted that China will face a severe Banking crisis (Lardy, 1998). Despite the high rates of non-performing loans, banks have been able to avoid a crisis in part because of the increasing inflows of new savings. While it can be argued that high savings rates have encouraged tolerance of bad banking practices, reforming a socialist banking system cannot be done rapidly and high savings rates have given China the opportunity to gradually reduce the non-performing loan problem. In considering the impact of high savings rates on the economy, it must be recognized that

savings can be manifested in other ways that are not included in official saving statistics but can be equally important as putting money in the bank or investing in a company. Most importantly, acquiring human capital through education is one of the most important ways to postpone consumption now so as to consume more later. In fact, the two pillars of the East Asian miracle have been high rates of capital accumulation and remarkable rates of human capital accumulation (Young, 1994). In China the development of human capital has been more uneven than in Japan, Taiwan, or elsewhere in East Asia, but the education system is now clearly on a growth path that is likely to lead to the same high rates of human capital in the region³⁵.

Interest rate and investment

The standard economic theory proposes that the investment level depends mainly on two major factors: the real interest rate and the level of income. How does an increase in interest rates affect capital investment by firms? It has an implication in monetary and fiscal policy decisions. The neoclassical theory of investment states that increasing the interest rate reduces investment by raising the cost of capital³⁶.

The empirical relevance of the model for explaining how interest rate changes affect aggregate investment depends on the extent to which firms re-time investments in response to changes in market conditions. There is some evidence that firms delay investment when faced with increased uncertainty, as predicted by irreversible investment models (e.g. Leahy and Whited, 1996; Bulan, Mayer and Somerville, 2004; Bloom, Bond and Reenen, 2006)³⁷. There is also some evidence that cross-sectional and time-series fluctuations in interest rates affect the timing of IPO decisions (Capozza and Li, 2001)³⁸, 2004)³⁹.

Changes in interest rates can reflect the basic situation of the operation of macro economy; it also affects all the macroeconomic variables such as GDP, price level, the level of employment, international balance of payments, the rate of economic growth, etc. Obviously the interest rate is an important economic variable that plays an important role in both macro and micro economy activity. Therefore, a change in interest rates is one of the main factors to judge the macroeconomic activity. Therefore, a rate trend analysis is the main method to predict the macroscopic economic situation and the interest rate trend analysis is the main method to predict the macroscopic economic situation. Western economists believe that the market rate of interest, the total social savings and investment are closely linked. Therefore, the current interest rates affect the investment activities. At the same time, current

³⁵ (Harbaugh, 2004)

³⁶ HAAVELMO, T. (1960) *A Study in the Theory of Investment* (Chicago: Chicago University Press).

JORGENSEN, D. (1963), "Capital Theory and Investment Behavior", *American Economic Review Papers and Proceedings*, 53 (2), 247-259.

³⁷ BULAN, L., MAYER, C. and SOMERVILLE, T. (2004), "Irreversible Investment, Real Options, and Competition: Evidence From Real Estate Development" (Mimeo, Columbia University), LEAHY, J. and WHITED, T. (1996), "The Effects of Uncertainty on Investment: Some Stylized Facts", *Journal of Money*

Credit and Banking, 28, 64-83

³⁸ CAPOZZA, D. and LI, Y. (2001), "Residential Investment and Interest Rates: An Empirical Test of Development as a Real Option", *Real Estate Economics*, 29, 503-519.

³⁹ JOVANOVIC, B. and ROUSSEAU, P. (2001), "Why Wait? A Century of Life before IPO", *American Economic Review Papers and Proceedings*, 91, 336-341.

interest rates also affect the scale of investment in the future by adjusting the savings. If the interest rate rises, bond prices fall, if the interest rate falls, bond prices rise.

The influence of interest rate on investment scale is operate as the opportunity cost of investment on total investment, Under the condition of unchanged in investment income, the rising interest rates increase the cost of investment and then inevitably cause lower income investors to withdraw from the area of investment, so that the demand for investment is reduced. However, falling interest rates means that investment costs decline, thereby stimulating investment and the total social investments increase. The authorities in western economic theory circles and monetary management treat the interest rate as an important means for an important index to measure the function of the economy and adjustment of economic operation⁴⁰.

Unit 8 Issues of relative rates and return

Introduction

Interest rate is the cost of borrowing money. When interest rate increases the overall investment is reduces. Most of the businesses invest partially or wholly is credited. When increases in the interest rate companies have to put more resources to payoff this investment cost. Income is the monetary worth of the entire goods and services produced generally within a year in an economy. This income is as well the earning of all factors of production of the economy. Investment is frequently said as a function of interest rates and income. A high interest rate might lower investment because it turns out to be extra expensive to have a loan of money, while a raise in income promotes high investment. Still if a firm decides to employ its personal finance in an investment, the interest rate in this stands for an opportunity cost of investing those finances rather than providing out that quantity of money for interest rate. Investment is the most important element of any economy. It is crucial factor for growth in every epoch. Investments in different sectors ultimately raise the capital (in other words cause capital formation), this capital can be divided into two broad categories the first is increase in working capital (in short run) which can be shown by increase in business activity and the other is increased in fixed capital (long run effect), which raise the output (production) which later cause increase in the welfare of the economy⁴¹.

Interest rates vary depending on borrowing or lending decision. The difference between the rate at which interest is paid to depositors and the rate at which loans are given to borrowers constitute the spread. Actually, this spread constitutes the income of commercial banks. Such a spread also exists between selling and buying rates in local and international money and capital markets. The spread between offer and bid rates provides a cover for administrative costs of the financial intermediaries and includes their profit. The spread is influenced by the degree of competition among financial institutions. In the short-term international money markets the spread is lower if there is considerable competition. Conversely, the spread between banks borrowing and lending rates to their retail customers is larger in general due to considerably larger degree of loan default risk. Thus the lending rates (offer or ask rate) always includes a risk premium⁴².

Close relationship with interest rate and investment determines the volume of growth in a region. The context shall be clear when we look into the situation of Pakistan. A continually declining trend in investment and economic growth rate are the key problems that adversely affect economy of Pakistan for the last decade. A profound analysis of the main determinants of investment that is Real interest rate and real income is reasonably helpful for Pakistan⁴³.

Understanding the response of personal saving to changes in interest rates is central to many issues in economic policy. The effect of changes on the amount of saving may play an important role in tax policymaking. The interest elasticity of saving is defined as the percent change in saving that results

⁴⁰ Wuhan, Li Suyuan, Adnan Khurshid (2015) The effect of interest rate on investment; Empirical evidence of Jiangsu Province, China; *Journal of International Studies*,

⁴¹ (Muhammad & Zafar, 2013)

⁴² Financial Markets, Leonardo da Vinci programme project (2010)

⁴³ (Muhammad & Zafar, 2013)

from a one-percent change in the interest rate. There is disagreement among economists about both the sign and magnitude of this elasticity, as existing theory and empirical evidence do not appear to offer any clear conclusions. Economists' standard model of consumer behavior is the lifecycle model, which assumes that people determine their consumption and saving at each point in their lives by looking forward to their future income and desires, rather than considering only their current income and desired spending. Basic economic courses use a stylized version of this model to show that the interest elasticity of saving can be decomposed into a "substitution" effect and an "income" effect, which work in opposite directions⁴⁴. A fundamental tenet of investment theory and the traditional theory of monetary policy transmission is that investment expenditures by businesses are negatively affected by interest rates⁴⁵.

Real Investment, Capital Intensity and Interest Rates

In growing economy the cash flows from investment projects can be expected to be rising over time. Therefore, it is necessary to explore the interactions of growth and uncertainty of cash flows with variable capital intensity in the decision to invest. The ability to vary capital intensity raises the specter of perverse responses of investment to interest rates. Variable capital intensity is a sufficient condition for the perverse responses that can occur when growth rates are high or uncertainty is high⁴⁶.

In the past few years, long-term interest rates in the G-10 countries have fluctuated sharply. These fluctuations in nominal interest rates have raised concerns about the behaviour and likely future evolution of real interest rates, and the associated implications for economic growth and welfare. In particular, some expressed the view that real interest rates have returned to – or even exceeded – the high levels experienced during the 1980s⁴⁷. **Real interest rate** is the difference between the nominal rate of interest and the expected rate of inflation. It is a measure of the anticipated opportunity cost of borrowing in terms of goods and services forgone. **Interest rate structure** is the relationships between the various rates of interest in an economy on financial instruments of different lengths (terms) or of different degrees of risk. **Risk premium** is an addition to the interest rate demanded by a lender to take into account the risk that the borrower might default on the loan entirely or may not repay on time (default risk).

Long-term interest rate

The long-term interest rate is a central variable in the macroeconomy. It matters to borrowers looking to start a business or purchase a home; to lenders weighing the risks and rewards of extending credit; to savers preparing for college or retirement; and to policymakers gauging the state of the economy and financing government expenditure. The global financial crisis and the aggressive policy response pushed long-term interest rates in the United States and in many advanced economies to historically low levels. But today's low-rate environment is not just a cyclical story. Interest rates had been falling worldwide for nearly twenty years before the crisis. Despite the magnitude and persistence of the secular downtrend, the explanation for the decline is one of the most vexing questions faced by macroeconomists today. A survey conducted in 2015 by the US on Long-term interest rates reveals many drivers of long-term interest rates in recent decades and going forward. It concludes⁴⁸:

- a. **The decline in long-term interest rates over the past thirty years was real, global, and unexpected.** While lower inflation explains some of the decline in nominal interest rates, the downtrend is evident even when adjusting nominal interest rates for the rate of inflation. The decline has also been evident across a wide range of countries, reflecting the increasing integration of the global economy. Financial markets and professional forecasters alike

⁴⁴ "The Effect Of Interest-Rate Changes On Household Saving And Consumption: A Survey" Douglas W. Elmendorf Federal Reserve Board June 1996

⁴⁵ (Sharpe, Suarez, & Sharpe, 2014)

⁴⁶ "Real Investment, Capital Intensity and Interest Rates", Dennis R. Capozza (2001)

⁴⁷ "Saving, Investment and Real Interest Rates", A Study for the Ministers and Governors by the Group of Deputies-Instituto Poligrafico E Zecca Dello Stato, October 1995.

⁴⁸ ("LONG-TERM INTEREST RATES: A SURVEY," 2015)

consistently failed to predict the secular shift, focusing too much on cyclical factors and missing the long-term trend.

- b. **The decline is consistent with several theoretical frameworks economists have used to analyze interest rates.** The interest rate settles at the level that equates the supply of saving with the demand for investment, and innumerable factors affect both sides of the equation. Many frameworks suggest that long-term interest rates are closely related to productivity growth. Other factors such as the rate of population growth and technological advance, as well as aggregate demand and the stance of fiscal and monetary policy, also play a role.
- c. **A number of factors, both transitory and longer-lived, have contributed to the decline—with many of these factors suggesting that long-run equilibrium interest rates have fallen.** Transitory factors include global fiscal and monetary policies, shifts in the term premium and inflation risk, and post-crisis private-sector deleveraging. More persistent factors include lower potential output and productivity growth, shifting demographics, and the global “saving glut.”

Ultimately, interest rates reflect underlying macroeconomic conditions; there is no “optimal” long-term rate of interest. Rather, policy should support long-run growth, maintain price stability, and support a stable financial system.

Shadow Banking

There is an inherent risk in the transformation of maturity in the conventional banking activity. It is assumed that households entrust their savings to the commercial banks with the objective of income generation. But the fact exist that, without the long term enrolment of fund for productive purposes, there shall not be recognizable income, especially after the processing charge of banks. So under the closed supervision, it is better to transform the maturity by commercial banks. Commercial banks generally handle short term deposits of households (A maturity of less than five years). On the grounds of interest rate risks, banks hesitate to advance longer term, especially after the economic crisis. Economic crisis (2007-08), in a sense, reasonably contributed towards the development of *shadow banking*- the bank like functioning of non bank financial intermediaries.

Shadow Banking in India

In India, some NBFCs undertake shadow banking activities. Banks are compelled to provide short term loans to NBFCs-ND-SI (Non Deposit taking Systemically Important). Some NBFCs, in the shadow of the commercial banks, finance fixed assets. Although the function offer fixed capital augmentation, business firms face two mediators. These two mediators charge to compensate the interest rate risk. Maturity transformation, uneven financial leverage and opaque regulatory measures develop shadow banking in India⁴⁹.

Greek Crisis

The Country was constantly spending more than it was collecting in tax revenues. For most of this time, the country's initially reported numbers showed small differences that were subsequently found to have been much larger. It resulted in a fall of 2009 and a then newly elected government reported that the deficit for that year was going to be 13.6 percent of economic output and that the deficits in 2007 and 2006 were also larger than had been reported. Its borrowing costs rose sharply and the country began looking for ways to reduce its required debt payments and end its borrowing addiction. By late 2014, Greece was finally spending less than it was collecting, although the interest payments on debt meant there was still an overall deficit. The economy contracted for two more years as the reforms failed to deliver higher growth. The public lost confidence in the incumbent government and its lenders. Unemployment in Greece has remained above 25% for years and was much higher for young people.

⁴⁹ (Kumar & Kattookaran, 2015)

Regional Financial Developments: Tightening Conditions⁵⁰

Asia experienced a substantial reduction in (and in some cases reversal of) net capital inflows starting in mid-2015, reflecting global and regional factors. The reasons must be read with the cyclical movements of the economic factors. Sentiment toward emerging markets started weakening in early 2015. This curtailed the capital flow. The sharp decline in equity prices in China and uncertainty about the shift in China's exchange rate policy led to further spikes in volatility and bouts of outflows. Two factors— asynchronous monetary policy in advanced economies and uncertainty regarding the timing and pace of further monetary policy tightening by the Federal Reserve—have led to heightened interest rate volatility and rising spreads, fueling outflows and pressures on emerging market currencies. Cumulative portfolio inflows to major Asian emerging market economies (excluding China) reached \$40 billion in 2015, one-third of the level attained in 2014. China has seen large outflows following its decision to make its exchange rate more market determined in August 2015, with total capital outflows reaching an estimated \$900 billion in 2015. So far in 2016, the region has experienced a decline in portfolio inflows (bonds and equities combined), and outflows from China alone averaged \$100 billion during January–February.

Table I Interest Rates selected indicators Central Bank Policy Rate, Percent per annum

Country	2014	2015
Euro Area	0.05	0.05
Australia	2.50	2.00
Canada	1.25	0.75
Israel	0.25	0.10
Korea, Republic of	2.00	1.50
New Zealand	3.50	2.50
Norway	1.25	0.75
Switzerland	0.25	-0.25
United Kingdom	0.50	0.50
United States	0.13	0.38
Bangladesh	5.00	5.00
Fiji	0.50	0.50
Indonesia	7.75	7.50
Malaysia	3.25	3.25
Mongolia	12.00	13.00
Nepal	8.00	7.00
Philippines	3.69	4.00
Thailand	2.00	1.50
Vietnam	6.50	6.50
Turkey	7.50	7.25
Russian Federation	17.00	11.00
Iraq	6.00	6.00
Jordan	2.75	1.50
Qatar	4.50	4.50
Saudi Arabia	0.25	0.50
Ghana	21.00	26.00
Kenya	8.50	11.50
Mauritius	4.65	4.40
Brazil	11.75	14.25
Chile	3.00	3.35
Mexico	3.00	3.25

Source: International Financial Statistics (IFS), IMF

⁵⁰ Regional Economic Outlook -Asia and Pacific: Building on Asia's Strengths during Turbulent Times, April 2016, IMF

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Questions

Short Answer Type Questions

1. What do you mean by Spread?
2. What determines the shape of the yield curve?
3. What do you mean by Risk Premium?
4. Write a short note on liquidity Preference Theory
5. What is Financial Repression?
6. What is Shadow banking?
7. Write a short note on the Term Structure of Interest Rate
8. What do you mean by Maturity Transformation?
9. Suggest guidelines for the use of the yield curve to predict recessions in real time
10. Specify the relationship between Interest Rate and Investment

Essay Type Questions

1. Briefly explain Keynes's monetary theory of interest
2. Explain the impact of Interest rate on Real Investment and Capital Intensity
3. Explain Theories of Term Structure of Interest rates
4. What do you understand by Yield Curve? Suggest a strategy to estimate the yield curve.

MODULE III

MARKETS FOR COMMODITY AND DEBT

Unit 9 Commodity Markets

Introduction

Commodities are products that can be bought, sold or traded in different kinds of markets. Commodities are the raw materials that are used to create products which are consumed in everyday life around the world, from food products in India to building new homes in Europe or to running cars in the US.

There are two main types of commodities⁵¹:

1. Soft commodities – agricultural products such as corn, wheat, coffee, cocoa, sugar and soybean; and livestock.
2. Hard commodities – natural resources that need to be mined or processed such as crude oil, gold, silver and rubber.

Throughout history, commodities have played a major role in shaping the global political economy and have affected the lives and livelihoods of people. History is replete with examples of how shortage of critical commodities sparked huge public outcry and social unrest. Of late, the world community is concerned over the environmental and health costs of production and consumption of certain commodities and impact on society.

Kinds of commodities traded in the world

In the global markets, there are four categories of commodities in which trading takes place:

1. Energy (e.g., crude oil, heating oil, natural gas and gasoline).
2. Metals (e.g., precious metals such as gold, silver, platinum and palladium; base metals such as aluminium, copper, lead, nickel, tin and zinc; and industrial metals such as steel).
3. Livestock and meat (e.g., lean hogs, pork bellies, live cattle and feeder cattle).
4. Agricultural (e.g., corn, soybean, wheat, rice, cocoa, coffee, cotton and sugar).

Importance of Commodities

Commodities play an important role in the economic development of all countries – developed, developing and least developed countries (LDCs). In the case of LDCs, numbering 48 at present, more than two-thirds of the labour force is dependent on agriculture. In India, too, over 60 percent of the population is dependent on agriculture for livelihood. Thus, the commodity production and transaction are base determinants of Indian economy.

According to UNCTAD statistics, 27 LDCs are commodity exporters. In fact, commodities accounted for almost 80 percent of LDCs' goods export during 2007-09. Given the LDCs' heavy dependence of commodities, any development strategy aimed at economic growth, poverty reduction and food security needs to recognize the crucial role played by commodities and natural resources in these economies. As witnessed during the recent triple crises – food, financial and fuel – the economies of LDCs remain vulnerable due to their over-reliance on few primary commodities, and price volatility.

Main differences between commodity spot and derivatives markets

There are two types of commodity markets:

1. Spot (physical) and
2. Derivatives (such as futures, options and swaps).

In a spot market, a physical commodity is sold or bought at a price negotiated between the buyer and the seller. The spot market involves buying and selling of commodities in cash with immediate delivery. There are spot markets for individual consumers (retail market), and the business-to-business (wholesale market) category. Spot markets also include traditional markets

⁵¹ (Mahajan & Singh, 2015)

such as Delhi's Azadpur Mandi that deal in fruits and vegetables. Apart from these, there are numerous unorganized market ventures in Indian countryside.

On the other hand, a commodity can be sold or bought via derivatives contract as well. A futures contract is a pre-determined and standardized contract to buy or sell commodities for a particular price and for a certain date in the future. For instance, if one wants to buy 10 tonne of rice today, one can buy it in the spot market. But if one wants to buy or sell 10 tonne of rice at a future date, (say, after two months), one can buy or sell rice futures contracts at a commodity futures exchange.

The futures contracts provide for the delivery or receipt of a physical commodity of a specified amount at some future date. Under the physically settled contract, the full purchase price is paid by the buyer and the actual commodity is delivered by the seller. But in a futures contract, actual delivery takes place later. For instance, a farmer enters into a futures contract to sell 10 tonne of rice at \$100 per tonne to a miller on a future date. On that date, the miller will pay the full purchase price (\$1,000) to the farmer and in exchange will receive the 10 tonne of rice.

However, under the cash-settled futures contract, the farmer and the miller would simply exchange the difference between the spot price of rice on the settlement date and the agreed upon price as mentioned in the futures contract and there would be no actual delivery of rice. Following the above example, if on the settlement date the price of rice was \$80 per tonne, while the agreed upon price of futures contract was \$100 a tonne, the miller will pay \$200 to the farmer in cash and there will be no delivery of rice to the miller. If, on the settlement date, the price of rice was \$120 a tonne, the farmer will pay \$200 to the miller in cash and no delivery of rice will take place.

In practice, most futures contracts do not involve delivery of physical commodity as contracts are settled in cash through an exchange. The financial investors prefer cash settlement because of no interest in buying or selling the underlying commodity, and lower transaction costs. Nowadays, the entire process of futures trading in commodities is carried out electronically throughout the world.

Commodity exchange

A commodity exchange is a market in which multiple buyers and sellers trade commodity-linked contracts on the basis of rules and procedures laid down by the exchange. In developed countries, and in an increasing number of developing countries, such exchanges typically act as a platform for trade in futures contracts, or for standardized contracts for future delivery. In other parts of the developing world, a commodity exchange may act in a broader range of ways, in order to stimulate trade in the commodity sector. This may be through the use of instruments other than futures, such as the cash or "spot" trade for immediate delivery, forward contracts on the basis of warehouse receipts, or the trade of farmers' repurchase agreements for financing (known as "repos"). Alternatively, it may be through focusing on facilitative activities, rather than on the trade itself, as is the case in Turkey, where exchanges have served as centres for registering transactions for tax purposes⁵².

Commodity-linked contracts

Spot (or cash): Contracts for the purchase or sale of a commodity with immediate delivery (i.e. within a few days).

Forwards: Contracts for the purchase or sale of a commodity with deferred delivery.

⁵² (Development Impacts of Commodity Exchanges in Emerging Markets, UNCTAD, 2009)

Futures: Standardized forward contracts which represent an obligation to make or take delivery of a fixed quantity and quality of a commodity at a specific location. Contrary to forwards, futures contracts do not often result in physical delivery, as they can be offset by an equal and opposite contract before the delivery date.

Options: Contracts giving the right, but not the obligation, to buy or sell a futures contract at a specified price or before a specified date. To obtain such a contract, the buyer needs to pay a *premium* – the maximum loss is limited to this premium. The seller of an option receives the premium, but the potential loss is theoretically unlimited.

Swaps: An exchange of specified future payment streams between two counterparties.

Key functions of commodity futures trading

The two major economic functions of a commodity futures trading are **price risk management** and **price discovery**. A futures exchange carries out these twin functions by providing a trading platform that brings buyers and sellers together.

The price risk management (also called hedging) is considered to be the most important function of a commodity futures market. The hedging is used to manage price risks. It allows transfer of price risk to other agents who are willing to bear such risks. The hedgers, in principle, buy futures contracts for protection against rising commodity prices and sell futures for protection against falling prices or to get a guaranteed price in the future. Hedgers use futures market to protect themselves against price adverse changes and are often interested in taking or making physical delivery of the underlying commodity at a specified price. On the other hand, speculators, gamblers and other non-commercial players trade futures contracts strictly to make profits by betting on price movements. Such players have no interest in taking possession of the underlying commodity.

The premise of hedging is the key reason behind the existence of commodity futures exchanges. It has greater significance in a country like India where over 60 percent of the population is dependent on agriculture and farmers face various kinds of uncertainties and risks including price risk. In India, the original purpose behind re-introduction of futures trading was to help farmers hedge against potential risks arising out of price movements in agricultural commodities. The farmers can participate in futures market to manage price risk arising from decline and rise in commodity spot prices in the future.

It is important to note that the commodity futures price, the price agreed upon by the parties for the future transaction, is a market estimate about the future price of the underlying commodity. It reflects the price expectations of both buyers and sellers for a time of delivery in the future. It may be higher or lower than the spot price of the commodity in the spot market. Thus, the futures price could be used as an estimate of the spot price of a commodity at some future date. However, futures prices keep changing until the last date of the futures contract subject to additional information about demand and supply⁵³.

The Market Participants

Broadly speaking, the commodity futures market ecosystem has the following main participants:

1. **Scalpers/Day Traders** are those participants who take positions in futures contracts for a single day and liquidate them prior to the close of the same trading day. The scalpers have the shortest time horizon. They hold their positions for a few minutes while day traders close their positions before the end of trading each day. Both the scalpers and the

⁵³ (Mahajan & Singh, 2015)

day traders attempt to make profit out of the intra-day movement in commodity futures prices. They do not carry over their position to the next trading day. These market players provide liquidity in futures market due to large volumes of transactions undertaken by them. However, it needs to be acknowledged that such players can also negatively affect the price formation and market functioning due to excessive reliance on speculative trading. A special category of scalpers is that of high frequency traders who only hold contracts for micro-seconds thanks to the use of superfast computers and algorithms.

2. **Hedgers** are essentially players with an exposure to the underlying commodity and associated price risk – producers or consumers who wish to transfer the price risk on to the market. The futures markets exist primarily for hedgers. The hedgers simultaneously operate in the spot market and the futures market. They try to reduce or eliminate their risk by taking an opposite position in the futures market on what they are trying to hedge in the spot market so that both positions cancel one another. They operate in the spot market to buy or sell the physical commodity, and in the futures market to offset any loss arising out of price fluctuations in the spot market.
3. **Speculators** are traders with no genuine commercial business to the underlying; they do not hedge but trade with the objective of making profits from movements in prices. The speculators generally assume higher risk and also expect a higher return on their investments. They do not have any real need to buy, sell or take delivery of the actual commodities. They wish to liquidate their positions before the expiry date of the contract and carry out a purely financial transaction. Due to the margin system, speculators operate in the futures market with minimum investments. For instance, upfront initial margin of 5 percent (or less) of the value of the contract provides speculators with substantial leverage. The speculators may be professional institutional investors dealing in big contracts or small individual traders who trade on their own accounts. The speculators are supposed to provide market liquidity as the number of those seeking protection against declining prices is rarely the same as the number of those seeking protection against rising prices. In the financial media, speculators are frequently labeled as investors and non-commercial players.
4. **Arbitrageurs** are traders who buy and sell to make money on price differentials across different markets. They simultaneously buy or sell the same commodities in different markets. Arbitrage keeps the prices in different markets in line with each other. Usually, such transactions are risk-free.
5. **Aggregators** bring liquidity in the futures market and help farmers to benefit from price discovery and price risk management. Aggregators could be farmers' cooperatives, agricultural institutions like NAFED (National Agricultural Cooperative Marketing Federation), farmers' or producers' unions and non-governmental organizations that are allowed to collect commodities from farmers and sell in the futures market.
6. **Position Traders** maintain overnight positions, which may run into weeks or even months, in the anticipation of favourable movement in the commodity futures prices. They may hold positions in which they run huge risks and may also earn big profits.
7. **Brokers** typically act as intermediaries and facilitate hedgers and speculators. A commodity broker is a firm or individual who acts as a go between to buy or sell commodity contracts on behalf of clients – for a commission.
8. **The Exchange** is a central place (physical or virtual) where market participants trade standardized futures contracts.
9. **Regulator** oversees the working of the exchange. The Forward Markets Commission (FMC) is the regulatory authority for the commodity futures market in India. It is

- 11 equivalent of the Securities and Exchange Board of India (SEBI), which regulates the
2 equities markets in India.

Why is farmer participation in the Indian commodity futures markets very low?

There are several reasons behind the low participation of farmers and their representative institutions in the Indian futures markets, some of which are listed below:

1. Farmers cannot afford to pay the fees for maintaining trading account with the brokers besides warehousing and assaying costs;
2. Farmers find the trading requirements such as payment of margins to be burdensome;
3. The minimum lot size for trading in the futures market is much larger than the marketed surplus for most of the farmers in India. As a result, marginal/small farmers who need risk coverage the most are totally excluded;
4. Most Indian farmers are incapable of participating in the futures markets because they lack the skills needed for trading on electronic exchanges;
5. The trading terminals are yet to penetrate into villages as the necessary infrastructure (power supply and broadband) is still missing in rural India;
6. The absence of the appropriate scale and quality of warehousing infrastructure and grading facility;
7. A proposal for allowing farmers' cooperatives and state agricultural marketing federations (such as IFFCO) to act as aggregators and hedge positions in futures exchanges on the behalf of their farmers is pending at FMC for years.

It is important to note that trading by different kinds of players (hedgers, speculators and others) can affect the price formation and the interaction among them can determine market prices in a futures market. If in a particular futures market, there are more buyers (say, speculators) than sellers (say, hedgers), then an excessive speculative buying of futures contracts is likely to increase the price of contracts. With the result, prices will no longer be determined only by the interplay between supply and demand as related to the physical commodity markets.

The dramatic rise and fall in prices of oil and agricultural commodities during 2006-08 generated a heated debate in global policy circles whether speculation by financial players induced excessive price volatility. This issue was discussed at length at the G20 and several policy measures were recommended to improve the regulation and supervision of commodity derivatives markets. Two of the most important changes introduced in relation to OTC derivatives markets are the mandatory clearing of standardised OTC derivatives by central counterparties (CCPs) and the requirements for bilateral margin posting in non-standard OTC contracts. In addition, more standardized OTC derivatives are to be traded on the exchanges. However, having one CCP to clear huge amounts of OTC contracts may not be the best solution because a CCP may also fail for various reasons, including a default by many large members and losses on the value of the collateral received.

In 2011, G20 agriculture ministers agreed to share reliable data on agricultural markets in order to ensure transparency in agricultural financial markets (including the OTC derivatives). They also called for greater collaboration between physical and financial regulators to improve the functioning of markets.

Commodity Futures Markets In India

India has always been a country of market imperfections and prices fluctuations. Though India has an agricultural economy, it never had a national common market for agricultural products. There were always shortages and surpluses – with wide discrepancy in the prices at various levels. There was always price heterogeneity because of information asymmetry in the markets.

In rural India, *mandis* were the traditional market places for food and agri-commodities. In different parts of India, *mandis* developed as wholesale trading hubs for vegetables, grains, pulses, spices, condiments, fruits, timber, gems, diamonds and livestock.

India has a long history of derivatives trading in commodities. Commodity futures trading date back to the ancient times. Researchers have found the mention of forward trading in commodities in Kautilya's *Arthashastra*. In 1875, the first organized futures market for cotton contracts was established by the Bombay Cotton Trade Association. In independent India, the Forward Contracts (Regulation) Act was enacted in 1952 to regulate the commodity trading in forward and futures contracts.

Despite such a long history, commodity futures trading (particularly in agricultural goods) have always remained controversial in India where more than 65 percent of the population is dependent on agriculture for livelihoods. In the late 1960s, severe droughts forced many farmers to default on forward contracts. This, coupled with abusive market practices by some traders, led to increase in commodity prices, and the Indian government suspended forward trading in several commodities such as jute, edible oil seeds and cotton. For almost three decades, the future trading was at a standstill, till India began liberalizing its economy in 1991.

In the post-liberalization period, largely on the advice of a study¹⁷ by the World Bank and the United Nations Conference on Trade and Development (UNCTAD), and the recommendations of Kabra Committee Report, the Indian government lifted the ban on commodity futures trading in 2003. However, it is important to note that the Kabra Committee's recommendation not to allow futures trading in wheat, pulses, non-basmati rice, sugar, coffee, tea and other food products was not accepted by the government. The National Agricultural Policy (2000) also recommended the removal of price control and use of futures trading in agricultural commodities.

One of the key reasons for the reintroduction of commodity futures trading was to enable farmers to hedge their price risk. However, this objective has remained a distant dream. A future trading in agricultural goods has neither resulted in price discovery nor benefitted the farmers in terms of securing higher prices for their produce.

The original concept behind setting up the national commodity exchanges was not-for-profit mediators who can act as self-regulators and maintain market discipline among the members. The demutualized¹⁹ exchanges were supposed to act like independent enterprises and design new types of contracts to facilitate participation of smaller players including small farmers, who were otherwise unable to benefit from the services offered by the exchanges. But none of these objectives have been attained so far and there is a conflict of interest between the regulatory role and the profit motive of demutualized exchanges.

Unit 10 Commodity Market in India

History of the Commodity Futures Market in India

The Commodity Futures market in India dates back to more than a century. The first organized futures market was established in 1875, under the name of 'Bombay Cotton Trade Association' to trade in cotton derivative contracts. This was followed by institutions for futures trading in oilseeds, foodgrains, etc. The futures market in India underwent rapid growth between the period of First and Second World War. As a result, before the outbreak of the Second World War, a large number of commodity exchanges trading futures contracts in several commodities like cotton, groundnut, groundnut oil, raw jute, jute goods, castorseed, wheat, rice, sugar, precious metals like gold and silver were flourishing throughout the country. In view of the

delicate supply situation of major commodities in the backdrop of war efforts mobilization, futures trading came to be prohibited during the Second World War under the Defence of India Act. After Independence, especially in the second half of the 1950s and first half of 1960s, the commodity futures trading again picked up and there were thriving commodity markets. However, in mid-1960s, commodity futures trading in most of the commodities was banned and futures trading continued in two minor commodities, viz, pepper and turmeric⁵⁴.

Committee Recommendations

The Khushro Committee (June 1980) had recommended reintroduction of futures trading in most of the major commodities, including cotton, kapas, raw jute and jute goods and suggested that steps may be taken for introducing futures trading in commodities, like potatoes, onions, etc. at appropriate time. The government, accordingly initiated futures trading in Potato during the latter half of 1980, in a few markets in Punjab and Uttar Pradesh. Futures trading were also resumed in castorseed, and gur (jaggery), and in 1992, extended to Hessian (Jute). After the introduction of economic reforms in June 1991 and the consequent trade and industry liberalization in both the domestic and external sectors, the Govt. of India appointed in June 1993, a committee on Forward Markets under the Chairmanship of Prof. K.N. Kabra. The Committee submitted its report in September 1994. The majority view of the Committee was that futures trading be introduced in Basmati Rice, Cotton and Kapas, Raw Jute and Jute Goods, Groundnut, rapeseed/mustard seed, cottonseed, sesame seed, sunflower seed, safflower seed, copra and soybean oilseeds, oils and their oilcakes, Rice bran oil, Castor oil and its oilcake, Linseed, Silver and Onion. The Committee also recommended that some of the existing commodity exchanges particularly those with futures trading in pepper and castor seed, may be upgraded to the level of international futures markets. In April 1999, futures trading was permitted in various edible oilseed complexes.

The National Agriculture Policy announced in July 2000 and the announcements of Hon'ble Finance Minister in the Budget Speech for 2002-2003 indicated the Government's resolve to put in place a mechanism of futures trade/market. Futures trading in sugar was permitted in May 2001 and the Government issued notifications on 1.4.2003 permitting futures trading in all the commodities. With the issue of these notifications, futures trading is not prohibited in any commodity. Options trading in commodity is, however, presently prohibited⁵⁵.

Current Scenario

Currently 6 national exchanges, viz. Multi Commodity Exchange, Mumbai (MCX), National Commodity and Derivatives Exchange, Mumbai (NCDEX), National Multi Commodity Exchange, Ahmedabad (NMCE), Indian Commodity Exchange Ltd., Mumbai (ICEX), ACE Ltd., Navi Mumbai (UCX), regulate forward trading in 113 commodities. Besides, there are 11 Commodity specific exchanges recognized for regulating trading in various commodities approved by the Forward Market Commission under the Forward Contracts (Regulation) Act, 1952.

The commodities traded at these Exchanges comprise the following:

- Edible oilseeds complexes like Mustardseed, Cottonseed, Soybean oil etc.
- Food grains – Wheat, Gram, Bajra, Maize etc.
- Metals – Gold, Silver, Copper, Zinc etc.

⁵⁴ <http://www.fmc.gov.in>

⁵⁵ <http://www.fmc.gov.in>

- Spices – Turmeric, Pepper, Jeera etc.
- Fibres – Cotton, Jute etc.
- Others – Sugar, Gur, Rubber, Natural Gas, Crude Oil etc.

Out of 17 recognized Exchanges, MCX, NCDEX, NMCE, ACE, UCX and ICEX, contributed 99% of the total value of the commodities traded during the year 2013-14. Out of the 113 commodities, regulated by the FMC, in terms of value of trade, Gold, Crude oil, Silver, Copper, Natural Gas, Lead, Soy Oil, Zinc, Soybean and Castorseed are the prominently traded commodities. The total volume of trade across all Exchanges in 2013-14 was 8,832.76 lakh MT at a value of Rs. 101 lakh Crores. The total of deliveries of all commodities on Commodity Exchange platform is 9,23,893 MT during the year 2013-14.

The different intermediaries and clients registered at these recognized national Exchanges are, Members - 5098, Other intermediary - 251, Warehouse service provider / warehouse - 42 and Clients - 40,15,781 as on 31.3.2014 .

Rationale for Commodity Futures Markets

Forward/ Futures trading in a commodity is a mechanism for price discovery and price risk management and is useful to all sectors of the economy including the farmers and consumers. The prices of agricultural commodities are generally at their lowest at the harvest time as the supply far exceeds the immediate, short term demand by the consumers, processors and other stakeholders associated with the commodity markets and increase substantially in the lean season when the demand by the consumers, processors etc exceeds the supply. This adversely affects the farmers (as they realize lower prices of their produce in the harvest season) and consumers (as they have to pay higher prices in the lean season to meet their requirements). Forward/ futures markets provide a market mechanism to balance this imbalance of the supply – demand pattern of agricultural commodities. Futures trading provides a means of appraising the supply-and-demand conditions and dealing with price risks, over time and distance. Trading in futures not only provides price signals to the market of today, but also of months ahead, and affords guidance to sellers (farmers/ growers/ processors) and buyers (consumers) of agricultural commodities in planning ahead and, in financing and marketing commodities from one season to the another. Futures markets therefore are beneficial to both the consumers and farmers.

Benefits to farmers and other stakeholders

Farmers and growers benefit through the price signals emitted by the futures markets even though they may not directly participate in the futures market. The futures markets lead to reduction in the amplitude of seasonal price variation and help the farmer realize a better price at the time of harvest. This also helps the farmer in planning his cultivation in advance as well as to determine the kind of crop which he would prefer to raise, by taking advantage of the advance information of the future price trends, and probable supply and demand of various commodities in advance. By providing the manufacturers and the bulk consumers a mechanism for covering price-risks, the futures market induces them to pay higher price to the producers, as the need to pass on the price-risk to farmers is obviated. The manufacturers are able to hedge their requirement of the raw materials and as also their finished products. This results in greater competition in the market and ensure viability of the manufacturing units⁵⁶.

⁵⁶ <http://www.fmc.gov.in>

Futures Trading and Inflation

The price of any commodity is determined by the actual demand and supply position in the market. In an open market situation, prices are bound to fluctuate either way, depending on the additional information/data which influences expectations of market participants, relating to future demand and supply conditions. The futures market does not alter the basic condition of demand and supply but merely estimates the prices based on the actual and expected demand and supply factors. The demand and supply conditions also influence prices of commodities in which there is no futures trading. The demand supply gap causes price rise in such commodities too. Therefore, futures trading is not responsible for increase in the prices of commodities. The RBI conducted a detailed study (Annual Report 2012-13) of the futures market since the start of the electronic commodity trading. The empirical analysis using the monthly data for the period 2004 to 2009 revealed that several commodities which are not traded in the commodities exchange, such as vegetables, fruits and milk, exhibited significant price increases during the year 2009-2010. Moreover, certain commodities that were suspended for trading in 2007, such as rice, wheat, tur and urad, also exhibited significant price increases subsequently. In conclusion, the report stated that commodity prices in India seem to be influenced more by other drivers of price changes, particularly demand-supply gap in specific commodities, the degree of dependence on imports and international price movements in these commodities. The Committee set up by the Government under the Chairmanship of Prof. Abhijit Sen (report submitted in April 2008) also could not find any conclusive causal relationship between futures trading & inflation.

Forward Market Commission

Forward Markets Commission (FMC) headquartered at Mumbai, is a regulatory authority for commodity futures market in India. It is a statutory body set up under *Forward Contracts (Regulation) Act 1952*. On 28 September 2015 the FMC was merged with the Securities and Exchange Board of India (SEBI).

Regulatory tools

The Forward Market Commission has been keeping the commodity futures markets well regulated. In order to protect market integrity, the Commission has prescribed the following measures

1. Limit on open position of an individual members as well as client to prevent over trading;
2. Limit on price fluctuation (daily/weekly) to prevent abrupt upswing or downswing in prices;
3. Collection of M 2 M on daily basis;
4. Special and/or additional margin deposits to be collected on outstanding purchases or/and sales to curb excessive speculative activity through financial restraints;

To ease the pressure of delivery of goods on the last day of the contract, the commission has introduced staggered delivery system during the last 10 days of the expiry of the contracts in agricultural commodities. Futures contracts expiring in lean months are the not allowed for curbing the excessive volatility in price of the commodity due to short supply during the lean period.

During shortages, extreme steps like skipping trading in certain deliveries of the contract, closing the markets for a specified period and even closing out the contract to overcome emergency situations are taken. In addition to the above measures, the regulator calls for daily reports from the Exchanges and takes other pro-active steps to ensure that there is no misuse of the market and that the prices reflected on the Exchange platform are governed by the demand

and supply factors in the physical markets. Thus, to check excessive speculation and price volatility, the futures market in commodities is kept under constant watch and surveillance.

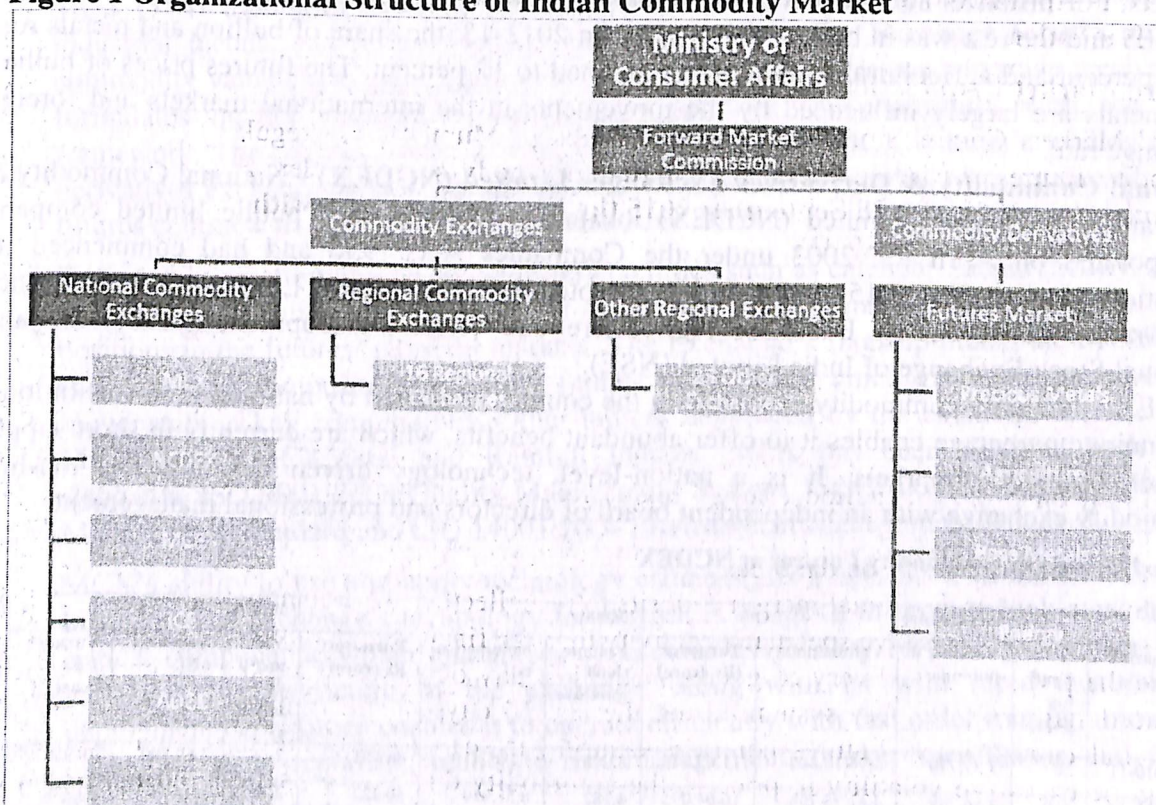
Initiatives taken by the Forward Market Commission

It may be mentioned that in the Commodity Futures Market, the products currently permitted are futures and forward. "Options" have not been permitted. In order to ensure that the stakeholders have a proper understanding of the functioning of commodity markets, the Commission has undertaken various initiatives such as awareness programmes, capacity building programmes, internships and other activities for raising awareness about the commodity futures market build capacities among the stakeholders.

Collaboration with International Regulators

In order to strengthen co-operation with international regulators, the FMC has taken steps for collaborating with regulators in other countries. FMC is also an associate member of IOSCO, an international organization of Security and Commodities Market Regulators. In addition, FMC has also signed Memorandum of Understanding with the United States Commodity Futures Trading Commission (USCFTC) in October 2006, the China Securities Regulatory Commission (CSRC) in November 2006 and the Commissao de Valores Mobiliarios – CVM (Securities and Exchange Commission of Brazil), in January 2010.

Figure 1 Organizational Structure of Indian Commodity Market



Source: Forwards Market Commission, India

Major commodity exchanges in India

There are 19 commodity derivatives exchanges in India. However, the bulk of trading (99.88%) is concentrated in the following national-level commodity exchanges:

1. Multi Commodity Exchange of India (MCX), Mumbai

2. National Commodity and Derivatives Exchange of India (NCDEX), Mumbai
3. National Multi Commodity Exchange (NMCE), Ahmedabad
4. Indian Commodity Exchange (ICEX), New Delhi
5. ACE Derivatives & Commodity Exchange Limited, Mumbai
6. Universal Commodity Exchange Limited, Navi Mumbai.

In terms of total number of contracts traded, MCX has become the world's largest commodity futures exchange in gold and silver, second largest in natural gas, and third in crude oil. The top four commodities (gold, silver, copper and crude oil) form 85 percent of MCX's total trading business. NCDEX, on the other hand, deals with a large number of agricultural and metal commodities, while NMCE's portfolio includes major agricultural commodities and metals.

The total size of commodity futures market was Rs.170,468 billion (around \$2,705 billion) outstanding in the financial year 2012-13, registering a compounded annual growth rate (CAGR) of nearly 40 percent since 2003. In contrast, India's Gross Domestic Product (GDP) was worth \$1,841 billion in 2012. The monthly turnover in Indian commodity exchanges is next only to the US and China. During 2011-12, the total volume of trade across all commodity exchanges in India was 140,257 million metric tonne (MT), out of which deliveries were merely 888,250 MT (0.0000006 percent). This data clearly shows that actual delivery of commodities is extremely low in the Indian futures markets.

Over the years, the composition of trading has dramatically changed in the Indian futures markets. For instance, agricultural commodities constituted 69 percent of total value of trade in 2004-05 and the rest was in bullion and metals. In 2012-13, the share of bullion and metals rose to 65 percent and agricultural commodities declined to 12 percent. The futures prices of bullion and metals are largely influenced by the movements in the international markets and foreign exchange rate.

National Commodity & Derivatives Exchanges Limited (NCDEX):- National Commodity & Derivatives Exchanges Limited (NCDEX) located in Mumbai is a public limited company incorporated on April 23, 2003 under the Companies Act, 1956 and had commenced its operations on December 15, 2003. It is promoted by ICICI Bank Limited, Life Insurance Corporation and National Bank for Agriculture and Rural Development (NABARD) and National Stock Exchange of India Limited (NSE).

NCDEX is the only commodity exchange in the country promoted by national level institutions. This unique parentage enables it to offer abundant benefits, which are currently in short supply in the commodity markets. It is a nation-level, technology driven de-mutualised on-line commodity exchange with an independent board of directors and professional management.

Table I Trends in Commodity Futures at NCDEX

Year/Month	No of Trading days	Agriculture			Metals			Bullion		
		Volume('000 tonnes)	Volume(lots)	Turnover (Rs crore)	Volume ('000 tonnes)	Volume(Lots)	Turnover(Rs crore)	Volume('000 tonnes)	Volume(Lots)	Turnover(Rs crore)
2010-11	307	3,37,770	3,96,10,809	11,09,740	8,998	12,05,418	36,761	2	3,62,790	70,928
2011-12	310	3,86,759	4,41,73,798	16,64,095	4,182	8,31,959	30,422	2	1,43,742	29,438
2012-13	304	3,47,242	3,84,29,715	15,57,146	782	2,08,002	8,235	0	5,068	1,084
2013-14	309	2,74,282	3,36,46,539	11,38,862	3	1,349	58	0	32,620	6,233
2014-15	255	1,94,255	2,70,99,591	8,70,863	2	200	7	1	1,96,738	32,708
Apr 14 - Dec 14	191	1,54,697	2,14,57,608	6,92,757	2	194	7	1	1,59,898	25,617
Apr 15 - Dec 15	194	1,76,261	2,37,72,230	8,25,872	0	0	0	1	78,939	16,652
Energy					Total			Open interest at the end of the		

Year/Month	No of Trading days	Volume ('000 tonnes)	Volume (lots)	Turnover (Rs crore)	Volume ('000 tonnes)	Volume (Lots)	Turnover (Rs crore)	period		
								Open Interest ('000 tonnes)	Open Interest (Lots)	Value (Rs crore)
2010-11	307	66,289	47,91,026	1,93,173	4,13,058	4,59,70,043	14,10,602	1,913	4,57,714	6,446
2011-12	310	26,651	19,47,870	86,248	4,17,594	4,70,97,599	18,10,204	1,813	2,35,906	7,558
2012-13	304	8,594	6,29,902	31,960	3,56,617	3,92,72,687	15,98,426	1,479	1,82,015	5,592
2013-14	309	257	18,862	1,175	2,74,544	3,36,99,370	11,46,328	1,703	2,46,169	7,436
2014-15	255	107	7,868	485	1,94,365	2,73,04,397	9,04,063	1,433	1,95,950	6,087
Apr 14 - Dec 14	191	107	7,868	485	1,54,807	2,20,49,445	7,18,864	1,275	1,85,215	6,185
Apr 15 - Dec 15	194	0	0	0	1,76,259	2,38,51,169	8,42,524	1,593	2,19,342	6,910

Source: Handbook of Statistics 2015, SEBI

Multi Commodity Exchange of India Limited (MCX):- Headquartered in Mumbai Multi Commodity Exchange of India Limited (MCX), is an independent and de-metallized exchange with a permanent recognition from Government of India. It is, India's first listed exchange, a state-of-the-art, commodity futures exchange that facilitates online trading, and clearing and settlement of commodity futures transactions, thereby providing a platform for risk management. The Exchange, which started operations in November 2003, operates under the regulatory framework of Securities and Exchange Board of India (SEBI).

Functions

MCX offers trading in varied commodity futures contracts across segments including bullion, industrial metals, energy and agricultural commodities. The Exchange focuses on providing commodity value chain participants with neutral, secure and transparent trade mechanisms, and formulates quality parameters and trade regulations, in conformity with the regulatory framework. The Exchange has an extensive national reach. MCX is India's leading commodity derivatives exchange with a market share of 88.8 per cent in terms of the value of commodity futures contracts traded in the quarter ended June 2016.

To ease participation, the Exchange offers facilities such as calendar-spread facility, as also EFP (Exchange of Futures for Physical) transactions which enables participants to swap their positions in the futures/ physical markets. The Exchange's flagship index, the MCXCOMDEX, is a real-time composite commodity futures price index which gives information on market movements in key commodities. Other indices developed by the exchange include MCXAgri, MCXEnergy, MCXMetal and Rainfall Indices. MCX has been certified with three ISO standards, ISO 9001:2008 Quality Management System, ISO 27001:2015 Information Security Management Standard and ISO 14001:2004 Environment Management Standard.

MCX's ability to use and apply technology efficiently is a key factor in the development of its business. The exchange's technology framework is designed to provide high availability for all critical components, which guarantees continuous availability of trading facilities. The robust technology infrastructure of the exchange, along with its rapid customization and deployment capabilities enables it to operate efficiently with fast order routing, immediate trade execution, trade reporting, real-time risk management, market surveillance and market data dissemination⁵⁷.

⁵⁷ <https://www.mcxindia.com/about-us>

Table II Trend in Commodity Futures at MCX

Year/Month	Agriculture			Metals			Bullion			
	No of Trading days	Volume ('000 tonnes)	Volume (lots)	Turnover (Rs crore)	Volume ('000 tonnes)	Volume (Lots)	Turnover (Rs crore)	Volume ('000 tonnes)	Volume (Lots)	Turnover (Rs crore)
2010-11	307	27,241	39,67,369	1,14,152	1,24,163	7,41,49,730	25,08,858	710	7,65,08,289	51,69,268
2011-12	310	32,465	61,18,325	1,97,781	1,18,499	8,88,65,001	27,09,758	1,011	22,83,44,739	99,63,667
2012-13	305	32,926	76,30,359	2,70,295	1,51,396	11,39,43,114	31,40,109	723	16,22,79,284	78,07,063
2013-14	310	20,878	59,05,031	1,71,391	85,674	6,37,97,242	17,26,336	400	9,27,48,201	42,63,195
2014-15	255	13,504	33,71,516	1,10,268	62,083	4,73,52,037	12,74,213	240	4,62,94,585	21,53,427
Apr 14 - Dec 14	191	10,208	25,08,086	83,207	45,881	3,41,13,080	9,47,527	175	3,41,07,878	15,86,382
Apr 15 - Dec 15	194	9,673	25,54,597	89,468	66,513	4,84,82,608	11,51,210	179	3,14,34,330	14,72,769

Source: Handbook of Statistics 2015, SEBI

National Multi Commodity Exchange of India (NMCE):-This exchange was originally promoted by Kailash Gupta, an Ahmedabad based trader, and Central Warehousing Corporation (CWC)⁵⁸.

Status of regional commodity exchanges

Before the introduction of national commodity futures exchanges, there were 24 regional commodity exchanges in India. The regional exchanges are commodity specific and mostly cater to the needs of a local area (such as Bikaner Commodity Exchange Ltd. for trading in guar seed). Currently, almost all of regional exchanges are on the verge of closure. Almost 17 out of 24 registered regional exchanges have not traded for the past 5 years and 13 of them have not carried out trading in the last 10 years.

The disappearance of regional exchanges is not a positive development as only a handful of national exchanges are monopolizing the futures market. This is despite the fact that regional exchanges better reflect region specific prices. Rather than allowing them to disappear, the government should strengthen the regional (and state-level) commodity exchanges through sharing a common technology platform and allow a few regional exchanges to emerge as national exchanges over a period of time.

What is even more surprising is the fact that NABARD – a government-owned development bank with a mandate for facilitating credit flow for promotion and development of agriculture and small-scale industries in rural India – was not allowed to establish a commodity futures exchange on its own. Instead, it was made to enter into partnership with MCX and NCDEX to set up national level privately-owned commodity futures exchanges.

Commodities allowed in the Indian futures markets

The Forward Markets Commission (FMC) has allowed trading of 113 commodity futures contracts in the Indian markets. These include food grains (e.g., wheat and gram), edible oilseeds and oil (e.g., groundnut and cottonseed), spices (e.g., turmeric and pepper), fibers (e.g., cotton and jute), metals (e.g., gold and silver), energy (natural gas and crude oil) and other products such as guar seed. However, gold, silver, guar seed, pepper and gram are the prominently traded items in the Indian derivatives markets.

⁵⁸ (Bansal & Ahmad, 2014)

Wash trading

Some commodity exchange operators are using wash trading – a trading practice that involves selling and repurchasing the same or substantially the same security for the purpose of increasing the price and creating the semblance of activity in the market. Wash trading is worth over Rs. 30,000 crore and is said to be thriving in futures exchanges. Wash trading is illegal and its purpose is to manipulate the market and prompt other investors into buying the position. Incidence of wash trades, circular trades and other fake trades rise steeply towards the end of every financial year to evade taxes, particularly in illiquid contracts.

Need of Commodity Market & Exchanges in India

To develop active trading interest across commodities, it is necessary to have a common platform of commodity futures exchange where demand and supply forces can act together in bringing out the best price for any commodity. The main economic purpose of futures commodity exchanges as a market place is to enable commodity Producers and processors to sell their produce in advance to protect them against possible price fall for their commodities and allow consumers, traders, processors to buy in advance to protect against possible price increase. In this way they are able to 'hedge' their price risk, by locking the price, which they will receive, and which they will pay respectively⁵⁹.

Regulatory framework

Three tier regulatory structure of future trading in India, i.e. Government of India, Forward Market Commission and Commodity Exchanges⁶⁰.

- I. **Government of India:** The central government makes policy regarding the forward trading in commodities. At present, the Ministry of Consumer Affairs, Food and Public Distribution Department of government is dealing with commodity derivative trading.
- II. **Forward Market Commission:** The commission came into existence in 1953 under the provisions of Forward Contract (Regulation) Act, 1952. As a statutory body it functions under the administrative control of the Ministry of Consumer affair. As per section 4 of the FC(R) Act, 1952, the commission performs the following roles:
 1. To advise the central government on the subject of assigning or withdrawal of recognition from any commodity exchange.
 2. To observe the forward market activities and to take necessary actions within the powers assigned to it under the Forwards Contract (Regulation) Act, 1952.
 3. To gather and publish obligatory information related with forward trading.
 4. To give recommendations regarding the improvements in working of future trading and commodity exchanges.
 5. To examine the accounts and other documents of any recognized exchange/association or any member of such organization.
 6. To execute other functions assigned to the commission by FC(R) Act, 1952.
- III. **Commodity Exchanges:** Recognized exchange or Association is a place where trading of commodities takes place. Commodity Exchange works under the provisions of Forward Market Commission. FMC is the regulatory body to control the activities of commodity exchanges just like SEBI regulates the functions of Capital market. At present there are 6 National commodity exchanges and 16 regional commodity

⁵⁹ (Bansal & Ahmad, 2014)

⁶⁰ (Kaur, 2013)

specific exchanges operating in Indian commodity futures market. These exchanges are recognised to regulate trading in a variety of commodities approved by Forward Market Commission under the Forward Contracts (Regulation) Act, 1952.

According to the "Objectives and Principles of Securities Regulation" (International Organization of Securities Commissions (IOSCO), 2003), **regulation** must have three overarching **objectives**: the protection of investors; ensuring that markets are fair, efficient and transparent; and the reduction of systemic risk⁶¹.

1. Protection of investors: measures taken to protect investors – taken here to mean all market users – from unscrupulous or irresponsible practices by the exchanges, counterparties or intermediaries that they may interact with. Common mechanisms used to protect investors include: fitness or good character qualifications for intermediaries; requirements for intermediaries to segregate client funds from their own funds; and binding arbitration mechanisms for dispute settlement.

2. Ensuring that markets are fair, efficient and transparent: measures taken to ensure that the market price truly reflects the information known about the market, to constrain "speculative excess", and to avoid manipulation of prices or physical stocks. Common mechanisms used to uphold market integrity include: ensuring a time-stamped audit trail of all trading activity; position limits for speculative participants, including tighter limits in delivery months; constant monitoring of trading for suspicious patterns; free, transparent dissemination of data; an approval process by the external regulator for new contracts to ensure an adequate deliverable supply (among other factors); and "know-your-customer" requirements for intermediaries.

3. Reduction of systemic risk: measures taken to effectively manage the systemic risk arising from market operations, reducing the risk of default to acceptable levels, and ensuring the system as a whole is sufficiently resilient to withstand shocks, such as spikes in volatility or the collapse of a large trader. Common mechanisms used to reduce systemic risk include: minimum capital requirements in order to participate in the markets; the rigorous use of the margining system, with margin levels related to market risk (including higher margin requirements in periods of increased volatility and during the delivery period); daily price movement limits (or "circuit filters") that confine daily trading within defined price parameters; and a "risk hierarchy", which ensures that exchange members cover their clients' positions in the case of a client default and a clearing-house guarantee fund covers members' positions in the case of a member default.

Commodity Derivatives Market Regulation Department (CDMRD), SEBI

The Commodity Derivatives Market Regulation Department is responsible for supervising the functioning and operations of Commodity Derivative exchanges. The following Divisions will perform the functions of the Department:

a. Division of Market Policy (DMP)

The division undertakes Policy relating to Commodity Derivative Exchanges including their trading, clearing and settlement operations.

b. Division of Exchange Administration (DEA)

This division overviews registration, recognition and administration of Commodity Derivative Exchanges including ownership, governance, demutualization and exit etc. Reviewing rule change proposals relating to all policy issues and supervision of commodity derivatives

⁶¹ (Development Impacts of Commodity Exchanges in Emerging Markets, UNCTAD, 2009)

exchanges. Issuing show cause notices, appointment of Enquiry/Adjudication officers and maintenance of database of all commodity derivatives exchanges.

c. Division of Exchange Inspection and complaints against Exchanges.

This division Conducts inspection of commodity derivatives exchanges including inspection for new recognition of Commodity Derivatives Exchanges and recommencement of trading. This division also Monitors and inspect the IT infrastructure of Commodity Derivatives Exchanges. Dealing with complaints pertaining to Commodity Derivatives Exchanges

d. Division of Risk Management and Products (DRMP)

This division took Policy and practice relating to risk management framework of Commodity Derivative exchanges. Approval of products/contracts to be traded on commodity derivatives exchanges.

The Mechanics of the Commodity Futures Markets⁶²

The primary distinction between a futures market and a market in which actual commodities are bought and sold, either for immediate or later delivery, is that in the futures market one deals in standardized contractual agreements only. One can buy and sell commodities in a futures market regardless of whether or not one has, or owns, the particular commodity involved. When one deals in futures one need not be concerned about having to receive delivery (for the buyer) or having to make delivery (for the seller) of the actual commodity, providing of course that one does not buy or sell a future during its delivery month. The purpose of a commodity exchange is to provide an organized marketplace in which members can freely buy and sell various commodities in which they have an interest. The exchange itself does not operate for profit. It merely provides the facilities and ground rules for its members to trade in commodity futures and for non-members also to trade by dealing through a member broker and paying a brokerage commission.

The Clearing House

Each futures exchange has its own clearing house. All members of an exchange are required to clear their trades through the clearing house at the end of each trading session, and to deposit with the clearing house a sum of money (based on clearinghouse margin requirements) sufficient to cover the member's debit balance. All members are required to clear their trades through the clearing house and must maintain sufficient funds with it to cover their debit balances; the clearing house is placed in a position of being responsible to all members for the fulfillment of contracts.

Unit 11 International Commodity Market

CME Group Inc.

Chicago Mercantile Exchange & Chicago Board of Trade is an American futures company and one of the largest options and futures exchanges. It owns and operates large derivatives and futures exchanges in Chicago and New York City, as well as online trading platforms. In 2014, it gained regulatory approval to open a derivatives exchange in London. It also owns the Dow Jones stock and financial indexes, and CME Clearing Services, which provides settlement and clearing of exchange trades. The exchange-traded derivative contracts include futures and options based on interest rates, equity indexes, foreign exchange, energy, agricultural commodities, rare and precious metals, weather, and real estate.

⁶² (The Mechanics of the Commodity Futures Markets What They Are and How They Function, Robert L. Lerner, 2000)

Tokyo Commodity Exchange, Inc. (TOCOM)

This is Japan's largest and one of Asia's most prominent commodity futures exchanges. TOCOM operates electronic markets for precious metals, oil, rubber and soft commodities. It offers futures and options contracts for precious metals (gold, silver, platinum and palladium); energy (crude oil, gasoline, kerosene and gas oil); natural rubber and agricultural products (soybeans, corn and azuki).

Euronext NV

This is a European stock exchange seated in Amsterdam, Brussels, London, Lisbon and Paris. In addition to cash and derivatives markets, the Euronext group provides listing market data, market solutions, custody and settlement services. Its total product offering includes equities, exchange-traded funds, warrants and certificates, bonds, derivatives, commodities and indices.

The Dalian Commodity Exchange (DCE)

This is a Chinese futures exchange based in Dalian, Liaoning province, China. It is a non-profit, self-regulating and membership legal entity established on February 28, 1993. Dalian Commodity Exchange trades in futures contracts underlined by a variety of agricultural and industrial produce on a national scale. As of 2015, DCE has listed a total of 16 futures products, including corn, corn starch, soybean (gmo and non-gmo), soybean meal, soybean oil, RBD palm olein, egg, fiberboard, blockboard, linear low-density polyethylene (LLDPE), polyvinyl chloride (PVC), polypropylene (PP), coke, coking coal and iron ore⁶³.

World Commodity Markets Outlook⁶⁴

The role of income growth in commodities

Income growth, especially in emerging economies, has played a key role in post-2000 commodity price increases. This role has been uneven across commodity groups. Metal prices have been affected the most by growth, especially that in China's manufacturing sector—China currently consumes almost half of world's metals, up from a mere 5 percent two decades ago. Income growth has been the key driver in energy prices; during 2004-13, oil consumption increased by 40 percent in non-OECD economies, while it declined 7 percent in OECD economies. Yet, the effect of income growth on agricultural commodities (including food) is mixed and limited.

Despite the recent weakness across many commodities, most prices are still high compared to recent history. For example, energy and food prices will be on average 150 and 60 percent higher, respectively, in 2014 than 2000-02. Metal, fertilizer, and precious metal prices will be much higher as well (80, 110, and 210 percent, respectively). Numerous factors are associated with these commodity price trends. They include a weak US dollar, which strengthens demand and limits supply from non-US dollar commodity consumers and producers. High prices of energy and other inputs have also played an important role in driving metal and agriculture prices. Low levels of past investment (in turn a reflection of a prolonged period of low prices), along with low inventories have contributed to the boom. Lastly, ample liquidity due to low interest rates and quantitative easing policies in major high-income economies over the past few years are believed to have supported commodity prices as well. In the case of agriculture, prices have been affected by the diversion of food commodities to the production of bio-fuels as well as frequent extreme weather events.

⁶³ https://en.wikipedia.org/wiki/Commodity_market

⁶⁴ (Commodity Markets Outlook Report, World Bank 2015)

Yet, strong and sustained economic growth in emerging economies, notably China, has been the most frequently discussed driver of **commodity** prices, not only as a cyclical factor but also as a key cause of the post-2000 super cycle—a primarily demand-driven price cycle that lasts several decades instead of the few years typically associated with the cyclicity of economic activity. Indeed, GDP and industrial production in emerging economies (where most of the growth in commodity consumption takes place) grew at an annual rate of 6.3 and 7.8 percent, respectively, during 2002-2012, the highest rate in any 10-year period over the past four decades. During the same period China's GDP and industrial production grew at an average annual rate of 10.6 and 14.7 percent, respectively.

Indeed, most industrial commodities have experienced an unprecedented consumption boom during the past 15 years. In 2012, China consumed almost half of the 91 million tons of metals produced globally, up from only 4 percent of global supplies of 43 million tons in 1990. In contrast, OECD economies consumed as much metals in 2012 as they did in 1990. Similarly, crude oil consumption increased by 40 percent during 2004-14 in non-OECD economies, while it declined 7 percent in OECD economies. In 2014, non-OECD economies consumed more oil than OECD economies for the first time in history—yet, on a per capita basis OECD economies consume 5 times more oil than non-OECD ones.

The natural gas market remains segregated by geography with large price differentials between the U.S., European, and Asian markets. Shale gas production growth in the US has created a glut of supplies that have been walled off from the global markets as the U.S. companies lack both export infrastructure and permits. Asian prices, on the other hand, remain largely linked to oil while European prices reflect a mixture of spot and oil-linked contracts. Demand for natural gas is seasonally weak during summer resulting in lower prices.

World demand for crude oil is expected to grow at less than 1.5 percent annually over the projection period, with all the growth coming from non-OECD countries, as has been the case in recent years. Consumption growth in OECD economies will continue to be subdued by slow economic growth and efficiency improvements in vehicle transport induced by high prices of the past few years—including a switch to hybrid, natural gas, and electrically powered transport. Pressure to reduce emissions due to environmental concerns is expected to dampen demand growth at the global level as well.

On the supply side, non-OPEC production is expected to continue its upward climb, as high prices in the past have prompted increased use of innovative exploration techniques (including deep-water offshore drilling and shale liquids) and the implementation of new extractive technologies to increase the output from existing wells.

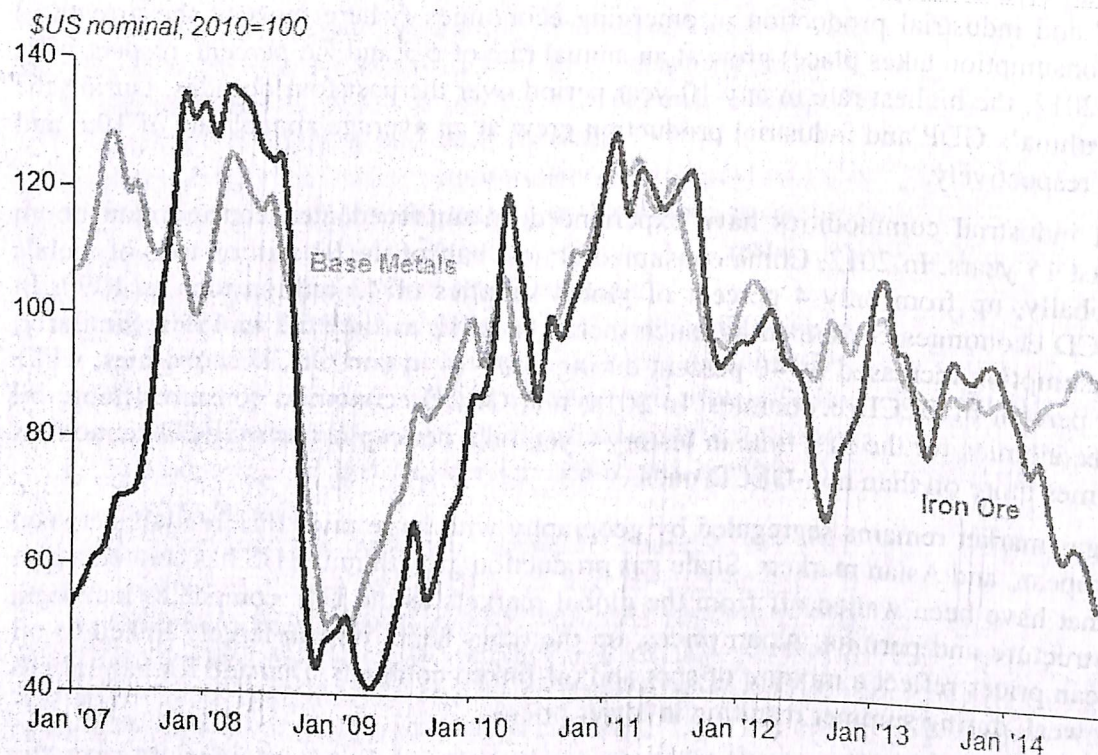
Short term risks in the oil market are currently on the downside, reflecting the diminished impact of geopolitical risks, OPEC's reluctance to take action, and anemic growth in emerging economies. However, geopolitical risks may play a role in the medium term as Iraq is expected to account for half of OPEC's growth in the next 5 years, while current (relatively) low prices may reduce investment in non-conventional technologies.

Metals

The World Bank metals price index reached a high of 126 in February 2011 (2010 = 100), up 164 percent since its December 2008 low (Figure 12). This increase, together with the sustained increases prior to the financial crisis, generated large new investments and a strong supply response resulting in a 3-year slow decline. Almost all of the additional metal supply went to meet demand from China, whose consumption share of world refined metals reached 47 percent

at the end of 2013, up from 45 per-cent in the previous year (and up from 5 percent two decades ago).

Figure 2 Metal Prices

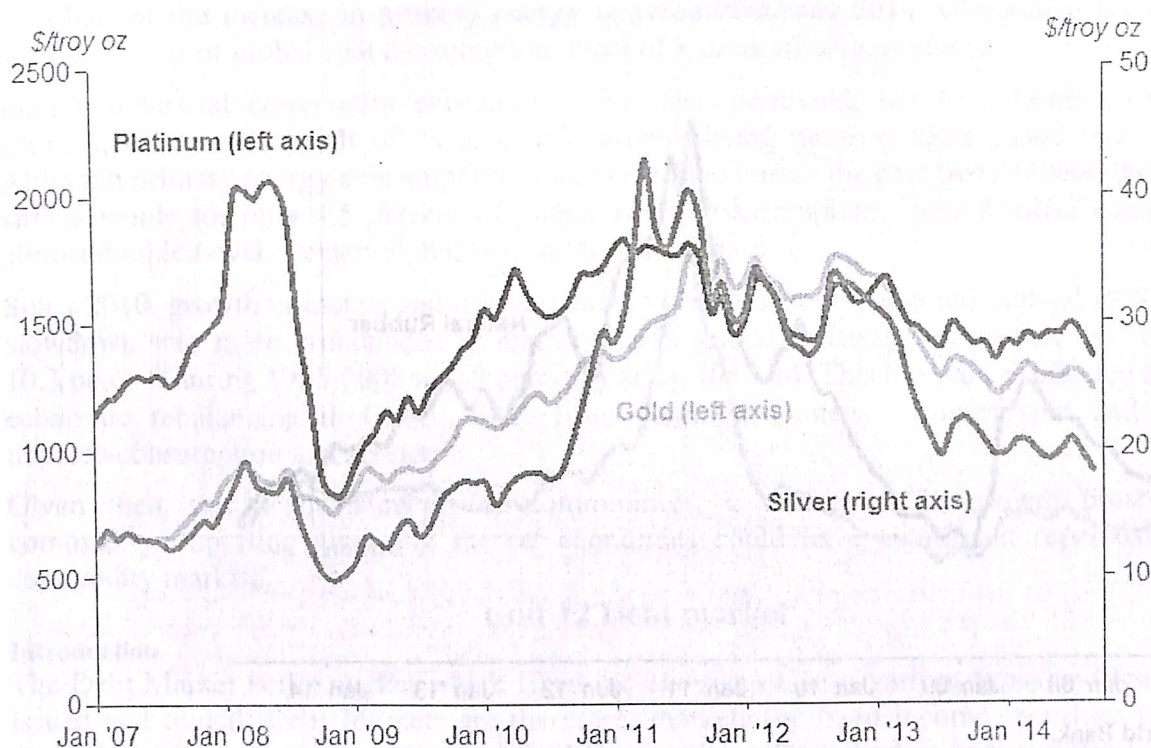


Source: World Bank.

Precious metals

The recent weakness in gold prices has prompted a number of mergers and acquisitions in South Africa's gold mining industry, with companies seeking to reduce operating costs and insulate investors from labor strike risks. The overall weakness in precious metal prices is likely to persist and the index was average 11 percent lower in 2014 as institutional investors consider these commodities as less "safe haven" asset holdings. Precious metal prices are expected to fall an additional 2 percent in 2015. Long-term price pressures are predominantly on the downside and are expected to become more pronounced when the U.S. Federal Reserve eventually raises interest rates.

Figure 3 Precious metal prices



Source: World Bank.

Fertilizers

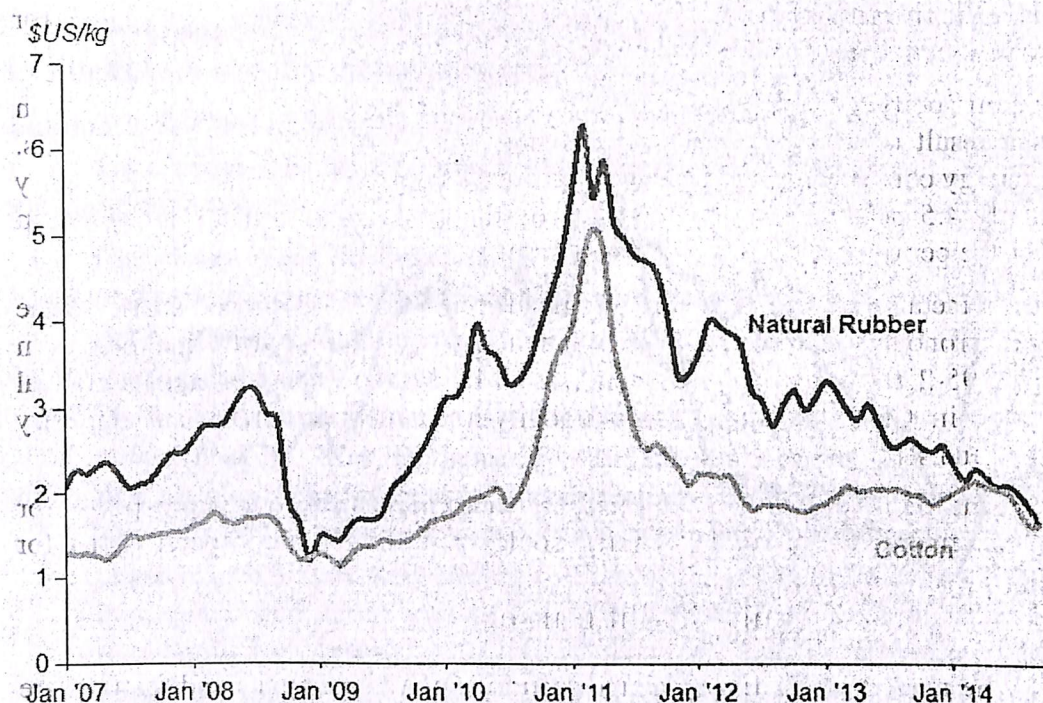
Fertilizers are a key input to the production of grains and oilseeds, often exceeding half of purchased input costs in the agricultural sectors of high income countries. Because natural gas is used to produce nitrogen fertilizers, the recent energy revolution and the resulting lower natural gas prices in the U.S. is impacting the global fertilizer industry. Many fertilizer companies are building plants in the U.S. to utilize lower natural gas prices, including a recent corporate deal between a U.S. and an European fertilizer company, which, if finalized will form world's largest producer of nitrogen fertilizer.

The fertilizer price index was expected to decline 11.5 percent in 2014 and an additional 3.5 percent next year. Such declines come on top of the 13 percent drop in 2013. Yet, individual components of the index will follow different paths. Phosphate rock and potassium chloride will decline almost 25 percent each in 2015, urea will average 6.5 percent lower, but TSP and DAP will make some moderate gains. This outlook is based on the assumption that natural gas price in the U.S. will increase moderately.

Recent developments

The recent upward pressure in rice prices reflects worsening production prospects in India, Indonesia, Philippines, and Sri Lanka. Broad-based weakness reflects record area expansion in soybeans, with global production projected to reach an all-time peak both among producers in the U.S. and in South America. Weak imports of edible oils, especially by China and India, have played a role as well.

Figure 4 Raw material prices



Source: World Bank.

Policy responses, such as ex-port bans, are unlikely to be put in place in an environment of well-supplied agricultural markets. If the baseline outlook for production materializes, then even if policy actions are implemented, they are likely to be local and isolated events with minimal impact on world markets.

Weak growth in emerging market economies: Implications for Commodity Markets⁶⁵

The World Bank has recently revised downwards its growth forecasts for emerging and developing economies to 4.0 percent in 2016. Amid amply-supplied markets, weak growth prospects for these economies are weighing on commodity prices. Major emerging markets—particularly China—have been among the largest sources of additional commodity demand during the 2000s. A faster than-expected slowdown in major emerging economies—especially if combined with financial stress—could reduce commodity prices considerably and set back growth in commodity exporters.

Emerging economies play a significant role in shaping commodity markets, both for production and consumption. During 2010-14, the four largest emerging markets (Brazil, Russia, India, and China) accounted for 20 percent or more of global gas and oil production and 40 percent or more of global coal and grain production. At the same time, their commodity consumption has grown rapidly, to about 40 percent of global primary energy and food commodity consumption and more than 50 percent of global metal consumption. There has been considerable heterogeneity among these countries, including between China and India, which together currently account for almost 40 percent of the global population. China has been world's largest consumer of a number of industrial commodities during the past decade and a half, and accounted for much of the growth of global commodity consumption—virtually all of the increase in metals and more

⁶⁵Weak growth in emerging market economies: What does it imply for commodity markets? *Commodity Markets Outlook*, January 2016, Special Focus.

than half of the increase in primary energy between 2000 and 2014. China also accounts for more than half of global coal consumption, most of it domestically produced.

India's industrial commodity consumption has also increased, but to a lesser extent than China's, partly as a result of its economic growth being more services based than China's. Although primary energy consumption in India doubled during the past two decades, the country still accounts for only 4.5 percent of global energy consumption. India's metal consumption almost doubled over the period, but from a very small base.

Since 2010, growth in metals and primary energy demand from China has slowed steadily. The slowdown was more pronounced in metals whose annual consumption growth declined from 10.3 percent during 1995-2008 to 3.2 percent during 2010-14. This has partly reflected a gradual economic rebalancing in China, away from commodity-intensive investment and industry towards consumption and services.

Given their significant demand for commodities, a weakening in growth prospects for commodity importing emerging market economies could have significant repercussions for commodity markets.

Unit 12 Debt market

Introduction

The Debt Market is the market where fixed income securities of various types and features are issued and traded. Debt Markets are therefore, markets for fixed income securities issued by Central and State Governments, Municipal Corporations, Govt. bodies and commercial entities like Financial Institutions, Banks, Public Sector Units, Public Ltd. companies and also structured finance instruments.

Different types of instruments, which are normally traded in this market

1. Government Securities:

a. Central Government: Zero Coupon Bonds, Coupon Bearing Bonds, Treasury Bills STRIPS.

b. State Governments: Coupon Bearing Bonds

2. Public Sector Bonds:

a. Government Agencies/Statutory Bodies: Govt Guaranteed Bonds, Debentures

b. Public Sector Units: PSU Bonds, Debentures, Commercial Paper

3. Private Sector Bonds:

a. Corporate: Debentures, Bonds, Commercial Paper, Floating Rate Bonds, Zero Coupon Bonds, Inter-Corporate Deposits.

b. Banks: Certificate of Deposits, Debentures, Bonds.

c. Financial Institutions: Certificate of Deposits, Bonds

Debt market instrument characteristics⁶⁶

Debt markets are used by both firms and governments to raise funds for long-term purposes, though most investment by firms is financed by retained profits. Bonds are long term borrowing instruments for the issuer. Major issuers of bonds are governments (Treasury bonds in US, gilts in the UK, Bunds in Germany) and firms, which issue corporate bonds. Corporate as well as government bonds vary very considerably in terms of their risk. Some corporate bonds are secured against assets of the company that issued them, whereas other bonds are unsecured. Bonds secured on the assets of the issuing company are known as debentures. Bonds that are not secured are referred to as loan stock. Banks are major issuers of loan stock. The fact that

⁶⁶ Financial Markets, Leonardo da Vinci programme project (2010)

unsecured bonds do not provide their holders with a claim on the assets of the issuing firm in the event of default is normally compensated for by means of a higher rate of coupon payment.

Characteristics of bonds

The conventional or **straight** bond has the following characteristics:

- a. **Residual maturity (Redemption date).** As time passes, the residual maturity of any bond shortens. Bonds are classified into 'short-term' (with lives up to five years); 'medium-term' (from five to fifteen years); 'long-term' (over fifteen years).

Bonds pay a **fixed rate** of interest, called **coupon**. It is normally made in two installments, at six-monthly intervals, each equal to half the rate specified in the bond's coupon. The coupon divided by the **par value** of the bond (100 Euro) gives the **coupon rate** on the bond.

- b. The **par or redemption value** of bonds is commonly 100 Euro (or other currency). This is also the price at which bonds are first issued. However, since the preparations for issue take time, market conditions may change in such a way as to make the bonds unattractive at their existing coupon at the time they are offered for sale. They will then have to be sold at a discount to 100 Euro, in order to make the coupon rate approximate the market rate of interest. If, vice versa, the market interest rates fall, the coupon may make the bond attractive at a price above 100 Euro. In these cases the issuers are making a last-minute adjustment to the price which they hope will make the bonds acceptable to the market.

- c. **Bond prices fluctuate inversely with market interest rates.** If market rates rise, people prefer to hold the new, higher-yielding issues than existing bonds. Existing bonds will be sold and their price will fall. Eventually, existing bonds with various coupons will be willingly held, but only when their price has fallen to the point where the coupon expressed as a percentage of the current price approximates the new market rate.

The **yield on bonds** are expressed commonly in two forms:

1. *Redemption yield;*
2. *Interest yield or running yield.*

Interest yield (Running yield): the return on a bond taking account only of the coupon payments. **Yield to maturity or redemption yield:** The return on a bond taking account of the coupon cash flows and the capital gain or loss at redemption.

Types of bonds

1. **Callable and puttable bonds.** Callable bonds can be redeemed at the issuer's discretion prior to the specified maturity (redemption) date. Puttable bonds can be sold back to the issuer on specified dates, prior to the redemption date.
2. **Convertible bonds.** These are usually corporate bonds, issued with the option for holders to convert into some other asset on specified terms at a future date. Conversion is usually into equities in the firm, though it may sometimes be into floating rate notes.
3. **Eurobonds.** Eurobonds are bonds issued in a country other than that of the currency of denomination. Thus bonds issued in US dollars in London are eurobonds, as are yen bonds issued in New York. The bonds themselves may be straights, that is fixed-interest, of the variations listed here. Eurobonds are issued by governments but more usually by corporations.

4. **Euro bonds.** These are bonds denominated in euros and issued in the euro currency area. If bonds denominated in euros would be issued outside the euro currency area, they would be euro eurobonds. **Floating rate notes (FRNs).** These are corporate bonds where the coupon can be adjusted at pre-determined intervals. The adjustment will be made by reference to some benchmark rate, specified when the bond is first issued. An FRN might specify, for example, that its coupon should be fifty basis points above six-month treasury bill rate, or six-month LIBOR, adjusted every six months. FRNs are, in part, a response to high and variable inflation rates.
5. **Foreign bonds.** These are corporate bonds, issued in the country of denomination, by a firm based outside that country. Thus, a US firm might issue a sterling bond in London.
6. **Index-linked bonds.** These are corporate bonds where the coupon can be adjusted to high and variable rates of inflation. While other bonds have a maturity (redemption) value fixed in nominal terms and therefore suffer a decline in real value as a result of inflation, both the value and the coupon of an index-linked bond are uprated each year in line with lagged changes in a specified price index.
7. **Junk bonds.** Junk bonds are corporate bonds whose issuers are regarded by bond credit rating agencies as being of high risk. They will carry a rate of interest at least 200 basis points above that for the corresponding bonds issued by high-quality borrowers.
8. **Strips.** Stripping refers to the breaking up of a bond into its component coupon payments and its maturity (redemption) value. Thus a ten-year bond, paying semi-annual coupons, would make twenty-one strips. Each strip is then sold as a zero-coupon bond. That is, it pays no interest but is sold at a discount to the payment that will eventually be received. In this sense, it is like a long-dated bill. The strips are created from conventional bonds.

Bond market characteristics

Debt markets include: **Primary markets** for bonds, i.e. the markets in which newly issued instruments are bought, **secondary markets**, in which existing or second hand instruments are traded. Majority of world bond markets have different institutional arrangements for the issue and trading of government bonds and corporate bonds. The reason is that governments should be able to sell the debt, which they use for budgetary and other purposes. Thus an active market with high rated participants should be ensured. Therefore government bond markets are subject to high level of supervision and regulation by the central bank. For governments bonds are the main instrument (mainly central governments, but also regional and local government authorities, and social securities funds) to finance their budget deficits. This is true especially for within the euro area countries. Besides, government bonds often serve as a benchmark for pricing other assets and they are also frequently used as collateral in various financial transactions. In governments debt securities issues form the most important market segment, followed by debt securities issued by financial institutions (consisting of monetary financial institutions (MFIs) and non-MFI financial institutions), and those issued by non-financial corporations. Monetary financial institutions include all financial institutions whose business is (1) to receive deposits and/or close substitutes for deposits from entities other than MFIs and (2) to grant for their own account credit and/or invest in securities. The non-government bond market is dominated by bank debt securities. This segment includes different types of bonds, including unsecured bank debt securities and covered bonds. **Covered bonds** are claims of the bond holders against the issuing MFI that are secured by a pool of cover assets on the MFI's balance sheet, such as mortgage loans or loans to the public sector.

Bond market yields

Bond yields are influenced by interest-rate expectations, the term premium, credit risk and liquidity. Risk-averse investors demand a risk premium (term premium) for investments in longterm bonds to compensate them for the risk of losses due to interest rate hikes; those losses increase with bond duration. The term premium leads to a positive term spread, i.e., the spread of yields for bonds with longer maturity over yields for bonds with shorter maturity, even when markets expect increasing and decreasing interest rates to be equally likely. Liquidity is one of the key characteristics of the bond market⁶⁷. This liquidity is, again a key in the determination of the price of bond. Anticipations, risk aversion, investment alternatives, and preferences about the timing of consumption play a role in determining bond prices⁶⁸.

Development, status and hindrances of debt market in India⁶⁹

At the current time, when India is endeavoring to sustain its high growth rate, it is imperative that financing constraints in any form be removed and alternative financing channels be developed in a systematic manner for supplementing traditional bank credit. In this context, the development of long-term debt markets – corporate debt and municipal debt – is critical in the mobilization of the huge magnitude of funding required to finance potential business expansion and infrastructure development.

A developed corporate debt market serves the needs of an emerging economy in multiple ways:

- i. It supplements the existing banking system in providing the required funding to enterprises and while doing so reduces the vulnerability of the financial system to external shocks by ensuring diversification of funding sources in the economy. Previous financial crises have shown that systemic problems in the banking sector can interrupt the flow of funds from savers to investors for a significantly long period of time (Jiang, Tang, & Law, 2002).
- ii. It enables better pricing of credit risk, dynamic allocation of capital, realistic pricing of government debt and reduction of currency mismatches in the financial system.
- iii. It provides investment options to institutions such as insurance companies and pension funds which seek high quality long term assets to match their long term liabilities.
- iv. It fosters the development of credit derivative products thereby allowing efficient credit risk transmission.

Current Status of Indian Corporate Debt Market

India has been distinctly lagging behind other emerging economies in developing its long-term corporate debt market. While the equity market in India has been quite active, the size of the corporate debt market is very small in comparison to not only developed markets, but also some of the other emerging market economies in Asia such as Malaysia, Thailand and China.

The size of the Indian financial system is not adequate to meet the needs of the real economy. A comparison of the asset size of the top ten corporates and that of the top ten banks reveals that banks in India are unable to meet the scale or sophistication of the needs of large corporate India.

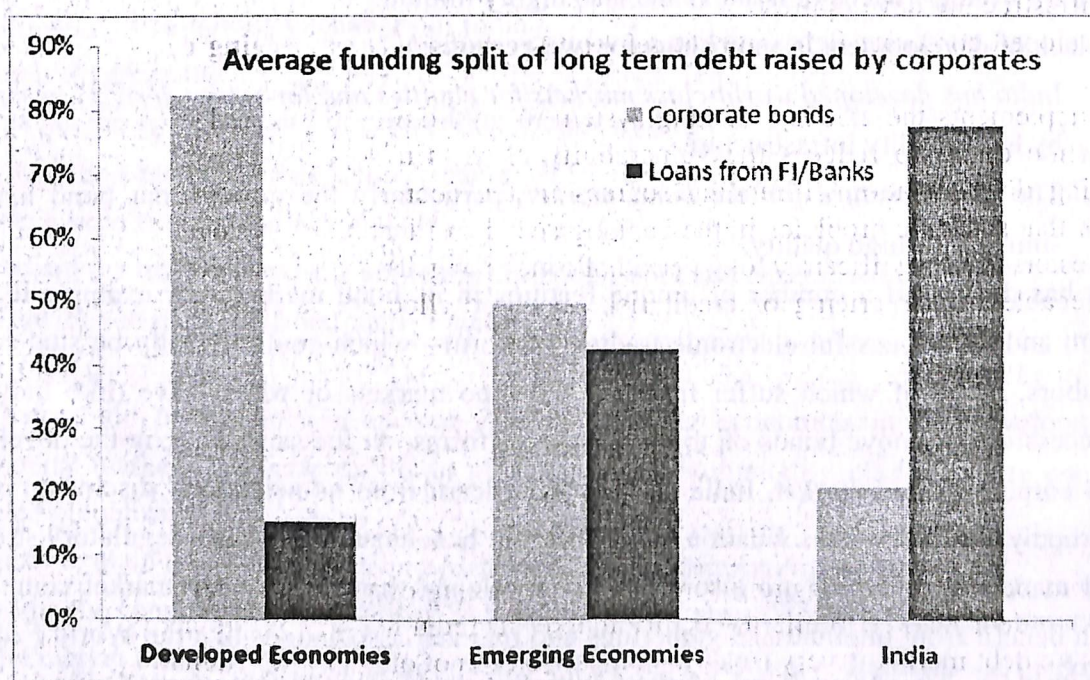
In India, as of 2010, the proportion of bank loans to GDP was approximately 37%, while that of corporate debt to GDP was only 5.4%. According to the Securities and Exchange Board of India (henceforth SEBI) database, outstanding corporate bonds amounted to around INR 9 trillion in 2011 making it nearly 10.5% of GDP. At the same time, corporate bond outstanding was nearly

⁶⁷ (Commodity Markets Outlook Report, World Bank 2015)

⁶⁸ (Cox, Ingersoll, & Ross, 1985)

⁶⁹ (Sengupta, & Anand, 2014)

90% of GDP in USA, 34% in Japan, & close to 60% in South Korea. For a sample of eight Indian corporations that featured in Forbes 2000, corporate bonds account for only 21% of total long term financing. In contrast, corporate bonds account for nearly 80% of total long term debt financing by corporations in the four developed economies of USA, Germany, Japan and South Korea.⁶ In these countries, the share of corporate bonds in total debt financing is close to 87% for corporates graded above BBB and 66% for the rest. Corresponding figures in major emerging economies such as South Africa, Brazil, China and Singapore, are 57% for corporates rated above BBB and 33% for those rated at BBB or below respectively. All these indicate a tremendous potential for corporate debt market growth in India. Based on the experience of G7 countries since the 1970s, Goldman Sachs has estimated that the total capitalization of the Indian debt market (including public-sector debt) could grow nearly four-fold over the next decade from roughly USD 400 billion in 2006 to USD 1.5 trillion by 2016. This growth, if not crowded out by public sector debt, could result in increased access to debt markets for Indian corporates.



Source: Sengupta, & Anand, (2014)

Development of the domestic corporate debt market in India is constrained by a number of factors, the prominent ones being: low issuance leading to illiquidity in the secondary market, narrow investor base and high costs of issuance. The market suffers from deficiencies in products, participants and institutional framework. And this is despite the fact that India appears to be fairly well placed insofar as the pre-requisites for development of the corporate debt market are concerned. There is a reasonably well-developed government securities market, which generally precedes the development of the market for corporate debt securities. The major stock exchanges in India have trading platforms for transactions in debt securities. Infrastructure also exists for clearing and settlement in the form of the Clearing Corporation of India Limited

(CCIL). Finally, the presence of multiple rating agencies meets the requirement of an assessment framework for bond quality⁷⁰.

India's Bond Market Developments and Challenges Ahead⁷¹

India is a bank-dominated market, and the relative importance of bank assets as a percentage of GDP has continued to grow—partly as banking penetration has deepened with financial liberalization, and partly as a result of the ongoing need for deficit financing. However, the ratio of bank assets to GDP is still low by comparison with other emerging East Asian economies, indicating that India still has some way to go before its banking sector is fully developed. The same pattern is also seen in the case of People's Republic of China (PRC), which like India has a largely state-owned/controlled financial sector. Other emerging East Asia markets have seen a decline in banking assets as a percentage of GDP since 1996, reflecting greater diversification into other forms of finance, especially for corporate borrowers.

The Indian bond market is, however, less well-developed. While having seen rapid development and growth in size, the government bond market remains largely illiquid. Its corporate bond market remains restricted in regards to participants, largely arbitrage-driven (as opposed to driven by strategic needs of issuers) and also highly illiquid.

The lack of development is anomalous for two reasons:

1. *India has developed world-class markets for equities and for equity derivatives* supported by high-quality infrastructure.
2. *The infrastructure for the bond market*, particularly the government bond market, is similarly of high quality.

India has developed a number of unique features in its bond market—for example its CBLO system and the successful electronic trading platform—which could usefully be studied by its neighbors, many of which suffer from limited repo markets or which have (like India) tried unsuccessfully to move bonds on to electronic platforms. At the same time, in the development of its corporate bond market, India can no doubt learn from its neighbors' disclosure policies, bankruptcy processes, consolidation of government benchmark issues, and regulatory structures. Bond market associations are also less well-developed than their equity market counterparts, which benefit from international gatherings and regional associations like the World Federation of Exchanges. The Asian Bond Markets Initiative could play an instrumental role in helping address this shortfall.

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⁷⁰ Sengupta, & Anand, 2014

⁷¹ (Wells & Schou-zibell, 2008)

NHB) to DFIs to facilitate on-lending to Housing Finance Companies (HFCs), NBFCs, mutual funds and exporters. Under the refinance facility, Rs 213.98 bn were drawn up to June 26, 2009, while total disbursements amounted to Rs 153.12 bn (up to June 26, 2009).

Meaning and Definition

OECD describes DFIs as specialised development banks or subsidiaries set up to support private sector development in developing countries. They are usually majority-owned by national governments and source their capital from national or international development funds or benefit from government guarantees. This ensures their creditworthiness, which enables them to raise large amounts of money on international capital markets and provide financing on very competitive terms.

1) Industrial Development Bank of India (IDBI)

Industrial Development bank of India (IDBI) was constituted under Industrial Development bank of India Act, 1964 as a Development Financial Institution and came into being as on July 01, 1964 vide GoI notification dated June 22, 1964. It was regarded as a Public Financial Institution in terms of the provisions of Section 4A of the Companies Act, 1956. It continued to serve as a DFI for 40 years till the year 2004 when it was transformed into a Bank.

Functions of IDBI

- Planning, promoting and developing industries with a view to fill the gaps in the industrial structure by conceiving, preparing and floating new projects.
- Providing technical and administrative assistance for promotion, management and expansion of industry.
- Providing refinancing facilities to the IFCI, SFCs and other financial institutions approved by the government.
- Coordinating the activities of financial institutions for the promotion and development of industries.
- Purchasing or underwriting shares and debentures of industrial concerns.
- Guaranteeing deferred payments due from industrial concerns and for loans raised by them.
- Undertaking market and investment research, surveys and techno-economic studies helpful to the development of industries.

Industrial Development Bank of India-Progress

Later, when years passed, it was felt that IDBI should be converted in to a bank. For the purpose, Industrial Development bank (transfer of undertaking and Repeal) Act, 2003 [Repeal Act] was passed repealing the Industrial Development Bank of India Act, 1964. In terms of the provisions of the Repeal Act, a new company under the name of Industrial Development Bank of India Limited (IDBI Ltd.) was incorporated as a Govt. Company under the Companies Act, 1956 on September 27, 2004. Thereafter, the undertaking of IDBI was transferred to and vested in IDBI Ltd. with effect from the effective date of October 01, 2004. In terms of the provisions of the Repeal Act, IDBI Ltd. has been functioning as a Bank in addition to its earlier role of a Financial Institution.

Merger of United Western Bank with IDBI Ltd.

The United Western Bank Ltd. (UWB), a Satara based private sector bank was placed under moratorium by RBI. Upon IDBI Ltd. showing interest to take over the said bank towards its further inorganic growth, RBI and Govt. of India amalgamated UWB with IDBI Ltd. in terms of

the provisions of Section 45 of the Banking Regulation Act, 1949. The merger came into effect on October 03, 2006.

Change of name of IDBI Ltd. To IDBI Bank Ltd

The name of the Bank was changed to IDBI Bank Limited and the new name became effective from May 07, 2008 upon issue of the Fresh Certificate of Incorporation by Registrar of Companies, Maharashtra. The Bank has been accordingly functioning in its present name of IDBI Bank Limited.

2) IFCI (Industrial Finance Corporation of India)

After independence, our capital market was not so developed. Ventures like merchant bankers and underwriters were not common. It is against this backdrop that the government established The Industrial Finance Corporation of India (IFCI) on July 1, 1948, as the first Development Financial Institution in the country to cater to the long-term finance needs of the industrial sector.

Liberalization - conversion into company in 1993

By the early 1990s, it was recognized that there was need for greater flexibility to respond to the changing financial system. It was also felt that IFCI should directly access the capital markets for its funds needs. It is with this objective that the constitution of IFCI was changed in 1993 from a statutory corporation to a company under the Indian Companies Act, 1956. Subsequently, the name of the company was also changed to "IFCI Limited" with effect from October 1999.

Indian Economy and IFCI- Focus

Since its inception on 1st July 1948 as a Public Financial Institution, IFCI has made a significant contribution to the modernization of Indian industry, export promotion, import substitution, pollution control, energy conservation and generation through commercially viable and market-friendly initiatives. Some sectors that have directly benefited from IFCI include:

- Agro-based industry (textiles, paper, sugar)
- Service industry (hotels, hospitals)
- Basic industry (iron & steel, fertilizers, basic chemicals, cement)
- Capital & intermediate goods industry (electronics, synthetic fibres, synthetic plastics, miscellaneous chemicals) and Infrastructure (power generation, telecom services)

IFCI's Economic Contribution

IFCI's economic contribution can be measured from the following:

1. IFCI has played a key role in the development of cooperatives in the sugar and textile sectors, besides acting as a nodal agency in both sectors. 371 cooperative societies in these sectors have been assisted by IFCI.
2. IFCI has promoted Technical Consultancy Organizations (TCOs), primarily in less developed states to provide necessary services to the promoters of small and medium-sized industries in collaboration with other banks and institutions.
3. IFCI has also provided assistance to self-employed youth and women entrepreneurs under its Benevolent Reserve Fund (BRF) and the Interest Differential Fund (IDF).
4. IFCI has founded and developed prominent institutions like:
 - Management Development Institute (MDI) for management training and development
 - ICRA for credit assessment rating
 - Tourism Finance Corporation of India (TFCI) for promotion of the hotel and tourism industry

- Institute of Leadership Development (ILD) for rehabilitation and training of displaced and retrenched labor force
 - Rashtriya Gramin Vikas Nidhi (RGVN) for promoting, supporting and developing voluntary agencies engaged in uplifting rural and urban poor in east and northeast India.
5. IFCI, along with other institutions, has also promoted:
- Stock Holding Corporation of India Ltd. (SHCIL)
 - Discount and Finance House of India Ltd. (DFHI)
 - National Stock Exchange (NSE)
 - OTCEI
 - Securities Trading Corporation of India (STCI)
 - LIC Housing Finance Ltd.
 - GIC Housing Finance Ltd.
 - Biotech Consortium India Ltd. (BCIL)
6. IFCI has also set up Chairs in reputed educational/management institutions and universities.
7. A major contribution of IFCI has been in the early assistance provided by it to some of today's leading Indian entrepreneurs who may not have been able to start their enterprises or expand without the initial support from IFCI.

IFCI has become a Government of India Undertaking with effect from 7th April 2015. The Govt. of India has placed a Venture Capital Fund of Rs. 200 crore for Scheduled Castes (SC) with IFCI with an aim to promote entrepreneurship among the Scheduled Castes (SC) and to provide concessional finance. IFCI has also committed a contribution of Rs.50 crore as lead investor and Sponsor of the Fund. IFCI Venture Capital Funds Ltd., a subsidiary of IFCI Ltd., is the Investment Manager of the Fund. The Fund has been operationalized during FY 2014-15 and IVCF is continuously making efforts for meeting the stated objective of the scheme.

Further, Government of India has recently designated IFCI as a nodal agency for "Scheme of Credit Enhancement Guarantee for Scheduled Caste (SC) Entrepreneurs" in March, 2015 with an objective to encourage entrepreneurship in lower strata of the societies. Under the Scheme IFCI would provide guarantee to banks against loans to young and start-up entrepreneurs belonging to scheduled caste.

Functions of IFCI

- To guarantee loans raised by industrial concerns;
- To grant loans and advances to or subscribe to the debentures of industrial concerns;
- To underwrite the issue of stocks, shares, bonds or debentures by industrial concerns;
- To extend guarantee in respect of deferred payments by importers;
- To subscribe directly to the stock or shares of any industrial concern.

3) NABARD

Genesis

A committee was organised by RBI, to review the set up for institutional credit for agriculture and rural development (CRAFICARD) on 30 March 1979. It was under the Chairmanship of Shri B.Sivaraman, former member of Planning Commission. That committee submitted its interim report on 28 November 1979. In that report, they specified the need for providing undivided attention, forceful direction and pointed focus to the credit problems arising out of integrated rural development and recommended the formation of National Bank for Agriculture

and Rural Development (NABARD). In 1981, the Indian Parliament passed an Act for the foundation of NABARD. Thus NABARD came into existence on 12th July 1982, by undertaking several activities of the RBI like agricultural credit etc. It also undertook the refinance functions of the then Agricultural Refinance and Development Corporation (ARDC).

NABARD was dedicated to the service of the nation by the late Prime Minister Smt. Indira Gandhi on 05 November 1982.

NABARD had an initial capital of Rs. 100 Crore. Consequently, after revising the composition of share capital between Government of India and RBI, the paid up capital as on 31 March 2015, stood at ₹ 5000 crore with Government of India holding ₹ 4,980 crore (99.60%) and Reserve Bank of India 20.00 crore (0.40%).

Mission of NABARD

Promote sustainable and equitable agriculture and rural prosperity through effective credit support, related services, institution development and other innovative initiatives.

Functions of NABARD

Functions of NABARD can be divided into three as:

A. Financial

B. Developmental

C. Supervisory

A. Financial functions

These functions can be classified into two as:

a. Refinance

b. Direct finance

a. Refinance functions

It includes:

01. Provision of short and medium term loans

In modern agriculture, apart from traditional cultivation, a farmer has to make recurring investments, for using high yielding varieties of seeds, fertilisers, insecticides and costly agricultural implements. In such a situation, arrangements for credit should go much beyond the simple provision of credit and must be linked operationally with productivity and other services. Production and productivity, marketing and raising the level of surplus and savings must, therefore, be the major functions of credit. The benefit of modern technology, the advantages of institutional credit, infrastructural arrangements etc., should accrue to all classes of farmers. Besides, on the supply side, there must be an arrangement for assessing the requirements of funds on the basis of actual cost and raising the resources there for. It was in this context, the crop loan system or the production oriented system of lending was evolved and conceived as the most appropriate mechanism for mass disbursement of production credit. Production Credit Department (PCD) deals with short term refinance facilities, for various types of production, marketing and procurement activities, being provided to client institutions, as detailed below:

➤ Short Term (Seasonal Agricultural Operations)

Refinance is provided for production purposes at concessional rate of interest to State Cooperative Banks (SCBs) and Regional Rural Banks (RRBs) by way of sanction of credit limits. Each withdrawal against the sanctioned credit limit is repayable within 12 months.

➤ **Short Term Refinance to RRBs, PSBs and CCBs (directly) for financing PACS for their Seasonal Agricultural Operations**

A new refinance product for financing of PACS through PSBs & RRBs, wherever Cooperative Banks are weak or not in a position to lend to PACS adequately, was introduced during last year. (2011-12)

➤ **Short Term (Others)**

The ST (Others) limit would consist of different purposes viz. ST- Agriculture and Allied Activities, ST - Marketing of crops, ST- Fisheries Sector, ST- Industrial Cooperative Societies (other than weavers), ST- Labour Contract and Forest Labour Cooperative Societies including collection of Minor Forest produce. ST- Rural artisan including weavers members of PACS/LAMPS/FSS, ST- Purchases, Stocking and Distribution of Chemical Fertilisers and other Agricultural Inputs on the basis of bank wise RLP for respective purposes. The limit is sanctioned to SCBs and RRBs.

02. Provision of long term loans

Asset creation occurs through investment credit. Thereby we will get augmented production, high productivity and higher income for farmers and entrepreneurs. Under the long term refinance scheme, the credit is generally provided for a period of 3 to 15 years. Such a long term advance scheme aims at creating income generating assets in the following sectors:

1. Agriculture and allied activities
2. Artisans, small scale industries, Non-Farm Sector (Small and Micro Enterprises), handicrafts, handlooms, powerlooms, etc.
3. Activities of voluntary agencies and self help groups working among the rural poor

Eligible Institutions

The Institutions Eligible for Refinance is:

1. State Co-operative Agriculture & Rural Development Banks (SCARDBs)
2. Regional Rural Banks (RRBs)
3. State Co-operative Banks (SCBs)
4. Commercial Banks (CBs)
5. State Agricultural Development Finance Companies (ADFCs)
6. Scheduled Primary Urban Co-operative Banks (PUCBs)
7. North East Development Finance Corporation (NEDFC)
8. Non-Banking Financial Companies (NBFCs)

II. Purposes :

a. Farm Sector :

Agriculture and allied activities such as minor irrigation, farm mechanisation, land development, soil conservation, dairy, sheep/goat rearing, poultry, piggery, plantation/horticulture, forestry, fishery, storage and market yards, bio-gas and other alternate sources of energy, sericulture, apiculture, animals and animal driven carts, agro-processing, agro-service centres, etc.

b. Non-Farm Sector :

Artisans, Small & Micro Enterprises, handicrafts, handlooms, powerlooms, etc

Loan Period :

The loan period is upto a maximum of 15 years

03. Eligible schemes for refinance under NFS.

Automatic Refinance Scheme (ARF)

The various schemes formulated over the years have been categorized into five distinct and compact schemes.

- i. **Composite Loan Scheme (CLS)**
Under this scheme refinance is given to meet the block and /or working capital requirements of small/micro enterprises. Max. refinance of ₹10 lakh per unit.
- ii. **Integrated Loan Scheme (ILS)**
Under this scheme refinance is given to block capital and working capital for one operating cycle. Max. Refinance of ₹15 lakh per borrower.
- iii. **Self Employment Scheme for Exservicemen (SEMFEX)**
The scheme has been in operation since 15 January 1988 which is specially designed to provide a comprehensive package of credit for encouraging ex-servicemen to undertake agricultural and allied activities or to set up non-farm units in rural areas to earn their livelihood for leading a dignified life. NABARD provides refinance assistance under Automatic Refinance Facility (ARF) to eligible banks for a wide spectrum of manufacturing, processing and service sector activities under RNFS (Investment Credit).
- iv. **Soft Loan Assistance for Margin Money (SLAMM)**
The scheme is to provide financial assistance to the prospective entrepreneurs who have the requisite talent and skill of entrepreneurship but lack necessary monetary resources to meet the margin requirements stipulated under relevant NABARD refinance schemes.
- v. **Small Road and Water Transport Operators (SRWTO)**
Under this scheme the facilities for acquisition of transport vehicles, which are to be used for transportation of farm produce/industrial products to rural/urban marketing centers including passenger transport vehicle and water transport units. Margin money assistance will be extended on a very selective basis up to 10% of the cost of the vehicle.

Rural Housing

Housing in the rural areas, both agriculturist and non-agriculturists, combine the business as well as dwelling needs and thereby leads to overall rural development, NABARD is giving refinance (investment credit) to the eligible banks.

Renewable Energy

While addressing India's energy security challenges, Ministry of New and Renewable Energy (MNRE), Government of India and the Jawaharlal Nehru National Solar Mission (JNNSM). In order to achieve this objective, the MNRE has launched a capital cum interest subsidy scheme for creation of off-grid, decentralised solar powered energy harvesting devices through application of photo voltaic technology for the purpose of lighting, heating, etc. at the level of domestic and mini commercial applications. NABARD is the nodal agency for giving feasibility and Refinance for eligible projects.

b. Direct finance functions

It includes:

01. Loans for Food Parks and Food Processing Units in Designated Food Parks

02. Loans to Warehouses, Cold Storage and Cold Chain Infrastructure
03. Credit Facilities to Marketing Federations
04. Rural Infrastructure Development Fund
05. Direct Refinance to Cooperative Banks
06. Financing and Supporting Producer Organisations

B. Developmental functions

It includes:

a. Institutional development

Institutional development aims at the strengthening of cooperatives since 1982.

The following major initiatives and supports are being provided to Rural Credit Cooperatives to attain our goal for evolving a sustainable Rural Financial System to enhance ground level credit flow to farmers and others in rural areas.

The rural financial system in the country calls for a strong and efficient credit delivery system, capable of taking care of the expanding and diverse credit needs of agriculture and rural development. More than 50% of the rural credit is disbursed by the Co-operative Banks and Regional Rural Banks. NABARD is responsible for regulating and supervising the functions of Co-operative banks and RRBs. In this direction NABARD has been taking various initiatives in association with Government of India and RBI to improve the health of Co-operative banks and Regional Rural Banks.

c. Farm sector development

NABARD is playing a key role in the farm sector development of the country.

d. Financial inclusion

Indian economy in general and banking services in particular have made rapid strides in the recent past. However, a sizeable section of the population, particularly the vulnerable groups, such as weaker sections and low income groups, continue to remain excluded from even the most basic opportunities and services provided by the financial sector. In order to address the issues of financial inclusion, the Government of India constituted a "Committee on Financial Inclusion" under the Chairmanship of Dr. C. Rangarajan. The Committee submitted its final report to Hon'ble Union Finance Minister on 04 January 2008.

The Committee on Financial Inclusion has defined Financial Inclusion as *"the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost."*

Among others, the Committee has recommended setting up of two funds - Financial Inclusion Fund (FIF) and Financial Inclusion Technology Fund (FITF). The two funds have been established with NABARD, which is the coordinating agency of Financial Inclusion initiatives with Financial Inclusion Department (FID) as the nodal department.

Core Business of Department

The core activities of the Department are to carry forward the agenda of financial inclusion of the excluded population at the national level as per the framework described by the Report of the Committee on Financial Inclusion in general and operationalising the Financial Inclusion Fund (FIF) and Financial Inclusion Technology Fund (FITF), in particular. The implementation is under the guidance of the two Advisory Boards set up for FIF and FITF respectively.

e. Innovations in micro credit

f. Research and development

R&D Fund

Established by the Bank, in accordance with the provisions of the NABARD Act 1981, the Research and Development (R&D) Fund aims at acquiring new insights into the problems of agricultural and rural development through in-depth studies and applied research and trying out innovative approaches backed up by technical and economic studies. The R&D Fund is utilised for formulating policies on matters of importance to agricultural operations and rural development, including facilities for training, dissemination of information and promotion of research by undertaking techno-economic studies and other surveys in the fields of agriculture, rural banking and rural development.

- Corpus of the R & D Fund is ₹ 50 crore.

Grant support for:

- Research projects and studies.
- International, National and Regional Seminars/ Conferences/Symposia, Workshops, etc.
- Occasional Papers and cost of other publications.
- Chair Units.
- Providing training for personnel of constituent banks.
- Summer Internship Programme.

Training Institutes Supported Under R&D Fund

1. CAB, Pune,
2. BIRD, Lucknow, Mangalore & Bolpur
3. IIBM, Guwahati,
4. National Institute of Rural Banking (NIRB), Bangalore.

g. Core-banking solutions to co-operative banks

In one of the biggest initiatives towards institution building, NABARD has facilitated the process of bringing the Co-operative Sector onto Core Banking Solution (CBS) platform. A total of 201 State and Central Co-operative Banks with 6,953 branches from 16 states & 03 UTs of the country, viz. Punjab, Haryana, Gujarat, Maharashtra, UP, Chhattisgarh, MP, Bihar, Karnataka, Tamil Nadu, Kerala, Uttarakhand, Sikkim, Himachal Pradesh, Jammu & Kashmir, Arunachal Pradesh, Chandigarh, Puducherry and Andaman & Nicobar joined the "NABARD initiated Project for CBS in Co-operatives". Two vendors, viz. TCS and Wipro, have implemented the ambitious project across the country. All 201 banks with 6,953 branches under NABARD Project are fully on CBS. This includes 122 new branches which were directly opened on CBS platform. Implementation of HO retail module of Kolar DCCB of Karnataka state is underway. Apart from the cooperative banks, Tamil Nadu Industrial Cooperative Bank (TAICO) has been taken onboard for roll-out of CBS under the project. The model followed in the initiative is Application Service Provider (ASP) model using the concept of cloud computing. The roll out process is in the final stage and branches are being migrated on CBS platform on a regular basis.

Now these century old banks have started functioning in the CBS environment at par with the technological platform of the Commercial Banks and Regional Rural Banks and match up with

these institutions in providing similar kind of services in the hinterland of the country. These banks now extend commensurate services to its existing and new clients keeping in sight the changing scenario and expectation level of the clientele. In time, their clients would be in a position to receive various Government incentives/ subsidies and also other financial inputs directly in their accounts maintained with the co-operative banks.

Bringing the Co-operative Banks under Core banking Solution would provide the following advantages:

- Bring them at par with the technological platform of the Commercial Banks and also RRB and match up with these institutions in providing similar kind of services in the hinterland of the country.
- Transparency and regular reconciliation and balancing of books of account to arrest pilferage.
- Once the Banks are on a technology platform they will be in a position to utilise technological solution furthering the financial inclusion initiative in rural India
- The customer of the Banks can avail facilities like Any Branch Banking, e-transfer of funds to anywhere of the country, etc.
- This will also enable GOI to transfer incentive/subsidy/other payments to the account holders based on Aadhaar number.
- Technological solution is expected to release staff members so that there will be more follow-up with the customers and also help bring in new customers/ clients to the Banks thus improving the business portfolio.

h. Climate change

Climate Change Initiatives of NABARD

Now a days, man worries a lot on matters of climate change. Climate change makes far reaching impact on people's life world wide. It has become a major threat for agriculture, food security and rural livelihoods. As indicated in Intergovernmental Panel on Climate Change (IPCC) in its Fifth Assessment Report released in March 2014, poor, marginalized, and rural communities are likely to be hit hardest by climate change impacts. For these vulnerable groups, climate change acts as a "risk multiplier" worsening existing social, economic, political, and environmental stresses.

The impacts of climate change are global, but countries like India are more vulnerable in view of the high population depending on agriculture, which in turn is dependent on the seasonal monsoons. India is confronted with the challenge of sustaining rapid economic growth amidst the increasing global threat of climate change. India has already shown its commitment to help address the global climate challenge and Government of India accorded top priority for addressing climate change related concerns.

The Government formulated the National Action Plan on Climate Change (NAPCC) on June, 2008 that established 8 National Missions to reduce the vulnerability to the impacts of climate change through adaptation and mitigation measures. On the basis of NAPCC, State Governments and Union Territories have prepared State Action Plan on Climate Change (SAPCC).

Climate change is a complex policy issue with major implications in terms of finance. All actions and solutions to address the adverse impact of climate change ultimately involve costs.

Funding is vital in developing countries to design and implement adaptation and mitigation projects.

NABARD has already taken various initiatives in addressing the challenges posed by Climate Change particularly in the areas of agriculture and rural livelihood sectors. In this direction NABARD aims to channelize national, international and private finances for adaptation and mitigation activities in India.

C. Supervisory

Supervision

Section 35(6) of the Banking Regulation Act, 1949, empowers NABARD to conduct inspection of State Cooperative Banks (SCBs), Central Cooperative Banks (CCBs) and Regional Rural Banks (RRBs). In addition, NABARD has also been conducting periodic inspections of state level cooperative institutions such as State Cooperative Agriculture and Rural Development Banks (SCARDBs), Apex Weavers Societies, Marketing Federations etc., on a voluntary basis.

Objectives of Supervision

- To protect the interest of the present and future depositors
- To ensure that the business conducted by these banks is in conformity with the provisions of the relevant Acts/Rules, regulations/Bye-Laws
- To ensure observance of rules, guidelines, etc., formulated and issued by NABARD / RBI/ Government
- To examine the financial soundness of the banks and
- To suggest ways and means for strengthening the institutions so as to enable them to play more efficient role in purveying rural credit

4. SFCs (State Finance Commission)

Under the State Financial Corporations Act, 1951, various state governments have established SFCs for meeting the term credit needs of small and medium scale industries. In Kerala, Kerala Financial Corporation (KFC) was set up. The assistance given by SFCs to industrial units is mainly through loans, underwriting of shares, bonds and debentures, and guaranteeing of deferred payments for capital goods purchase.

Functions of SFCs

1. Provision of financial assistance to small units.
2. Guaranteeing loans.
3. Subscription and underwriting.
4. Guarantee for deferred payments.
5. Acting as agents of central and state governments.

5. Unit Trust of India

In India, the only mutual fund operating for a long time since 1964 was the UTI. During that time, it had only open ended mutual fund with it, which can be sold and repurchased at any time. The UTI was found specially for pooling the small savings of the people and to deploy the same in productive purposes, offering an attractive return and growth to the investors while minimizing the risk element. The UTI was constituted under an Act in 1963. The growth in the business of UTI, especially during the eighties, has been spectacular. The gross sales of units which has amounted to Rs. 10 crores in the first year, i.e., in 1964-65, recorded a rapid growth, especially since 1982-83 to Rs. 4122 crores, but declined to Rs. 1050 crores during 2003-04. At end of March 2000, it had investible funds of Rs. 75000 crores which

declined to Rs. 58000 crores in 2002, due to larger repurchases, following the mismanagement of UTI-64 schemes.

UTI Schemes for resident Indians

The UTI offers a variety of investment schemes to the investing public like Unit scheme 1964, Unit Scheme 1971, Unit scheme for charitable and religious trusts and registered societies 1981, capital gains unit scheme 1983, Children's Gift Growth Fund 1986, and Parent's gift growth fund 1987. These schemes cater to the needs of various sections of the society.

Of the close ended schemes, a majority are monthly income schemes, specifically aims at the retired and aged investors.

For domestic investors, the UTI introduced a growth-oriented mutual fund known as 'Mastershares' in September 1986. The scheme was very popular.

6) SIDBI

History

Small Industries Development Bank of India (SIDBI), set up on April 2, 1990 under an Act of Indian Parliament, acts as the Principal Financial Institution for the Promotion, Financing and Development of the Micro, Small and Medium Enterprise (MSME) sector and for Co-ordination of the functions of the institutions engaged in similar activities.

Business Domain of SIDBI

The business domain of SIDBI consists of Micro, Small and Medium Enterprises (MSMEs), which contribute significantly to the national economy in terms of production, employment and exports. MSME sector is an important pillar of Indian economy as it contributes greatly to the growth of Indian economy with a vast network of around 4.6 crore units, creating employment of about 11 crore, manufacturing more than 6,000 products, contributing about 45% to manufacturing output and about 40% of exports in terms of value, about 37% of GDP, directly and indirectly.

Mandatory Objectives

Four basic objectives are set out in the SIDBI Charter. They are:

- Financing
- Promotion
- Development
- Co-ordination

These are the orderly growth of industry in the small scale sector. The Charter has provided SIDBI considerable flexibility in adopting appropriate operational strategies to meet these objectives. The activities of SIDBI, as they have evolved over the period of time, now meet almost all the requirements of small scale industries which fall into a wide spectrum constituting modern and technologically superior units at one end and traditional units at the other

Development Outlook

The major issues confronting MSMEs are identified to be:

- Technology obsolescence
- Managerial inadequacies
- Delayed Payments
- Poor Quality
- Incidence of Sickness
- Lack of Appropriate Infrastructure and

• Lack of Marketing Network

There can be many more similar issues hindering the orderly growth of MSMEs. Over the years, SIDBI has put in place financing schemes either through its direct financing mechanism or through indirect assistance mechanism and special focus programmes under its P&D initiatives. In its approach, SIDBI has struck a good balance between financing and providing other support services.

Co-ordination and Understanding

SIDBI is an apex institution. It utilizes the network of the banks and state level financial institutions, which have retail outlets. SIDBI supplements the efforts of existing institutions through its direct assistance schemes to reach financial assistance to the ultimate borrowers in the small scale sector.

Refinancing, bills rediscounting, lines of credit and resource support mechanisms have evolved over the period of time to route SIDBI's assistance through the network of other retail institutions in the financial system. Improved levels of co-ordination for development of the small scale sector is also achieved through a system of dialogue and obtaining feedback from the representatives of institutions of small scale industries who are on the SIDBI's National Advisory Committee and Regional Advisory Committees. SIDBI has entered into Memoranda of Understanding with many banks, governmental agencies, international agencies, research & development institutions and industry associations to facilitate a co-ordinated approach in dealing with the issues for development of small scale industries.

Unit 14 Mutual Funds

Mutual Fund is an arrangement for collecting fund by issuing units to the investors and investing funds in securities in accordance with objectives as disclosed in offer document. In mutual fund schemes, the risk is reduced by investing funds in diversified sectors and industries. Diversification is an appropriate way for risk minimization as all the securities may not move alike at the same time. Those who invest their money in the mutual fund receive units as per the extent of money invested by them. Investors of mutual funds are known as unit-holders. The profit and loss sharing will be taken place between the unit holders in accordance with their quantum of investments. Usually, mutual funds will have a wide variety of schemes with diverse investment objectives. They are launched from time to time.

A mutual fund is required to be registered with Securities and Exchange Board of India (SEBI) which regulates securities markets before it can collect funds from the public. Unit Trust of India was the first mutual fund set up in India in the year 1963. In early 1990s, Government allowed public sector banks and institutions to set up mutual funds. In the year 1992, Securities and exchange Board of India (SEBI) Act was passed. The objectives of SEBI are – to protect the interest of investors in securities and to promote the development of and to regulate the securities market. As far as mutual funds are concerned, SEBI formulates policies and regulates the mutual funds to protect the interest of the investors. SEBI notified regulations for the mutual funds in 1993. Thereafter, mutual funds sponsored by private sector entities were allowed to enter the capital market. The regulations were fully revised in 1996 and have been amended thereafter from time to time. SEBI has also issued guidelines to the mutual funds from time to time to protect the interests of investors. All mutual funds whether promoted by public sector or private sector entities including those promoted by foreign entities are governed by the same set of Regulations. There is no distinction in regulatory requirements for these mutual funds and all

are subject to monitoring and inspections by SEBI. The risks associated with the schemes launched by the mutual funds sponsored by these entities are of similar type.

Advantages and Disadvantages

Mutual funds are regarded as one of the best financial services. It has the following advantages:

1. Easy access to invest,

Mutual fund gives an opportunity to ordinary investors to invest easily in the financial markets. Similarly, entry and exit to a mutual fund scheme is comparatively easy.

2. Portfolio diversification.

Another important characteristics of the mutual fund is vast diversification. The fund of the investor is always put not in a single basket. It is invested in diversified securities. Hence, risk is reduced to a large extent.

2. Liquidity

Just like an individual stock, mutual fund also enables an investor to dispose his holdings at any time. Liquidity is an important quality of mutual fund investment scheme.

3. Professional investment management.

If an individual holds some stock himself, he alone has to look after the matters. But, if he buys some mutual fund units of professional mutual fund agencies, he can make use the services of professional managers there.

4. Economies of scale

Another speciality of mutual fund is that, agencies buy and sell large amounts of securities at a time. Transaction cost can be lowered to a large extent through such big transactions. Hence mutual fund dealings enjoy economies of scale.

5. Minimum initial investment.

It is required only at the time of initial investment.

6. Reduced risk.

While investing, mutual fund agencies focus on diversification of securities. Such diversification results in risk reduction.

7. Tax benefits.

Mutual fund investors now a days enjoy tax deduction.

8. Transparency.

Mutual fund schemes have transparency as they declares their portfolio every month. Mutual fund schemes are also not free from limitations. It has the following shortcomings.

Disadvantages of mutual funds

1. No guarantees.

In accordance with the fall and rise in the market, the value of the mutual fund also can be fluctuated. There is no assurance in the repayment of our initial investment unlike bank deposits.

2. Costs

In some cases, the efficiencies of fund ownership are offset by a combination of sales commission, redemption fees and operating expenses.

3. Tax inefficiency

Investors do not have a choice when it comes to capital gain pay outs in mutual funds. Due to the turn over, redemptions, gains and losses in security holdings throughout

the year, investors typically receives distributions from the fund that are an uncontrollable tax event.

4. Fluctuating returns.

No guarantee can be given to the investors in the case of returns from mutual fund. Mutual fund returns are subject to the rise and fall in the financial markets.

5. Misleading advertisements

Today, a good deal of advertisements are given about mutual fund in different medias. Many advertisements contain misleading sentences. This can mislead the investors and can carry them to wrong schemes.

Types of mutual funds

Mutual fund gives wide options to the investors. These options can be classified under the following heads.

1. By structure, such as open ended, interval or close ended schemes.
 2. By investment objective, such as growth, income, balanced and money market schemes.
 3. Others such as tax saving schemes, index schemes, and sector specific schemes.
- I. By structure, such as open ended, interval or close ended schemes.
- b. Open ended schemes.**
- Here, factors like the size of the fund, period of the fund etc are determined beforehand. This also means that open ended schemes are available for investors at any time during a year. The key feature of open ended scheme is liquidity. The following are the important features:
- It is the most usual type of mutual fund scheme. Investors can make free entry and exit to this scheme. Here is no time limit also.
 - These units are not publicly traded.
 - The main objective of this fund is income generation.
 - These are not traded in stock exchanges. Their price is determined on the basis of the Net Asset Value (NAV) of the units.

Type of Open ended schemes.

1. Stock funds.

Stock mutual funds invest mainly in common stocks. The objective of a stock fund is capital appreciation. Stock funds may generate modest dividends.

2. Bond funds

Under this type, investment is made in the bonds issues by corporations, municipalities and the government. These funds intend at providing steady and stable return for investors.

3. Money market funds.

Under this type, investment is made in short term securities such as treasury bills. Most money market funds offer a higher rate of interest than savings accounts of banks.

c. Close ended schemes.

Unlike open ended schemes, these have a prementioned maturity period. Here an investment company raises a fixed amount of capital through initial public offerings. The fund is then structured, listed and traded like a stock on a stock exchange.

- II. By investment objective, such as growth, income, balanced and money market schemes.
- a. Growth schemes.**

They are also known as equity schemes. The aim of these schemes is to provide capital appreciation over medium to long term.

b. Income schemes.

These are also known as debt schemes. These aims at providing regular and steady incomes to the investors.

c. Balanced schemes.

The objective of these funds is to provide a balanced mixture of safety, income and capital appreciation. The strategy of balanced funds is to invest in a combination of fixed income and equities. A typical balanced fund might have a weighting of 60% equity and 40% fixed income. The weighting might also be restricted to a specified maximum of minimum for each asset class.

III. Others such as tax saving schemes, index schemes, and sector specific schemes.

a. Index schemes.

The last but certainly not the least important are index funds. This type of mutual fund replicates the performance of a broad market index such as the S&P 500 or Dow Jones Industrial Average (DJIA). An investor in an index fund figures that most managers can't beat the market. An index fund merely replicates the market return and benefits investors in the form of low fees.

b. Sector specific schemes.

These types of investment is made only in securities of specific sectors like pharماسueticals, IT etc.

c. Tax saving schemes.

These schemes offer tax rebates to the investors under specific provisions of the Income Tax Act 1961. Eg: Equity Linked Savings Scheme.

SEBI GUIDELINES ON MUTUAL FUND

The main elements of the SEBI regulatory mechanism of mutual funds are:

1. Registration of mutual funds with SEBI
2. Constitution and management of mutual funds and operation of trusts.
3. Constitution and management of asset management company and custodian.
4. Schemes of mutual funds.
5. Investment objectives and valuation policies.
6. Real estate mutual fund schemes.
7. General obligations.
8. Inspection and audit.
9. Procedure for action in case of default.

Eligibility criteria

The eligibility criteria for registration of sponsors who can establish mutual funds are given below:

1. The applicant-sponsor should have a sound track record and general reputation of fairness and integrity in all his business transactions and he should be a fir and proper person. The test of a sound track record is:
 - Carrying on business in financial services for at least five years.
 - Positive networth in all the immediately preceding five years.

- Net worth in the immediately preceding year should be more than the capital contribution of the sponsor in the asset management company and
 - Profit after providing for depreciation, interest and taxes in three out of the immediately preceding five years, including the fifth year.
2. The sponsor should contribute at least 40 % of the net worth of the asset management company.
 3. The sponsor/any director/principal officer to be employed by the mutual fund should not have been guilty of any fraud.
 4. Appointment of trustees/trustee Company to act as trustees for the mutual fund who hold the property of the mutual fund in trust for the benefit of the unit holders.
 5. Appointment of asset management company set up under the provisions of the Companies Act to manage the mutual fund and operate its schemes
 6. For determining whether an applicant mutual fund is a fit and proper person, the SEBI may take in to account the criteria specified in the SEBI intermediaries regulations, 2008.

Terms and conditions of registrations

The registration of mutual funds with the SEBI is subject to certain terms and conditions, namely:

1. Trustees/sponsor/asset management company/custodian would have to comply with the SEBI regulations.
2. The mutual fund should immediately inform the SEBI if any information previously were misleading.
3. Payment of,
 - application fee of Rs. 1 lakh
 - Registration fee of Rs. 25 lakhs
 - Annual fee based on net assets as follows:
 - ❖ Net assets as on March 31, Rs.500 Crore: Rs.2.5 lakh
 - ❖ Rs.1000-3000 crore: Rs.4.5 lakh
 - ❖ Rs.3000-5000 crore: Rs.5.5 lakh
 - ❖ Rs.5000-10000 crore: Rs.6.5 lakh
 - ❖ Above Rs.10000 Crore: Rs.7.5 lakh

Asset Management Companies (AMC) – Restriction on Business activities

Mutual funds shall be operated by only by separately established Asset Management Companies (AMC).

AMC should not be allowed to act as the trustee of a unit trust. In other words, the AMC and the trustee should be two separate legal entities.

AMC should not be permitted to undertake any other business activity than management of mutual funds, and such other activities as financial services constantly, exchange of research and analysis on commercial basis as long as these are not in conflict with the fund management company itself.

Trustees and Trust Companies

Trusteeship functions should be carried out by separately established trust companies. Until such companies are formed, existing debenture trustees, banks and financial institutions may be

allowed to act as mutual fund trustees, or a separate board of trustees consisting of individuals of sufficient repute and experience may act as mutual fund trustees.
Atleast 50 percent of the board trustees shall be independent outside members.

Trust deeds

- The sponsor should submit the trust deed to SEBI for prior approval.
- The trust deed should include all safeguards considered to be essential for investor protection.

Custodian

- The mutual fund shall use the service of a custodian registered with SEBI.
- Should be ensured that the custodian should be totally delinked from the AMC.
- Each authorized unit trust should be allowed to float different schemes as long as the Asset Management Company concerned meets the required capital adequacy criteria and whose authorization has not been withdrawn by SEBI.
- Each scheme floated by a mutual fund should have prior registration with SEBI. The AMC should prepare a prospectus of offer for each scheme and should get it vetted by SEBI before inviting public participation.
- SEBI shall decide each proposal within 30 days of its receipt, failing which the scheme may be floated by the fund presuming SEBI'S clearance.
- Mutual funds should be allowed to start both open ended and close ended schemes.

Unit 15 Provident Fund

A compulsory, government-managed retirement savings scheme used in India, Hong Kong, Singapore, Malaysia, Mexico and other countries that is similar to the United States' Social Security program. It is run by a government for the benefit of its citizens. A provident fund is a form of social safety net into which workers must contribute a portion of their salaries and employers must contribute on behalf of their workers. The money in the fund is then paid out to retirees, or in some cases to the disabled who cannot work. Provident fund specifics vary widely by country, but in general their purpose is to provide financial support for those who meet the plan's defined retirement age. Governments set the age limit at which withdrawals are allowed to begin (penalty-free), though some pre-retirement withdrawals may be allowed under special circumstances, such as for medical emergencies. In Swaziland, for example, provident fund benefits can be claimed as early as age 45. Each provident fund sets its own minimum contribution level for workers and employers, which may vary depending on the worker's age. Some funds allow individuals to contribute extra to their benefit accounts and allow employers to contribute extra for their employees. If a worker dies before receiving benefits, his or her surviving spouse and children may be able to receive survivors' benefits from the provident fund. Some countries also allow individuals to receive an early payout if they immigrate to another country. Those who work past the minimum retirement age may face restricted withdrawals until full retirement. Unlike U.S. Social Security, some countries' provident fund accounts are held in individual members' names. Instead of younger workers paying into a communal account, individuals get back the money they contributed to their own accounts plus interest or investment returns. In this regard, a provident fund resembles the U.S. concept of a 401(k), except that the money in provident funds is held by the government, not by a private financial institution. Also, the

government, or a provident fund board - not the workers - largely or entirely chooses how provident fund contributions are invested. Some countries, such as Singapore, guarantee workers a minimum return on their provident fund contributions.

While the use of private savings accounts have grown in popularity, publicly administered retirement accounts remain important in both developing and developed economies. Societies in the developing world, for example, are still catching up with the rapid rise in industrialization, movement of citizens to urban areas from rural ones and changing family structures. In traditional Asian societies, for example, the elderly were provided for by their extended families. Declining birth rates, widely dispersed families and longer life expectancies have made maintaining this extended safety net difficult, and governments have stepped in to provide long term financial planning.

Provident funds are different than sovereign wealth funds, which are funded through royalties obtained from the development of natural resources.

Pension Fund

A pension fund is a common asset pool run by a financial intermediary on behalf of a company and its employees, to generate stable growth over the long term and provide pensions for the employees when they retire. Pension funds control relatively large amounts of capital and represent the largest institutional investors in many nations.

Types of pension plans

There are three basic and widely used pension plans:

1. Defined benefit plan

A defined-benefit plan is a retirement plan that an employer sponsors, where employee benefits are computed using a formula that considers factors, such as length of employment and salary history. The company administers portfolio management and investment risk for the plan. There are also restrictions on when and by what method an employee can withdraw funds without penalties.

2. Defined contribution plan

A defined-contribution plan is a retirement plan in which a certain amount or percentage of money is set aside each year by a company for the benefit of each of its employees. The defined-contribution plan places restrictions that control when and how each employee can withdraw these funds without penalties.

3. Hybrid pension plans

A hybrid pension scheme is one which is neither a full defined benefit scheme nor a full defined contribution scheme, but has some of the characteristics of each. In a defined contribution scheme, the member generally bears the full risk (of paying higher costs or receiving reduced benefits) if investment or pension costs are not as good as expected. In a defined benefit scheme, the employer usually takes that risk and pays higher contributions in order to maintain the agreed level of benefits. In hybrid schemes, the risk can be shared between the employer and employees.

Pension Fund Regulatory and Development Authority (PFRDA)

The Pension Fund Regulatory & Development Authority Act was passed on 19th September, 2013 and the same was notified on 1st February, 2014. PFRDA is regulating NPS (National Pension System), subscribed by employees of Govt. of India, State Governments and by employees of private institutions/organizations & unorganized sectors.

The Government of India had, in the year 1999, commissioned a national project titled "OASIS" (an acronym for old age social & income security) to examine policy related to old age income security in India. Based on the recommendations of the OASIS report, Government of India introduced a new Defined Contribution Pension System for the new entrants to Central/State Government service, except to Armed Forces, replacing the existing system of Defined Benefit Pension System. On 23rd August, 2003, Interim Pension Fund Regulatory & Development Authority (PFRDA) was established through a resolution by the Government of India to promote, develop and regulate pension sector in India. The contributory pension system was notified by the Government of India on 22nd December, 2003, now named the National Pension System (NPS) with effect from the 1st January, 2004. The NPS was subsequently extended to all citizens of the country w.e.f. 1st May, 2009 including self employed professionals and others in the unorganized sector on a voluntary basis.

Insurance Companies

Insurance is a form of risk management in which the insured transfers the cost of potential loss to another entity in exchange for monetary compensation known as the premium. Insurance allows individuals, businesses and other entities to protect themselves against significant potential losses and financial hardship at a reasonably affordable rate.

Types of insurance policies

7. Life insurance

Life insurance is a protection against financial loss that would result from the premature death of an insured. The named beneficiary receives the proceeds and is thereby safeguarded from the financial impact of the death of the insured. The death benefit is paid by a life insurer in consideration for premium payments made by the insured.

8. Marine insurance

Marine insurance covers the loss or damage of ships, cargo, terminals, etc.

Kinds of marine policies

- **Voyage policy**

When the contract is to insure the subject matter at and from one place to another, the policy is called a voyage policy. In this case, the risk attaches only when the ship starts the voyage.

- **Time policy**

When the subject matter is insured for a definite period of time, it is called time policy.

- **Mixed policy**

It is a combination of voyage and time policies and covers the risk during a particular voyage for a specific period of time.

- **Valued policy**

Under this, the subject matter is insured with an agreed value.

- **Open or unvalued policy.**

Here the value of the subject matter is not specified.

9. Fire insurance

Fire insurance is a contract under which the insurer in return for a consideration (premium) agrees to indemnify the insured for the financial loss which the latter may suffer due to destruction of or damage to property or goods, caused by fire, during a specified period.

10. Medical insurance or health insurance.

Health insurance is a type of insurance coverage that pays for medical and surgical expenses incurred by the insured. Health insurance can reimburse the insured for expenses incurred from illness or injury, or pay the care provider directly.

11. Auto insurance

Auto insurance is a policy purchased by vehicle owners to mitigate costs associated with getting into an auto accident. Instead of paying out of pocket for auto accidents, people pay annual premiums to an auto insurance company; the company then pays all or most of the costs associated with an auto accident or other vehicle damage.

12. Disability insurance.

This kind of insurance may protect the insured from financial ruin if he is injured and disabled and can no longer work.

13. Home owner's insurance.

This type of insurance helps to cover losses of a home or property due to fire, natural disaster, faulty electrical work etc.

Insurance regulatory and Development Authority (IRDA)

IRDA is the apex institution in the field of insurance in India. It controls the Indian insurance industry and protects the interests of the policy holders. It also tries hard for the orderly growth of the industry.

Background

- 1991: Government of India begins the economic reforms programme and financial sector reforms
- 1993: Committee on Reforms in the Insurance Sector, headed by Mr. R. N. Malhotra, (Retired Governor, Reserve Bank of India) set up to recommend reforms.
- 1994: The Malhotra Committee recommends certain reforms having studied the sector and hearing out the stakeholders
- Some recommended reforms
 - Private sector companies should be allowed to promote insurance companies
 - Foreign promoters should also be allowed
 - Government to vest its regulatory powers on an independent regulatory body answerable to Parliament

Birth of IRDA

- Insurance Regulatory and Development Authority (IRDA) set up as autonomous body under the IRDA Act, 1999
- IRDA's Mission: To protect the interests of policyholders, to regulate, promote and ensure orderly growth of the insurance industry and for matters connected therewith or incidental thereto.

IRDA's Activities

- Frames regulations for insurance industry in terms of Section 114A of the Insurance Act 1938
- From the year 2000 has registered new insurance companies in accordance with regulations
- Monitors insurance sector activities for healthy development of the industry and protection of policyholders' interests

Functions and Duties of IRDA

Section 14 of the IRDA Act, 1999 lays down the duties, powers and functions of IRDA.

- Registering and regulating insurance companies
- Protecting policyholders' interests
- Licensing and establishing norms for insurance intermediaries
- Promoting professional organisations in insurance
- Regulating and overseeing premium rates and terms of non-life insurance covers
- Specifying financial reporting norms of insurance companies
- Regulating investment of policyholders' funds by insurance companies
- Ensuring the maintenance of solvency margin by insurance companies
- Ensuring insurance coverage in rural areas and of vulnerable sections of society

Life Insurance Corporation of India (LIC)

LIC is the biggest life insurance company in India. It is fully owned by the government of India. It was established in 1956 by merging 243 small insurance companies and provident societies. It was established with the main objective of providing life insurance facility to rural and backward people. LIC has its head quarters at Mumbai.

Objectives of LIC

1. To spread the service of life insurance all over India.
2. Provide rural people and economically backward people access to the life insurance facilities.
3. Mobilization of savings of people through various schemes.
4. Conduct business with utmost economy by realizing that money belongs to the policy holders.
5. Meet the various life insurance needs of the community that would arise in the changing social and economic environment.
6. Promote a sense of participation, pride and job satisfaction among all employees of the corporation.
- 7.

General insurance corporation of India

The entire general insurance business in India was nationalized by General Insurance Business (Nationalisation) Act, 1972.

The Government of India, through nationalization, took over the shares of 55 Indian Insurance companies and the undertakings of 52 insurers carrying on general insurance business. GIC was formed in pursuance of section 9 (1) of General Insurance Business (Nationalisation) Act, 1972.

It was incorporated on 22 November 1972, under the companies Act 1956 as a private company limited by shares. GIC was formed for the purpose of superintending, controlling and carrying on the business of general insurance.

After a process of mergers among Indian insurance companies, four companies were left as fully owned subsidiary companies of GIC. They are:

1. National Insurance Company Ltd.
2. The new India assurance Company ltd
3. The Oriental Insurance Company ltd
4. United India Insurance Company ltd

With the General Insurance Business (Nationalisation) Amendment Act, 2002, coming in to force from March 21, 2003, GIC ceased to be a holding company of its subsidiaries.

The ownership of the four erstwhile subsidiary companies and also of the GIC was vested with the Government of India.

Functions of GIC

1. Enhancing social security.

GIC enhances social security by selling various policies to mitigate the risks involved in the social sector. It renders insurance service at a comparatively reasonable cost.

2. Expanding the periphery of general insurance.

GIC works hard to expand the scope of general insurance throughout the country.

3. Underwriting.

GIC acts as an underwriter. When corporate issues shares and debentures, GIC provides guarantee to subscribe certain number of securities which are not subscribed by public.

4. Participation in stock market.

GIC participates in stock market activities by acquiring shares and debentures. It also subscribes the shares of government companies.

5. Settling claims at the earliest.

GIC has been taking measures to settle the claims at the earliest.

6. Economic development.

It helps to increase the speed of economic development of the country by providing loans and advances to various industrial sectors.

Leading Insurers in India

Following are the leading insurers in India:

- Life Insurance Corporation of India
- Tata AIG General Insurance
- Bajaj Allianz General Insurance
- New India Assurance
- ICICI Prudential Life Insurance
- IFFCO TOKIO General Insurance
- ICICI Lombard General Insurance
- Oriental Insurance
- Birla Sun Life Insurance
- HDFC Standard Life Insurance

Review Questions

Short Answer Type:

1. What are development financial institutions?
2. What are the major functions of IFCI?
3. What are the major functions of SIDBI?
4. Write about the major differences between open ended and close ended schemes of mutual fund.
5. What is PFRDA?
6. Write a short note on pension fund.
7. What are the different objectives of LIC?
8. Write a short note on GIC.

9. What is IRDA?
10. What is the difference between general insurance and life insurance?

Essay type:

1. Write about the role of Unit Trust of India in the Indian Mutual Fund industry.
2. Write a detailed note about the functions of NABARD.
3. What is insurance? What are the different types of insurances in India?
4. 'SFCs play a key role in enhancing the economic capability of states'. Elucidate.

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MODULE V

FOREIGN CAPITAL FLOWS

Unit 16 Introduction to Foreign Capital Flows

At present, flow of foreign capital exerts significant influence on the economic growth of many countries. Foreign capital can be divided in to two as Foreign Direct Investment and Foreign portfolio investment.

To integrate the world economy, FDI and international trade play an important role. FDI is regarded as a best option for entering in to the arena of international trade. Developing countries regard FDI as a very strong source of external finance. At present, inward stock of FDI amounts to one third of the developing country's GDP, compared to merely 10 percent in 1980.

FDI augments the export performance of the host country economy. Beyond the supply of capital, FDI also helps the host countries to enhance the competitiveness of the domestic economy through transferring technology, strengthening infrastructure, raising productivity and generating new employment opportunities.

But, many of the host economies viewed FDI as a threat due to the ability of the foreign firms to influence the economic and political factors of the host country. Another important fact is that, some major host economies had a hesitation whether FDI is another form of colonialism, or is it the return of colonialism, as they had previous bad experience.

Amidst such suspicions and uncertainties, FDI are preferred to other forms of external finance because these are non-debt creating, non- volatile and the returns depend on the performance of the project financed by the investors. Foreign capital has been divided in to two as:

1. Foreign Direct Investment (FDI)
2. Foreign Portfolio Investment (FPI)

1. Foreign Direct Investment (FDI)

FDI refers to obtaining ownership in foreign business entity. It can also be attributed that FDI circulates capital across national boundaries. It can be defined as an investor based on one country (home country), acquires an asset in another country (host country), with the intention to manage it. It is this dimension of management that distinguishes FDI from portfolio investment in foreign stocks and other financial instruments.

Managing interest in the host country firm can be acquired by holding ten percent or more of equity shares. The lasting interest implies the existence of a long term relationship between the direct investor and the enterprise wherein a significant degree of influence is exerted by the investor in the management of the direct investment enterprise. Ownership of 10 % of the ordinary shares or voting stock is the criterion for determining the existence of a direct investment relationship. These are either directly or indirectly owned by the direct investor. The definition of direct investment enterprise extends to the branches and subsidiaries of the direct investor.

2. Foreign Portfolio Investment (FPI)

Investment by individuals, firms or public bodies in financial instruments, such as foreign stocks, government bonds etc is known as Foreign Portfolio Investment. Foreign portfolio investment does not render any management control to the investor. Thus FPI can be viewed only as a passive holding of foreign assets, without having any voice in the management of the invested firm. FPI is favourably affected by factors like risk minimization through diversification, and high rate of return. Thus it can be inferred that FPI is passive whereas FDI is active. The returns in the case of FPI are generally in the form of non-voting dividends or interest payments.

Table Difference between FPI and FDI

Particulars	FDI	FPI
Management and control	Investor obtains rights of management and control in the firm.	No such rights are available under FPI.
Mode of investment	Active holding	Passive holding
Disposal of investment	Difficult to dispose	Easy disposal
Flexibility	Less flexible	Volatile
Nature of interest	Long term	Short term
Requirement of capital	Very high	Comparatively less
Accessibility for an average investor	Difficult Access	Comparatively easy access

Benefits of FDI

Potential benefits of FDI to the host countries include the following:

1. Access to superior technology.
FDI provides access to superior technology to the host country.
2. Increased competition.
Foreign investment will result in an increase in the industrial output. Increased industrial output will result in overall reduction in domestic prices, improved product or service quality, and more availability of products. This intensifies competition in host economies resulting in the improvement in consumer welfare.
3. Increase in domestic investment.
It is a well accepted fact that flow of foreign capital to the domestic economy will increase the quantity of investment.
4. Bridging host country's foreign exchange gap.
A developing country may have foreign exchange problems and FDI is a better way through which this problem can be solved.

Demerits of FDI

It has been widely regarded that FDI has some disadvantages too. Some of the demerits of FDI are given below:

8. Market monopoly.

Multi National enterprises are characterised with large size and financial power. This may lead to the monopoly of MNCs in some sectors. Such a monopoly can prevent the entry of domestic enterprises in marketing, and advertising and R&D activities.

9. Crowding out and unemployment effects.

FDI tends to discourage entry and stimulates exit of domestic enterprises often termed as the crowding out effect. As FDI enterprises are less labour intensive, their entry results in higher unemployment and increased social instability.

10. Technology dependence.

MNEs often function in a way that doesn't result in technology transfer or technology sharing, thereby making local firms technologically dependent or technologically less self-reliant.

11. Profit outflow

Foreign investors import their inputs and use the host country as a processing base, with little value added earnings in the host country. A large proportion of their profits may be repatriated.

12. Corruption

Many foreign investors often bribe government officials, to get their desires satisfied.

13. National security

With MNCs holding a dominant position in sensitive industries like telecommunications, and the supply of core equipment and software for the IT industry, there is a danger that the strategic interests of the host country may be compromised.

The Determinants of FDI Location

1. *Market demand.*

The flows of FDI are positively influenced by the size of a country's market demand as measured by GDP per capita.

2. *Growth rate.*

FDI flows to where fast economic growth has been recorded. A vicious circle is observed here: at the same time that FDI contributes significantly to economic growth, faster economic growth attracts more FDI because it increases foreign investors' confidence in the economy, which in turn pushes the growth rate even higher. In the least developed countries, studies have shown that FDI in fact follows, not proceeds, some initial growth or at least the promise of growth.

3. *Political stability.*

Political riots or armed conflicts may exert a negative influence on foreign companies' investment decisions. Indeed, frequent changes of governments and the resultant policy changes can reduce an investor's assets to zero overnight.

4. *Macroeconomic stability.*

A country's overall macroeconomic performance, such as low inflation rate and balanced fiscal account, is a consistently significant factor in shaping the decision making of foreign investors when assessing investment locations.

5. *Infrastructure.*

With regards to FDI, infrastructure encompasses both physical (e.g. roads and power) and social (e.g. health and education) concepts. It has been repeatedly shown around the world that a well-developed infrastructure network and a well-trained labor force are major elements of attractiveness to foreign investors. This is especially true where high quality FDI (e.g. long-term transfer of advanced technology) is concerned.

6. *Regulatory environment.*

It is increasingly recognized that the administrative and regulatory environment of a country can have a significant influence on the level of FDI flows. While large and powerful investors may be able to endure cumbersome and costly procedures, they may prove fatal to the entry and growth of small and medium enterprises. Moreover, arbitrary, discriminatory, and non-transparent regulations often lead to corruption, which has been shown to be a fatal deterrent to FDI.

FDI POLICY

Policy framework on FDI

India followed a very rigid policy practice towards FDI. Before 1990s, entry of foreign firms were permitted in areas where the use of foreign technology was considered necessary. The government had a very selective policy on foreign equity participation on those days.

The new policy

The Industrial Policy statement of July 1991, which observes that while freeing the Indian economy from official controls, opportunities for promoting foreign investment in India should also be fully exploited, has liberalized the Indian policy towards foreign investment and technology.

Recent policies of FDI

Apart from being a critical driver of economic growth, foreign direct investment (FDI) is a major source of non-debt financial resource for the economic development of India. The Indian government's favourable policy regime and robust business environment have ensured that foreign capital keeps flowing into the country. The government has taken many initiatives in recent years such as relaxing FDI norms across sectors such as defence, PSU oil refineries, telecom, power exchanges, and stock exchanges, among others. The FDI policy of India encompasses the following matters:

- Townships, shopping complexes & business centres – all allow up to 100% FDI under the automatic route. Conditions on minimum capitalisation & floor area restrictions have now been removed for the construction development sector.
- India's defence sector now allows consolidated FDI up to 49% under the automatic route. FDI beyond 49% will now be considered by the Foreign Investment Promotion Board. Govt approval route will be required only when FDI results in a change of ownership pattern.
- Private sector banks now allow consolidated FDI up to 74%.
- Up to 100% FDI is now allowed in coffee/rubber/cardamom/palm oil & olive oil plantations via the automatic route.
- 100% FDI is now allowed via the auto route in duty free shops located and operated in the customs bonded areas.
- Manufacturers can now sell their products through wholesale and/or retail, including through e-commerce without Government Approval.

- Foreign Equity caps have now been increased for establishment & operation of satellites, credit information companies, non-scheduled air transport & ground handling services from 74% to 100%.
- 100% FDI allowed in medical devices
- FDI cap increased in insurance & sub-activities from 26% to 49%
- FDI up to 49% has been permitted in the Pension Sector.
- Construction, operation and maintenance of specified activities of Railway sector opened to 100% foreign direct investment under automatic route.
- FDI policy on Construction Development sector has been liberalised by relaxing the norms pertaining to minimum area, minimum capitalisation and repatriation of funds or exit from the project. To encourage investment in affordable housing, projects committing 30 percent of the total project cost for low cost affordable housing have been exempted from minimum area and capitalisation norms.
- Investment by NRIs under Schedule 4 of FEMA (Transfer or Issue of Security by Persons Resident outside India) Regulations will be deemed to be domestic investment at par with the investment made by residents.
- Composite caps on foreign investments introduced to bring uniformity and simplicity is brought across the sectors in FDI policy.
- 100% FDI allowed in White Label ATM Operations.

Sectors with Restrictions

A) Sectors where FDI is prohibited

- Lottery Business including Government /private lottery, online lotteries, etc.
- Gambling and Betting including casinos etc.
- Chit funds
- Nidhi company-(borrowing from members and lending to members only).
- Trading in Transferable Development Rights (TDRs)
- Real Estate Business (other than construction development) or Construction of Farm Houses
- Manufacturing of Cigars, cheroots, cigarillos and cigarettes, of tobacco or of tobacco substitutes
- Activities / sectors not open to private sector investment e.g. Atomic Energy and Railway Transport (other than construction, operation and maintenance of
 - (i) Suburban corridor projects through PPP,
 - (ii) High speed train projects,
 - (iii) Dedicated freight lines,
 - (iv) Rolling stock including train sets, and locomotives/coaches manufacturing and maintenance facilities,
 - (v) Railway Electrification,
 - (vi) Signaling systems,
 - (vii) Freight terminals,
 - (viii) Passenger terminals,
 - (ix) Infrastructure in industrial park pertaining to railway line/sidings including electrified railway lines and connectivities to main railway line and
 - (x) Mass Rapid Transport Systems.)
- Services like legal, book keeping, accounting & auditing.

B) Sectors With Caps

- Petroleum refining by PSU S (49 %)
- Teleports (setting up of up-linking HUBs/Teleports), Direct to Home (DTH), Cable Networks (Multi-system operators (MSOs) operating at national, state or district level and undertaking up-gradation of networks towards digitalisation and addressability), Mobile TV and Headend-in-the-Sky Broadcasting Service (HITS) – (74%).
- Cable Networks (49%).
- Broadcasting content services- FM Radio (26%), up-linking of news and current affairs TV channels (26%).
- Print Media dealing with news and current affairs (26%).
- Air transport services- scheduled air transport (49%), non-scheduled air transport (74%).
- Ground handling services – Civil Aviation (74%).
- Satellites- establishment and operation (74%).
- Private security agencies (49%).
- Private Sector Banking- Except branches or wholly owned subsidiaries (74%).
- Public Sector Banking (20%).
- Commodity exchanges (49%).
- Credit information companies (74%).
- Infrastructure companies in securities market (49%).
- Insurance and sub-activities (49%).
- Power exchanges (49%).
- Defence (49% above 49% to CCS).
- Pension Sector (49%)

Routes of FDI approval in India

A. Automatic Route:

- Under this route no Central Government permission is required.

B. Government Route:

Under this route applications are considered by the Foreign Investment Promotion Board (FIPB). Approval from Cabinet Committee on Security is required for more than 49% FDI in defence. The proposals involving investments of more than INR 30 billion are considered by Cabinet committee on economic affairs.

The Indian company receiving FDI either under the automatic route or the government route is required to comply with provisions of the FDI policy including reporting the FDI and issue of shares to the Reserve Bank of India.

Unit 17 Foreign Portfolio Investment in India

Foreign Portfolio Investment in India

During the late 1980s and early 1990s portfolio investment appeared as an important form of capital inflow to developing countries. The significance of portfolio investment to developing countries has come down after the East Asian crisis of 1997. However, unlike most other developing countries, India is still more reliant upon FPI than Foreign Direct Investment (FDI) as a supply of foreign investment. For the period 1992 to 2005, more than 50 percent of foreign

investment in India came in the form of FPI. Majority of the economists suggest that the FPI can benefit the real sector of an economy in three broad ways. First, the inflow of FPI can provide a developing country non-debt creating source of foreign investment. The developing countries are capital scarce. The advent of portfolio investment can supplement domestic saving for improving the investment rate.

By providing foreign exchange to the developing countries, FPI also reduces the pressure of foreign exchange gap for the Least Developing Countries, thus making imports of necessary investment goods easy for them.

The third and the most important way FPI influences the economy is through its various linkage effects through the domestic capital market. In line with the mainstream view, one of the most important benefits from FPI is that it gives an upward thrust to the domestic stock market prices. This has an impact on the price-earning ratios of the firms. A higher P/E ratio leads to a lower cost of finance, which in turn can lead to a higher amount of investment. The lower cost of capital and a booming share market can encourage new equity issues

FPI Investment in India

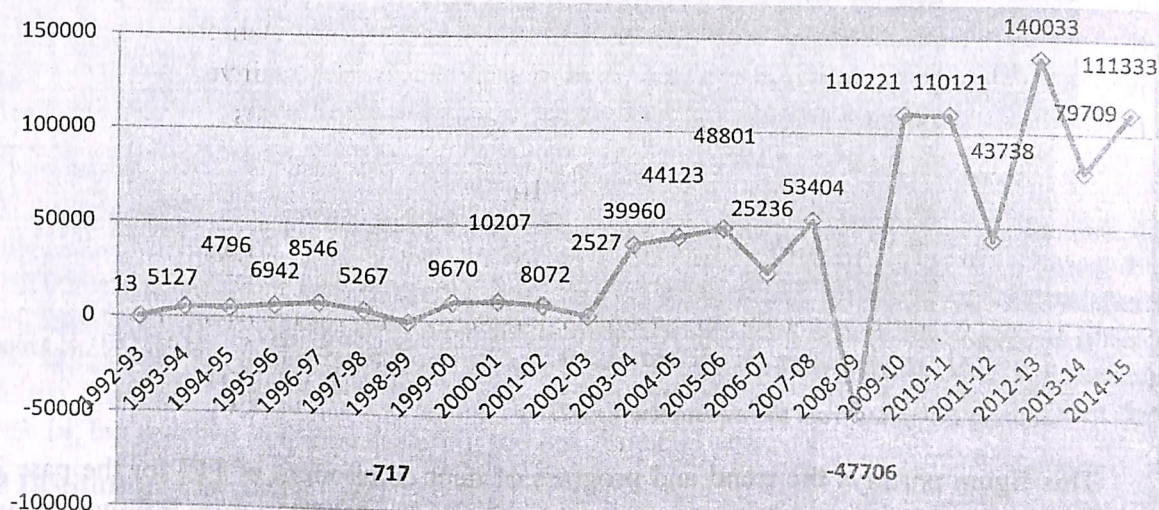
FPI INVESTMENTS FOR LAST 23 FINANCIAL YEARS				
Sl No	Financial Year	<i>INR crores</i>		
		Net Inflow of Equity (Gross purchase-gross sales)	Net Inflow Of Debt (Gross purchase-gross sales)	TOTAL (NET INVESTMENT)
1	1992-93	13	0	13
2	1993-94	5127	0	5127
3	1994-95	4796	0	4796
4	1995-96	6942	0	6942
5	1996-97	8546	29	8575
6	1997-98	5267	691	5958
7	1998-99	-717	-867	-1584
8	1999-00	9670	453	10122
9	2000-01	10207	-273	9933
10	2001-02	8072	690	8763
11	2002-03	2527	162	2689
12	2003-04	39960	5805	45765
13	2004-05	44123	1759	45881
14	2005-06	48801	-7334	41467
15	2006-07	25236	5605	30840
16	2007-08	53404	12775	66179
17	2008-09	-47706	1895	-45811
18	2009-10	110221	32438	142658
19	2010-11	110121	36317	146438

School of Distance Education

20	2011-12	43738	49988	93726
21	2012-13	140033	28334	168367
22	2013-14	79709	-28060	51649
23	2014-15	111333	166127	277461
Total		819423	306534	1125954

Source: www.nsdl.org

Net Inflow of Equity as FPI (INR crores)



Source: Compiled from the website www.nsdl.org

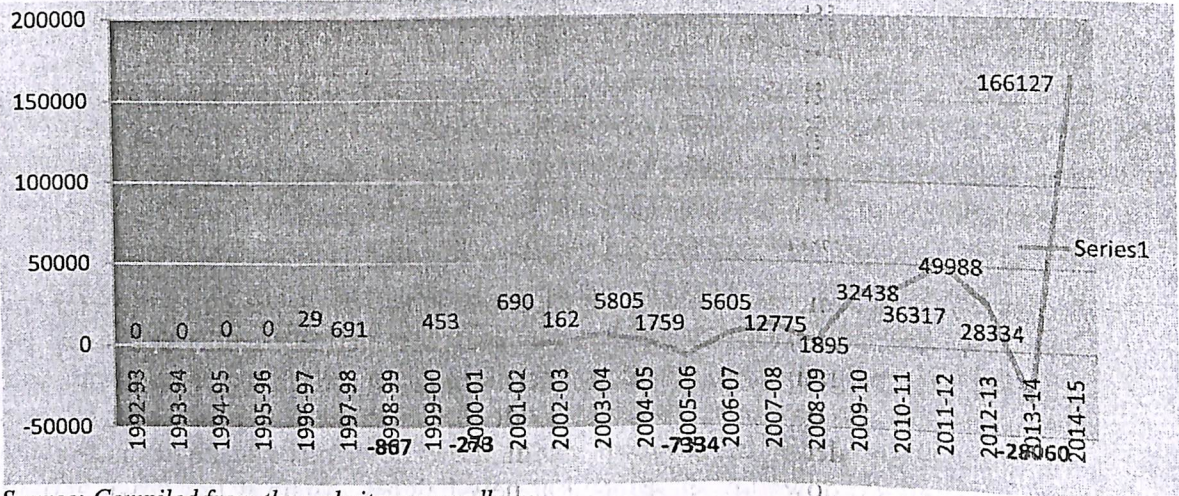
This chart explains the net inflow of equity capital (Difference between gross purchase of equity capital by foreign investors and gross sale of equity capital by foreign investors) to the country for a period of 23 years ranging from 1st April 1992 to 31st March 2015. The figure obviously delineates the quantum of FPI flown by foreigners as equity capital in to various stock exchanges of the country in different periods. When making a glance on the figures, it can be seen that the FPI is subject to huge fluctuations throughout the last 23 financial years since we allowed it in our country. The prime reason for this huge fluctuation is the extreme liquidity character of portfolio investment. Investors can sell or buy securities at the same moment they wish to do so.

It is only in the financial year 1992-93, we admitted FPI in our stock markets. In 1992-93, that is the year in which we allocated FPI, the quantity was very low. By the next financial year, it gradually gathered momentum, and the magnitude augmented by thousands times. From 1992-93 to 2002-03, any wide variations cannot be perceived, except in the year 1998-99, when foreign equity flow was negative.

But from the financial year 2003-04, the equity flow was subject to huge variations. From 2003-04 to 2007-08, it showed an increasing tendency at an increasing rate except in the year 2006-07. The graph makes it clear that the lowest flow of equity capital was in the year 2008-09. It was -47706 crore rupees, which means foreigners sold off their investment portfolios

gigantically in the same year, in order to save themselves from the economic recession that affected the whole world during that year. This is the imperative disadvantage of portfolio investments. When such a circumstance draws closer, investors make mass withdrawal of investments from foreign markets and put that particular economy in resistance. At the times of economic recession, this was the main reason for the depletion of major Indian stock indices. FPI equity inflow reached the peak in the year 2012-13 when the economy went through a state of boom. In the last financial year (2014-15), it is Rs.111333 crores.

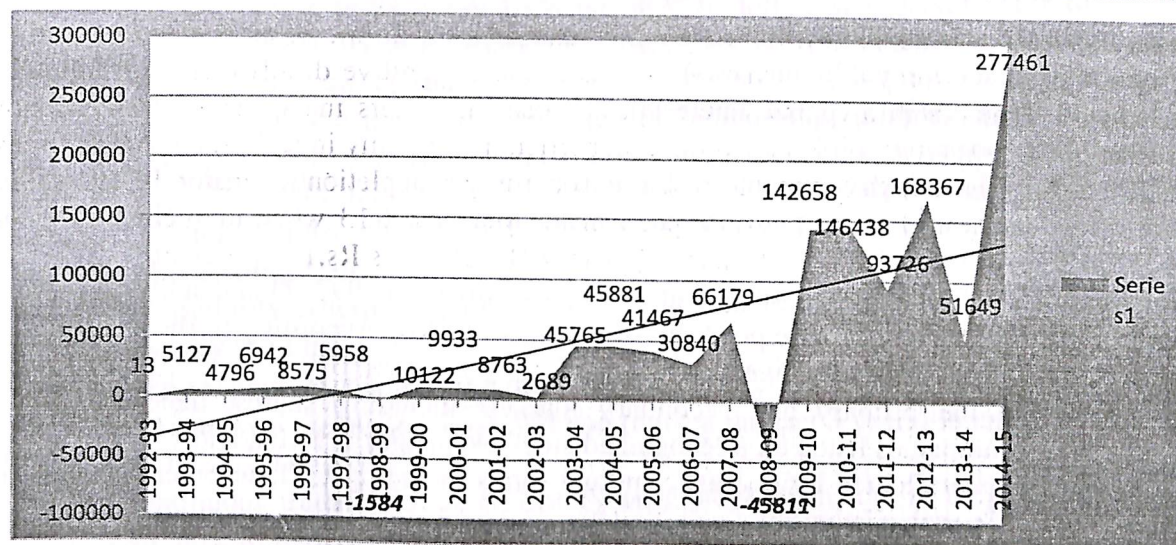
Net Inflow of Debt as FPI (INR crores)



Source: Compiled from the website www.nsdl.org

This figure portrays the trend and progress of debt component of FPI for the past 23 years. The status of this component is more or less similar to the FPI equity inflows, except in two or 3 periods. It is evident that, in the first four years of FPI approval, the debt contribution of foreign investors was nil and they initiated to invest in Indian debt assets only in the year 1996-97. In the year 1998-99, the flow of debt became negative as if the equity component. It was negative again in the year 2000-01. As in the subject of equity flows, here also we cannot see any extensive vacillation up to the year 2002-03. Nevertheless, from this phase onwards, FPI debt flows underwent for great oscillations. The flow was negative during the year 2005-06, and 2013-14. It reached in the ever time heights during the last financial year.

Net flow of FPI



Source: Compiled from the website www.nsdl.org

Figure.3 illustrates the movement and advancement of net investment of FPI for the last 23 financial years. This is the sum total of FPI debt net flows and FPI equity net flows. During the year 2002-03, it was negative and up to the financial year 2002-03, it was more or less constant. However, from 2003-04 onwards, it showed evidences of wide deviations. In the year of global economic meltdown, it declined steeply following the wide disposal of investors. Having broken out from the economic downturn, it reached at new heights. Again it fell down abruptly in the year 2013-14, but reached in the peak during the last financial year.

Foreign Institutional Investor – FII

The terminology of FII indicates all those investors outside a country who may invest in the:

- Securities in the primary and secondary markets including shares, debentures and warrants of companies unlisted, listed or to be listed on a recognized stock exchange in India.
- Units of schemes floated by domestic mutual funds in India whether listed or not
- Units of schemes floated by a collective investment scheme
- Dated government securities
- Derivatives traded on a recognized stock exchange
- Commercial paper
- Security receipts
- Indian Depository Receipt

Who can be FIIs?

- Pension funds
- Mutual funds
- Investment Trusts
- Banks
- Insurance companies/ Reinsurance companies
- Foreign central banks
- Foreign Governmental agencies
- Sovereign wealth funds
- International organizations
- University funds (serving public interests)

- Endowments (serving public interests)
- Foundations (serving public interests)
- Charitable trusts (serving public interests)

FII in India

Since 1990-91, the government of India focuses on liberalization, privatization and globalization for achieving economic growth. During that period, it gave new shape for its foreign policy also.

The Indian stock market was opened up to FII investment in 1992-93 and since then there has been a significant increase in the portfolio investment by FIIs. According to the regulations notified in Nov 14, 1995, FIIs may invest only in:

- Securities in the primary and secondary markets including shares, debentures and warrants of companies listed on a recognized stock exchanges in India, and
- Units of schemes floated by domestic mutual funds including UTI, whether listed on a domestic stock exchange or not.

Unit 18 International financial instruments

Euro/ADR Issues

Since 1992-93, Indian companies satisfying certain conditions are allowed to access foreign capital markets by Euro-issues of Global Depository Receipts (GDRs) and Foreign Currency Convertible Bonds (FCCBs).

"A Depository Receipt (DR) is basically a negotiable certificate, denominated in US dollars, that represents a non-US company's publicly traded local currency (Indian Rupee) equity shares. DRs are created when the local currency shares of an Indian company are delivered to the depository's local custodian bank, against which the depository bank issues DRs in US dollars. The DRs may trade freely in the overseas markets like any other dollar denominates security, either on a foreign stock exchange, or in the over the counter market, or among a restricted group such as qualified institutional buyers.

ADR

- ADRs permits U.S. investors to invest in non-U.S. companies and give non-U.S. companies easier access to the U.S. capital markets.
- Many non-U.S. issuers use ADRs as a means of raising capital or establishing a trading presence in the U.S. The non-U.S. company may sometimes be referred to as a "foreign private issuer."
- The first ADR was created in 1927 by a U.S. bank to allow U.S. investors to invest in shares of a British department store. Today, there are more than 2,000 ADRs available representing shares of companies located in more than 70 countries.
- An ADR is a negotiable certificate that evidences an ownership interest in American Depository Shares ("ADSs") which, in turn, represent an interest in the shares of a non-U.S. company that have been deposited with a U.S. bank. It is similar to a stock certificate representing shares of stock.

GDR

- A Global Depository Receipt (GDR) is a negotiable instrument issued by a depository bank in international markets — typically in Europe and generally made available to institutional investors both outside and within the U.S. — that evidences ownership of shares in a non-U.S. company, enabling the company (issuer) to access investors in capital markets outside its home country.
- Each GDR represents a specific number of underlying ordinary shares in the international company, on deposit with a custodian in the applicable home market. GDRs are quoted

and traded in U.S. dollars, pay dividends in U.S. dollars and are subject to the trading and settlement procedures of the market in which they are transacted.

Indian Depository Receipt (IDR)

An IDR is an instrument denominated in Indian Rupees in the form of a depository receipt created by a Domestic Depository (custodian of securities registered with the Securities and Exchange Board of India) against the underlying equity of issuing company to enable foreign companies to raise funds from the Indian securities Markets.

Eligibility for issuing IDR

The eligibility criteria given under IDR Rules and Guidelines are as under. The foreign issuing company shall have:-

- pre-issue paid-up capital and free reserves of at least US\$ 50 million and have a minimum average market capitalization (during the last 3 years) in its parent country of at least US\$ 100 million;
- a continuous trading record or history on a stock exchange in its parent country for at least three immediately preceding years;
- a track record of distributable profits for at least three out of immediately preceding five years; listed in its home country and not been prohibited to issue securities by any Regulatory Body and has a good track record with respect to compliance with securities market regulations. The size of an IDR issue shall not be less than Rs. 50 crores

Intermediaries involved in the issuance of IDRs

- Overseas Custodian Bank is a banking company which is established in a country outside India and has a place of business in India and acts as custodian for the equity shares of issuing company against which IDRs are proposed to be issued in the underlying equity shares of the issuer is deposited.
- Domestic Depository who is a custodian of securities registered with the as SEBI and authorised by the issuing company to issue Indian Depository Receipts;
- Merchant Banker registered with SEBI who is responsible for due diligence and through whom the draft prospectus for issuance of the IDR is filed with SEBI by the issuer company.

Eurobond

A Eurobond is a bond denominated in a currency not native to the issuer's home country. Eurobonds are commonly issued by governments, corporations, and international organizations.

Eurobonds give issuers the opportunity to take advantage of favorable regulatory and lending conditions in other countries. Eurobonds are not usually subject to taxes or regulations of any one government, which can make it cheaper to borrow in the Eurobond market as compared to other debt markets.

Unit 19 Impact of Foreign Capital Flow on the Indian Economy

Role of foreign capital in Indian financial system

Foreign capital is capable of playing an important role in the economic system of India. One of the weaknesses of Indian economy is that it is suffering from dearth of capital. In such an instance, foreign capital, is a blessing for the economy. An underdeveloped economy will have to import machinery, technical knowhow, spare parts and even raw materials to give a push to its economic development. FDI has the following significance:

- The threat of risk of investment is handed over from domestic investors to foreign investors.
- FDI is the only capital flow that has been strongly associated with higher GDP growth since 1970.

- FDI is to be rewarded only if the investment is profitable. In case the investment is in loss, it is not to be rewarded just like debt or debentures.
- Domestic capital is inadequate for economic growth and only foreign capital can supplement it.
- Domestic capital, sometimes may not flow to certain sectors because of lack of experience. In such circumstances, foreign capital can establish a way.
- A developing economy like India may have enough savings. But such savings may come outside as investment only at higher levels of economic activity. Here foreign capital can be used in order to accelerate the pace of economic activity.
- Foreign capital brings with it other scarce productive factors, such as technical knowhow, business experience and knowledge which are equally essential for economic development.

Regulations for FDI in India

a) Forms of conducting business in India

A foreign company can begin its operations in the form of:

- Incorporate a company under the Companies Act, 1956, as a Joint Venture or a Wholly Owned Subsidiary.
- Set up a Liaison Office / Representative Office or a Project Office or a Branch Office of the foreign company which can undertake activities permitted under the Foreign Exchange Management (Establishment in India of Branch Office or Other Place of Business) Regulations, 2000.

b) Instruments for receiving foreign investments in an Indian Company

Foreign investment is reckoned as FDI only if the investment is made in equity shares, fully and mandatorily convertible preference shares and fully and mandatorily convertible debentures with the pricing being decided upfront as a figure or based on the formula that is decided upfront. Partly paid equity shares and warrants issued by an Indian company in accordance with the provision of the Companies Act, 2013 and the SEBI guidelines, as applicable, shall be treated as eligible FDI instruments w.e.f. July 8, 2014 subject to compliance with FDI scheme.

c) Sectors where foreign investment is prohibited

FDI is prohibited under the Government Route as well as the Automatic Route in the following sectors:

- Atomic Energy
- Lottery Business
- Gambling and Betting
- Business of Chit Fund
- Nidhi Company
- Agricultural (excluding Floriculture, Horticulture, Development of seeds, Animal Husbandry, Pisciculture and cultivation of vegetables, mushrooms, etc. under controlled conditions and services related to agro and allied sectors) and Plantations activities (other than Tea Plantations)
- Housing and Real Estate business (except development of townships, construction of residential/commercial premises, roads or bridges to the extent specified in Notification No. FEMA 136/2005-RB dated July 19, 2005).
- Trading in Transferable Development Rights (TDRs).

- Manufacture of cigars, cheroots, cigarillos and cigarettes, of tobacco or of tobacco substitutes.
-

d) Repatriation of investments and profits

All foreign investments are freely repatriable (net of applicable taxes) except in cases where:

- the foreign investment is in a sector like Construction and Development Projects and Defence wherein the foreign investment is subject to a lock-in-period; and
- NRIs choose to invest specifically under non-repatriable schemes.

Further, dividends (net of applicable taxes) declared on foreign investments can be remitted freely through an Authorised Dealer bank.

e) Investment in preference shares as FDI

Foreign investment through preference shares is treated as foreign direct investment. However, the preference shares should be fully and mandatorily convertible into equity shares within a specified time to be reckoned as part of share capital under FDI. Investment in other forms of preference shares requires to comply with the ECB norms.

f) Issuance of debentures as part of FDI

Debentures which are fully and mandatorily convertible into equity within a specified time would be reckoned as part of share capital under the FDI Policy.

g) setting up of partnership/ proprietorship concern in India by foreigners

A foreigner cannot set up partnership firms in India. Only NRIs/PIOs are allowed to set up partnership/proprietorship concerns in India on non-repatriation basis.

FDI for the financial year 2015-16

Foreign Investment inflows-	
Item	2015-16 (US\$ Million)
1.1 Net Foreign Direct Investment (1.1.1-1.1.2)	36,021
1.1.1 Direct Investment to India (1.1.1.1-1.1.2)	44,907
1.1.1.1 Gross Inflows/Gross Investments	55,559
1.1.1.1.1 Equity	41,112
1.1.1.1.1.1 Government (SIA/FIPB)	3,574
1.1.1.1.1.2 RBI	32,494
1.1.1.1.1.3 Acquisition of shares	3,933
1.1.1.1.1.4 Equity capital of unincorporated bodies	1,111
1.1.1.1.2 Reinvested earnings	10,413
1.1.1.1.3 Other capital	4,034
1.1.1.2 Repatriation/Disinvestment	10,652
1.1.1.2.1 Equity	10,524
1.1.2 Foreign Direct Investment by India (1.1.2.1+1.1.2.2+1.1.2.3-1.1.2.4)	8,886
1.1.2.1 Equity capital	6,486
1.1.2.2 Reinvested Earnings	3,337
1.1.2.3 Other Capital	3,382

1.1.2.4 Repatriation/Disinvestment	4,320
1.2 Net Portfolio Investment (1.2.1+1.2.2+1.2.3-1.2.4)	-4,130
1.2.1 GDRs/ADRs	373
1.2.2 FIIs	-4,016
1.2.3 Offshore funds and others	0
1.2.4 Portfolio investment by India	487
1 Foreign Investment Inflows	31,891

Source: RBI Bulletin, July 2016

The above table makes it clear that net FDI is obtained by deducting FDI by India from FDI to India. FDI by India means the investment made by Indian companies abroad or in the resources of foreign host countries. FDI to India means the investment made by foreign companies in the resources of India.

Direct investment to India is obtained by using the following formula:

Gross investment (1.1.1.1) -Repatriation of capital (1.1.1.2)

Gross investment (55,559) = Equity (41112) + Reinvested earnings (10413) + Other capital (4034)

= 55,559-10652=44,907

Direct investment by India is obtained by the following formula:

(Equity capital + Reinvested Earnings+ Other capital)-Repatriation of capital=8886

Net FDI= FDI in to India-FDI by India =44907-8886
=36021.

Similarly, Net portfolio investment is obtained by,

GDR/ADR + FIIs + Offshore funds and others-FPI By India, Here India's Net FPI for the year 2015-16 is negative. That is -4130.

FDI Inflows in BRICS nations

BRICS is the acronym for an association of five major emerging national economies: Brazil, Russia, India, China and South Africa. The grouping was originally known as "BRIC" before the inclusion of South Africa in 2010.

As of 2015, the five BRICS countries represent over 3 billion people or 42% of the world population; as all five members are in the top 25 of the world by population, and four are in the top 10. The five nations have a combined nominal GDP of US\$16.039 trillion, equivalent to approximately 20% of the gross world product, and an estimated US\$4 trillion in combined foreign reserves. The BRICS have received both praise and criticism from numerous commentators. Bilateral relations among BRICS nations have mainly been conducted on the basis of non-interference, equality, and mutual benefit (win-win). It is estimated that the combined GDP (PPP) of BRICS would reach US\$50 trillion mark by 2020.

The notion called FDI has been developed principally for complementing the insufficient domestic capital creation of developing and under developed economies. FDI is a non- debt creating inflow of fund unlike other flows of fund like debentures. For a dreadfully inhabited nation like India, a large magnitude of resources is needed to fund its diverse developmental needs, which the country does not have itself. To strengthen its infrastructure, expertise and knowledge base, FDI is inevitable.FDI has more sustainability than other sources like foreign institutional investment.

But, in India, the state of affairs surrounding FDI is not promising. FDI has not turned to be a considerable portion of our GDP. Since it is not creating debt, it can be effectively used for the country's developmental purposes without increasing our debt burden, and the authorities should be keen in its effective utilization. The following is a comparison of FDI flows in to BRICS countries.

1. Total FDI inflows of individual nations in BRICS.

China comes first as regards total FDI inflows (From 1991 to 2013) among the BRICS nations; Brazil is the second largest receiver of FDI inflow (Total), with \$582307.94 million. Russia, the Eurasian country, stands in the third position in terms of FDI receipt in its various sectors. India has received FDI worth \$ 291835.43 million, and is only fourth among the BRICS nation. The new comer of the group, South Africa is the lowest recipient of FDI.

2. Average FDI inflows of individual nations.

Even in this, China stands first among the BRICS countries with \$63351.04 million FDI average per annum. As in the case of total FDI inflow, here also Brazil occupies the second place with an average FDI inflow of \$25317.74 million. The average FDI inflow of Russia (22700.52 million US \$) stands very close to that of Brazil and it has a third place among the BRICS nations. As if the case of total FDI inflows, India and South Africa respectively occupies the fourth and fifth place.

3. FDI status of Brazil shows that it was subject to huge rise and fall throughout the period under study. From a mere US \$ 1102.2 million FDI inflow in 1991, the country could reach at a height of US \$ 64045.33 million by 2013. There occurred a hike of US \$ 62943.13 million in the FDI inflow of the country. It is observed that foreign direct investment in Brazil had played a significant part in the country's industrialization process in the past few decades. FDI inflows into Brazil were attracted mostly by the size of the vast domestic market and also by favorable government policies. Regarding the FDI growth rate, Brazil has only the fourth rate as its average growth rate is less.

4. A comparison between the Russian and Brazilian FDI inflows show that from 1992-2002, Russia had only a small portion as its FDI inflow, and it was very less compared to that of Brazil. But from 2003 onwards, FDI flow to Russia strengthened and by 2005, it overtook the FDI inflow of Brazil. Thereafter, Russian economy witnessed for a steep increase in its FDI inflow up to 2008, which was far higher than that of Brazil. But in 2009, it fell down following the global economic crisis. A similar tendency is visible in the FDI inflow of Brazilian economy also, during 2009. Concerning Russia's FDI, it overcame the tiresome status and won back the previous position. But Russia's FDI growth rate is not hope full as it stands third among the BRICS nations with a 35. 83 percent average growth rate. FDI inflows of these countries show an upward tendency.

5. FDI inflows of India show an increasing tendency like that of Brazil and Russia.

But it was subject to huge deviations throughout the past 23 years. From the year 1991 to 2005, its inflow was weak. Since 2006, it began to dramatically enhance but tired with the economic crisis of 2009. But India had not to confront much consequence in its FDI inflow unlike Russia, during the days of economic crisis. From 2011 onwards, it has begun again, to show the tendencies of growth.

6. Position of China's FDI inflow is excellent compared to other BRICS nations. After two years of FDI approval itself, it could amplify the inflow and maintain a steady growth in the flow of FDI, up to the year of economic recession. China has gained some magnificent

improvements in strengthening the flow of FDI in to its economy, through its policy measures and master plans. In 1991, its FDI flow was only some US \$ 4366.34 million, and it became US \$ 123911 million by 2013. They made a gigantic difference of US \$ 119544.7 million in their flow of FDI.

7. South Africa is very weak the matter of FDI inflows. It hadn't any major improvement in the case of FDI inflow up to the year 2000. The country witnessed for a dramatic hike of FDI during 2001, and for a similar fall in the next year. It can also be observed that, the country's FDI inflow could attain stability only from the year 2007 onwards.
8. BRICS nation's FDI inflow constitutes a standard portion of total world FDI inflow, even if it was less than 10 % in 1991, 1992, 1998, 1999 and 2000. The average constitution of FDI to the world FDI is 12.91 percent for each year.

Review Questions

Short Answer Type:

1. Define FDI.
2. Write a short note on the differences between FDI and FPI.
3. What are the merits of FDI?
4. What factors mostly determine location of FDI?
5. How 'infrastructure' becomes a factor in attracting FDI?
6. What are the features of a foreign institutional investor?
7. Write the differences between ADR and GDR?
8. What is Indian Depository Receipt (IDR)?
9. Who can be Foreign Institutional Investors?

Essay type:

1. Write a detailed note about the policy frame work for foreign capital in India?
2. Describe the trend of foreign portfolio investment in India.
3. Explain the role of foreign capital in the Indian financial system.
4. How FDI will help the economic development of a country?

References

- International Business, Rakesh Mohan Joshi, Oxford Higher Education.
- International Business: Text and Cases, Francis Cherunilam, Prentice Hall of India Publication, 2010.
- Proceedings of the National Seminar, Research Methodology and Statistical Analysis using SPSS (St. Joseph's College Irinjalakuda), Foreign Portfolio Investment: A case of India, Febina. K and Dr. Thomas Paul Kattookaran, February 2016,1,Page No: 41-48 ,ISBN: 978-93-85777-24-0
- FDI Flows to BRICS: A comparative study, Mirror Journal, Febina. K and Dr. Thomas Paul Kattookaran, Mar2016, Volume:6 No:1,ISSN: 2249-8117
- <http://www.makeinindia.com>
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UNIVERSITY OF CALICUT
Master of Commerce (CSS)
Semester III

MC3C11: FINANCIAL MARKETS AND INSTITUTIONS

80 Hours

Marks: 80

Objectives:

- To provide the students a sound information and knowledge of broad framework of financial markets and institutions.
- To impart the students an understanding of the inter-linkages and regulatory framework within which the system operates in India

Module 1: An overview of financial markets: Financial markets – Nature – Functions – money market – Capital markets – Markets for derivatives – Working of stock exchange in India – NSE, BSE, OTCEI – Role of SEBI – Major international stock markets. **15 hours**

Module 2: Interest rates :Theories of Interest rate - determination - Maturity and structure of interest rates - Term structure of interest rates - Financial repression and interest rate - The yield curve - interest rates savings - Interest rate and investment - issues of relative rates and return. **15 hours**

Module 3: Commodity markets : MCX, NCDEX, and NMCE – Functions, administration, regulations and general mechanism – International commodity markets – Debt market – Types, functions, instruments – Operational mechanism – Hindrances for the development of debt market. **15 hours**

Module 4: Development financial institutions: IDBI, IFCI, NABARD, SFCs, UTI, SIDBI – Mutual Fund SEBI guidelines on mutual fund – Provident Fund – Pension Funds – PFRDA – Insurance Companies – IRDA. **15 hours**

Module 5: Foreign capital flows : forms of foreign capital – FDI and FPI – FIIs – International financial instruments – ADR, GDR, IDR and Euro bonds – Role of foreign capital in Indian financial system – Trends in foreign capital inflows to India – Regulatory framework for foreign capital flows. **20 hours**

References:

1. LM Bhole and Jitendra Mahakud: Financial Institutions and markets, Tata Mc Grawhill Publishers, (2009).
2. Shshi K Gupta: Nisha Agarwal and Neeti Gupta, Financial Markets And Institutions, Kalyani Publishers, (2013)
3. S Sachdeva: Indian Financial System, Educational Publishers, (2005).
4. MY Khan: Financial Services, Tata McGrawhill publishers (2004)
5. Keith Pilbeam: Finance and Financial Markets, Palgrave Macmillan (2005).
6. Gordon and Nataraj: Financial Markets and Services, Himalaya Publishing House.
7. Bharati V Pathak: The Indian Financial System: Markets, Institutions and Services, Dorling Kindersley India (pvt) ltd (2009).
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UNIVERSITY OF CALICUT
Master of Commerce (CSS), Semester III
MC3C11: FINANCIAL MARKETS AND INSTITUTIONS
MODEL QUESTION PAPER

Three Hours

Max Marks: 80

Section A

Answer All Questions- Each question carries 2 Marks

1. What do you mean by external commercial borrowing?
2. Distinguish between Money market and Capital Market.
3. What do you mean by MCX?
4. What do you mean by ECB?
5. What is Greenfield investment?

(5x2 = 10)

Section B

Answer any 5 Questions- Each question carries 8 Marks

6. "NBFCs today play an important role in mobilization of savings" Comment.
7. Evaluate the performance of Mutual funds in India.
8. What are the factors to be considered while formulating investment policy of a bank?
9. What are the determinants of general structure of interest rates?
10. Explain the liquidity preference theory of interest.
11. Explain the significance of financial system in the economic development of a Country.
12. "Financial repression, a constraint in the fuller capacity utilization of economy, may sometimes discourage both savings and investments". Do you agree with this statement? Comment.
13. Explain the regulatory framework of Commodity Market and Exchanges in India

(5x8 = 40)

Section C

Answer any 2 Questions- Each question carries 15 Marks

14. Evaluate the role and functions of major stock exchanges in India.
15. Outline the condition of debt market in India. What are the hindrances behind the nascent state of bond market in India? Suggest measures to develop the present condition of bond market.
16. Critically evaluate the performance of SEBI in regulating the Indian Capital Market.

(2x15 = 30)