

Money Market Operations

Learning Objectives

After going through the chapter student shall be able to understand

Conceptual Framework including the distinct features of Money Market, distinction between Capital and Money market etc.

- **Institutions**
 - (i) Reserve Bank of India (RBI)
 - (ii) Schedule Commercial Banks (SCBs)
 - (iii) Co-operative Banks
 - (iv) Financial and Investment Institutions
 - (v) Corporates
 - (vi) Mutual Funds
 - (vii) Discount and Finance House of India
- **Instruments**
 - (a) Call/Notice money
 - (b) Inter-Bank Term money
 - (c) Inter-bank Participation Certificate (IBPC)
 - (d) Inter Corporate Deposit
 - (e) Treasury Bills (TBs)
 - (f) Commercial Bills
 - (g) Certificate of Deposits (CDs)
 - (h) Commercial Paper
- **Determination of Interest Rates**
- **Future Possibilities**
- **Recent Development in Money Market**
 - (i) Debt Securitisation
 - (ii) Money Market Mutual Funds (MMMFs)
 - (iii) Repurchase Options (Repo.) and Ready Forward (RF) contracts

1. Introduction

The financial system of any country is a conglomeration of sub-market, viz. money, capital and forex markets. The flow of funds in these markets is multi-directional depending upon liquidity, risk profile, yield pattern, interest rate differential or arbitrage opportunities, regulatory restrictions, etc. The role of money market in the overall financial system is prime in as much as the market acts as an equilibrating mechanism for evening out short term surpluses and deficits and provides a focal point for Central Bank's intervention to bring out variations in liquidity profile in the economy. Money Market is the market for short-term funds, generally ranging from overnight to a year. It helps in meeting the short-term and very short-term requirements of banks, financial institutions, firms, companies and also the Government. On the other hand, the surplus funds for short periods, with the individuals and other savers, are mobilised through the market and made available to the aforesaid entities for utilisation by them. Thus, the money market provides a mechanism for evening out short-term liquidity imbalances within an economy. Hence, the presence of an active and vibrant money market is an essential pre-requisite for growth and development of an economy.

As the Indian economy gets integrated with the global economy, the demand for borrowing and lending options for the corporates and the financial institutions increases everyday. Known as the money market instruments, mutual funds, money market mutual funds, government bonds, treasury bills, commercial paper, certificates of deposit, repos (or, ready-forward purchases) offer various short-term alternatives. The major players in the money market are the Reserve Bank of India and financial institutions like the UTI, GIC, and LIC.

While the call money rates have been deregulated and left to the demand and supply forces of the market, the RBI intervenes in the repos through its subsidiaries. The RBI also acts in the foreign exchange market, where it sells US dollars to stabilise the rupee-dollar exchange rate.

Call Money rates have been dropped. We read these reports very often in the financial press and business pages of newspapers without understanding much of it. What is this money market ? Who are the participants ? What are the instruments used ? How are the interest rates determined ? What is call money ? What is meant by the term *repos* ? What are the inter linkages between the money market and the foreign exchange market ? What are the money market mutual funds (MMMFs), and how are they different from ordinary mutual funds (MFs) as they exist today ? We attempt to answer these questions in this chapter and elsewhere in this Book.

1.1 Conceptual Framework: The money market is market for short-term financial assets which can be turned over quickly at low cost. It provides an avenue for equilibrating the short-term surplus funds of lenders and the requirements of borrowers. It, thus, provides a reasonable access to the users of short term money to meet their requirements at realistic prices. Short term financial asset in this context may be construed as any financial asset which can be quickly converted into money with minimum transaction cost within a period of one year and are termed as close substitute for money or near money.

The money market thus may be defined as a centre in which financial institutions congregate for the purpose of dealing impersonally in monetary assets. In a wider spectrum, a money market can be defined as a market for short-term money and financial assets that are near

10.3 Strategic Financial Management

substitutes for money. The term short-term means generally a period upto one year and near substitutes to money is used to denote any financial asset which can be quickly converted into money with minimum transaction cost.

This is a market for borrowing and lending *short-term* funds. Banks, financial institutions, investment institutions, and corporates attempt to manage the mismatch between inflow and outflow of funds by lending in or borrowing from the money market.

Call money market, or inter-bank call money market, is a segment of the money market where scheduled commercial banks lend or borrow on call (i.e., overnight) or at short notice (i.e., for periods upto 14 days) to manage the day-to-day surpluses and deficits in their cash-flows. These day to day surpluses and deficits arise due to the very nature of their operations and the peculiar nature of the portfolios of their assets and liabilities.

While the portfolio of liabilities comprises deposits which are withdrawable on demand, the portfolio of assets consists of working capital and other loans to corporates and advances to individuals, and commercial and non-commercial organisations. Earlier, banks used to extend working capital loans to corporates while term-lending institutions like the Industrial Development Bank of India (IDBI), Industrial Finance Corporation of India (IFCI), and the Industrial Credit and Investment Corporation of India (ICICI) provided long-term loans.

The distinction between banks and term-lending institutions is getting blurred, with banks extending term loans and financial institutions setting up their commercial banking outfits. Depositors withdraw and deposit cash daily while corporates withdraw the loan amount as and when the need arises, i.e., when they have to make payments to their suppliers, etc. As a result, the balance, or net inflow or net outflow of cash, is not zero at the end of the day or the week or the fortnight. Hence, the need for an inter-bank call money market in the world seems over.

According to, former governor of the RBI, the money market, like the foreign exchange market, is more a concise description of transactions than a location, unlike a stock market. It is what happens between banks, financial institutions, corporates, and others who have money to *place* or *park* for a very short period, viz., a day, a week, or a fortnight.

To quote the Vaghul Committee report: "The money market is a market for short-term financial assets that are close substitutes for money. The important feature of money market instrument is that it is liquid and can be turned over quickly at low cost, and it provides an avenue for equilibrating the short-term surplus funds of lenders and the requirements of borrowers."

1.2 The Distinct Features of Money Market

- (i) It is one market but collection of markets, such as, call money, notice money, repose, term money, treasury bills, commercial bills, certificate of deposits, commercial papers, inter-bank participation certificates, inter-corporate deposits, swaps futures, options, etc. and is concerned to deal in particular type of assets, the chief characteristic is its relative liquidity. All the sub-markets have close inter-relationship and free movement of funds from one sub-market to another. There has to be network of large number of participants which will add greater depth to the market.
- (ii) The activities in the money market tend to concentrate in some centre which serves a region or an area; the width of such area may vary considerably in some markets like London and New York which have become world financial centres. Where more than one

market exists in a country, with screen-based trading and revolutions in information technology, such markets have rapidly becoming integrated into a national market. In India, Mumbai is emerging as a national market for money market instruments.

- (iii) The relationship that characterises a money market should be impersonal in character so that competition will be relatively pure.
- (iv) In a true money market, price differentials for assets of similar type (counterparty, maturity and liquidity) will tend to be eliminated by the interplay of demand and supply. Even for similar types of assets, some differential will no doubt continue to exist at any given point of time which gives scope for arbitrage.
- (v) Due to greater flexibility in the regulatory framework, there are constant endeavours for introducing new instruments/innovative dealing techniques; and
- (vi) It is a wholesale market and the volume of funds or financial assets traded in the market are very large.
- (vii) The Indian money market has a dichotomic structure. It has a simultaneous existence of both the organized money market as well as unorganised money markets. The organised money market consists of RBI, all scheduled commercial banks and other recognised financial institutions. However, the unorganised part of the money market comprises domestic money lenders, indigenous bankers, trader, etc. The organised money market is in full control of the RBI. However, unorganised money market remains outside the RBI control.
- (viii) The demand for money in Indian money market is of a seasonal nature. India being an agriculture predominant economy, the demand for money is generated from the agricultural operations. During the busy season i.e. between October and April more agricultural activities takes place leading to a higher demand for money.
- (ix) In the Indian money market, the organized bill market is not prevalent. Though the RBI tried to introduce the Bill Market Scheme (1952) and then New Bill Market Scheme in 1970, still there is no properly organized bill market in India.
- (x) In our money market the supply of various instruments such as the Treasury Bills, Commercial Bills, Certificate of Deposits, Commercial Papers, etc. is very limited. In order to meet the varied requirements of borrowers and lenders, It is necessary to develop numerous instruments.

1.3 Pre-Conditions for an Efficient Money Market: A well developed money market–

- (a) uses a broad range of financial instruments (treasury bills, bills of exchange etc).
- (b) channelises savings into productive investments (like working capital),
- (c) promote financial mobility in the form of inter sectoral flows of funds and
- (d) facilitate the implementation of monetary policy by way of open market operations.

The development of money market into a sophisticated market depends upon certain critical conditions. They are:

- (i) Institutional development, relative political stability and a reasonably well developed banking and financial system.
- (ii) Unlike capital market or commodity markets, tradings in money market are concluded

10.5 Strategic Financial Management

over telephone followed by written confirmation from the contracting parties. Hence, integrity is sine qua non. Thus banks and other players in the market may have to be licensed and effectively supervised by regulators.

- (iii) The market should be able to provide an investment outlet for any temporarily surplus funds that may be available. Thus, there must be supply of temporarily idle cash that is seeking short-term investment in an earning asset. There must also exist a demand for temporarily available cash either by banks or financial institutions for the purpose of adjusting their liquidity position and finance the carrying of the relevant assets in their balance sheets.
- (iv) Efficient payment systems for clearing and settlement of transactions. The introduction of Electronic Funds Transfer (EFT), Depository System, Delivery versus Payment (DVP), High Value Inter-bank Payment System, etc. are essential pre-requisites for ensuring a risk free and transparent payment and settlement system.
- (v) Government/Central Bank intervention to moderate liquidity profile.
- (vi) Strong Central Bank to ensure credibility in the system and to supervise the players in the market.
- (vii) The market should have varied instruments with distinctive maturity and risk profiles to meet the varied appetite of the players in the market. Multiple instruments add strength and depth to the market; and
- (viii) Market should be integrated with the rest of the markets in the financial system to ensure perfect equilibrium. The funds should move from one segment of the market to another for exploiting the advantages of arbitrage opportunities.
- (ix) In India, as many banks keep large funds for liquidity purpose, the use of the commercial bills is very limited. RBI should encourage banks to make use of commercial papers instead of making transactions in cash.

The money market in India has been undergoing rapid transformation in the recent years in the wake of deregulation process initiated by Government of India/Reserve Bank of India. The institutions of Primary Dealers (PDs) and Satellite Dealers have been set up as specialised institutions to facilitate active secondary market for money market instruments. New money market instruments have been introduced and more institutions have been permitted as players in the market. Interest rates in respect of all money market instruments have been completely freed and are allowed to be fixed in terms of market forces of demand and supply.

1.4 Rigidities in the Indian Money Market: Notwithstanding the deregulation process initiated by the Reserve Bank of India and several innovations, the money market is not free from certain rigidities which are hampering the growth of the market. The most important rigidities in the Indian money market are:

- (i) Markets not integrated,
- (ii) High volatility,
- (iii) Interest rates not properly aligned,

- (iv) Players restricted,
- (v) Supply based-sources influence uses,
- (vi) Not many instruments,
- (vii) Players do not alternate between borrowing and lending,
- (viii) Reserve requirements,
- (ix) Lack of transparency,
- (x) Inefficient Payment Systems,
- (xi) Seasonal shortage of funds,
- (xii) Commercial transactions are mainly in cash, and
- (xiii) Heavy Stamp duty limiting use of exchange bills

1.5 Distinction between Capital and Money Market: There is, however, basically a difference between the money market and capital market. The operations in money market are for a duration upto one year and deals in short term financial assets whereas in capital market operations are for a longer period beyond one year and therefore, deals in medium and long term financial assets. Secondly, the money market is not a well defined place like the capital market where business is done at a defined place viz. stock exchanges. The transactions in the money market are done through electronic media and other written documents. The major points of distinction are enumerated as follows.

- (1) In the Capital Market, there is classification between Primary Market and Secondary Market. While there is no such sub-division in money market, as such. However, slowly a secondary market in greater form is coming up in Money Market also.
- (2) Capital Market deals for fund of long term requirement. In contrast, the Money Market generally supply fund for short term requirement.
- (3) If the volume of business of Capital Market is considered (both Primary and Secondary Markets), it will lag behind the total value of transaction in Money Market.
- (4) While the number of instruments dealt with in the Money Market are many like
 - (a) Interbank Call Money,
 - (b) Notice Money upto 14 days
 - (c) Short-term deposits upto 3 months
 - (d) 91-days treasury bill
 - (e) 182-days treasury bill
 - (f) Commercial Paper etc.

The number of instruments in Capital Market are shares and debentures.

- (5) The players in Capital Market are general investors, brokers, Merchant Bankers, Registrar to the issue, underwriters, Corporate Investors, Foreign Financial Institutions

10.7 Strategic Financial Management

(FII) and Bankers. While in money market the participants are Bankers, RBI and Government.

- (6) Rate of interest in money market is controlled by RBI or central bank of any country. But capital market's interest and dividend rate depends on demand and supply of securities and stock market's sensex conditions. Stock market regulator is in the hand of SEBI.
- (7) The degree of risk is small in the money market. The risk is much greater in capital market. The maturity of one year or less gives little time for a default to occur, so the risk is minimised. Risk varies both in degree and nature throughout the capital market.
- (8) The money market is closely and directly linked with central bank of the country. The capital market feels central bank's influence, but mainly indirectly and through the money market.

Distinction between Money Market and Capital Market

Basis	Money Market	Capital Market
1. Maturity of Instruments	1 year or less	More than 1 year
2. Risks	Less	More and varied
3. Instruments	Treasury bills, CDs, etc	Shares, bonds, etc
4. Finance	Short term	Long term
5. Relation with Central Bank	Direct	Indirect

1.6 Vaghul Group Report: Until few years ago, the Indian money market was small with transactions generally confined to overnight borrowing and lending money by banks/financial institutions. Except commercial bills, there was no major other short term negotiable instrument for dealings. The fixed interest rate regime along with restrictions on entry of participants in the market provided little incentive for market development, which was almost dormant. The money management was, therefore, regarded as if no consequence by the investors, aspiring for better returns on short-term funds.

The Reserve Bank of India, however, in due course of time, recognised the need for an active secondary money market in India especially in the context of the setting up subsidiaries by many banks for operating mutual funds schemes and ever expanding business of the Unit Trust of India, Life Insurance Corporation of India, Industrial Development Bank of India and other financial institutions which needed avenues for the deployment of funds, flowing in regularly. For an indepth study and to make recommendations on the steps required to be taken for the development of a healthy and active money market, the Reserve Bank of India, appointed a working group under the Chairmanship of Shri N. Vaghul in September 1986. The recommendations, of the working group laid foundation for systematic action by the Reserve Bank of India for the development of the Indian money market. The broad objectives and the strategy as laid down by the Vaghul group serves as a milestone in the development of Indian money market. The working group recommended that the money market should be made broad-based by introducing new negotiable instruments and allowing more participants. Turnover or volume of trading is a sure indicator of growth of market and for increase in turnover, there has to be a free play of market forces in fixing the rates and prices. The

working group, therefore, recommended that the administered interest rate regime should be given up initially in such financial transactions as are put through the money market. The specific terms of reference of the Vaghul Group were:

- (i) to examine money market instruments and recommend specific measures for their development;
- (ii) to recommend the pattern of money market interest rates and to indicate whether these should be administered or determined by the market;
- (iii) to study the feasibility of increasing the participants in the money market;
- (iv) to assess the impact of changes in the cash credit system on the money market and to examine the need for developing specialised institutions such as discount houses; and
- (v) to consider any other issue having a bearing on the development of the money market.

1.7 Recommendations: The Vaghul Group, as a background to its recommendations, outlines the conceptual framework in the form of broad objectives of the money market which are :

- (a) It should provide an equilibrating mechanism for evening out short-term surpluses and deficits;
- (b) It should provide a focal point for central bank intervention for influencing liquidity in the economy;
- (c) It should provide reasonable access to users of short-term money to meet their requirements at a realistic price.

To achieve these objectives, the Vaghul Group adopts a four-pronged strategy:

- (a) selective increase in the number of participants to broaden the base of the money market,
- (b) activating the existing instruments and developing new ones so as to have a diversified mix of instruments,
- (c) orderly movement away from administered interest rates to market determined interest rates, and
- (d) creation of an active secondary market through establishing new instruments.

The broad objectives and the strategy laid down by the Group serve as a touchstone for testing the various recommendations and for assessing the extent to which these recommendations would facilitate the development of money market in India.

1.8 Other Recommendations: There are a few other aspects of the Vaghul Group report which call for our attention. These relate to (a) new money market instrument (b) new supporting institutions and (c) the time schedule for implementing the recommendations of the Group.

The new money market instruments suggested by the Group are: commercial paper, certificate of deposits, factoring services and inter-bank participation certificates. These

10.9 Strategic Financial Management

suggestions have to be appreciated, though some of the instruments do not seem to be in the area of immediate possibility. The launching of factoring services would call for a lot of spade-work with reference to the legal aspects and infrastructure required. Moreover, the introduction of short-term commercial paper should be preceded by the setting up of the credit rating agency.

Regarding the instrument of inter-bank participation certificates suggested by the group, it is difficult to appreciate why the group confines it only to banks and excludes institutions. It will restrict the size of the market for participation certificates if it is confined only to banks.

The recommendation of Vaghul Group for establishing an autonomous public limited company called Finance House of India is commendable. The failure of past efforts at developing a bill market or money market in general, was due to the absence of supporting institutions which would deal in money market instruments.

Viewed in this context, the setting up of finance house is an important step towards the development of the money market. The nature and scope of operations of the finance house would depend, to a considerable extent, on the environment in which it is expected to operate.

In August 1987, the decision of the RBI to set up a finance house amounted to putting the cart before the horse. The RBI side-stepped the recommendations of the Vaghul Group on the reform of the call money market and other sub-markets of the money market. It went ahead with the modalities of establishing the Finance House of India (FHI). Even here its proposal to participate on an equal basis in the capital of FHI with other institutions and banks came in for criticism. Banks were asked to provide nearly Rs 125 crores in the form of capital and low cost funds while the RBI wanted to administer the finance house with a stake of a fifth of the investment.

The Vaghul Group's report on the money market has been regarded as a quick job but that does not mean a thorough job. The Group has, instead of carrying forward the ideas of the Chakravarty Committee, developed a restrictive approach to the money market in general and to the four important sub-markets in particular. It would have been enlightening if the Group had brought together the linkages among the four sub-markets. This is necessary because the concept of evening out surpluses and deficits in short-term funds means that funds flows not only among borrowers and lenders in a given sub-market but also between sub-markets. In other words, the money market is an organic whole, though sub-markets may be treated separately for convenience. There is need to assess the overall impact of the recommendations of the Vaghul Group. However, credit should be given to the Group for providing a good base for discussion with a view to arriving at correct decision.

Pursuant to these recommendations, the Reserve Bank of India has taken a number of steps to develop the money market. The timing of the action by the Reserve Bank of India coincided with the phase of gradual but definite liberalisation in the economy. The various institutional developments and new instruments introduced in the market are explained in this chapter.

In sequel to the recommendations, of Sukhmoy Chakravorty Committee (1985) and Vaghul Committee (1987) the interest rates in money market were de-regulated in May, 1989. A host of other new instruments have also been introduced since 1986 and onwards. These are 182

days treasury bills in 1986, certificate of deposits (CDs), Commercial Papers (CPs) and Inter Bank participation certificates in 1989 and 364 days Treasury Bills and Money Market Mutual Funds in 1992. To broaden both the primary and secondary market, specialised institution known as Discount and Finance House of India Ltd. (DFHI) was launched in April 1988. The institution is a market maker for money market instruments. These measures have made the Indian money market a vibrant one.

1.9 The Participants: The money market in India, as many other less developed countries, is characterised by *two* segments -

1. Organised Segment
2. Unorganised Segment

The principal intermediaries in the organised segment are:

- a. The commercial and other banks,
- b. Non-banking finance companies and
- c. Co-operative societies.

The primary activity of these intermediaries is to accept deposits from the public and lend them on a short-term basis to industrial and trading organisations. In recent years, they have extended their activities to rural areas to support agricultural operations. There is also an active inter-bank loan market as part of the organised money market.

The salient features of the organised money market in India are

- (i) A significant part of its operations which is dominated by commercial banks, is subject to tight control by the Reserve Bank of India which
 - (a) regulates the interest rate structure (on deposits as well as loans), reserve requirements and sectoral allocation of credit and
 - (b) provides support to the banks by lending them on a short term basis and insuring the deposits made by the public.
- (ii) It is characterised by fairly rigid and complex rules which may prevent it from meeting the needs of some borrowers even though funds may be available
- (iii) overall, there is a paucity of loanable funds, mainly because of the low rate of interest paid on deposits.

The principal participants in the unorganised money market are

- a. Money Lenders,
- b. Indigeneous Bankers,
- c. Nidhis (mutual loan associations) and
- d. Chit Funds.

10.11 Strategic Financial Management

They lend, primarily to borrowers who are not able to get credit from the organised money market. The characteristics of the unorganised money market are:

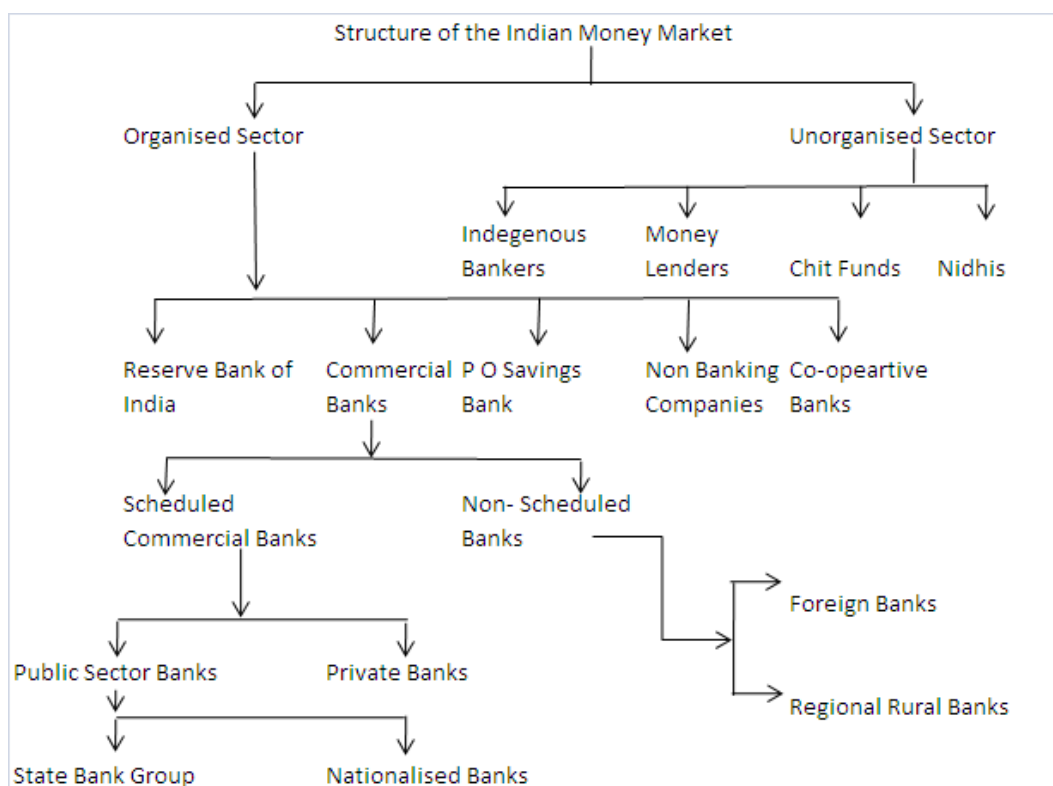
- (i) informal procedures,
- (ii) flexible terms,
- (iii) attractive rates of interest to depositors and
- (iv) high rates of interest to borrowers.

The size of the unorganised money market is difficult to estimate, though it appears to be fairly large. However, its importance relative to that of the organised money market is declining. This is a welcome development from the point of view of the Reserve Bank of India because of the existence of a large unorganised market frustrates its efforts to control credit.

Access to call money market was restricted to scheduled commercial banks until 1971 when the RBI permitted the Unit Trust of India (UTI) and the Life Insurance Corporation of India (LIC) to deploy their short-term funds. The list was later expanded to include cooperative banks, term-lending financial institutions (such as IDBI, IFCI, ICICI and SCICI), MFs launched by the public sector banks and investment institutions, and the MFs set up in private sector. The RBI allowed the MMMFs set up in the public and private sectors to participate in the money market. Former finance minister agreed in principle to allow the Department of Posts to invest its short-term funds in the call money market.

While banks and the UTI can lend as well as borrow, financial institutions, General Insurance Corporation (GIC), LIC, MFs, and MMMs can only lend in the call money market. The private sector banks and MFs have been demanding a level playing field vis-a-vis the UTI regarding the facility to borrow from the money market so as to meet their redemption requirements. This facility comes in handy for them, particularly in a declining market, as they can obtain the required short-term funds at a lower cost. This is because of the large difference between the cost of the short-term funds in the organised money market and that in the unorganised, or informal, money market. The participation of LIC, GIC and UTI would increase the availability of short-term funds and enable UTI to meet any large repurchases from unit-holders. MFs have now been permitted to borrow from the money market to meet their dividend, interest and redemption obligations. They can borrow upto 20 per cent of their net assets owned.

MMMFs provide an ideal vehicle for an average investor to reap the benefits of high call money rates and high yields on money market instruments which, hitherto, have been enjoyed only by banks and financial institutions while paying a lower rate of interest on deposits. This is because retail investors can't invest in money market instruments due to the restrictions in terms of eligibility and the minimum amount of investment despite higher return offered by these securities.



2. Institutions

The important institutions operating in money market are:

- (i) **Reserve Bank of India (RBI)** is the most important participant of money market which takes requisite measures to implement monetary policy of the country. As the Central bank, RBI regulates the money market in India and injects liquidity in the banking system, when it is deficient or contracts the same in opposite situation.
- (ii) **Schedule Commercial Banks (SCBs)** form the nucleus of money market. They are the most important borrower/supplier of short term funds. They mobilise the savings of the people through acceptance of deposits and lend it to business houses for their short-term working capital requirements. While a portion of these deposits is invested in medium and long-term Government securities and corporate shares and bonds, they provide short-term funds to the Government by investing in the Treasury Bills.
- (iii) **Co-operative Banks:** Function similarly as the commercial banks.
- (iv) **Financial and Investment Institutions:** These institutions (e.g. LIC,UTI,GIC, Development Banks etc.) have been allowed to participate in the call money market as lenders only.

10.13 Strategic Financial Management

(v) **Corporates:** Companies create demand for funds from the banking system. They raise short-term funds directly from the money market by issuing commercial paper. Moreover, they accept public deposits and also indulge in inter-corporate deposits and investments.

(vi) **Mutual Funds:** Mutual funds also invest their surplus funds in various money market instruments for short periods. They are also permitted to participate in the Call Money Market. Money Market Mutual Funds have been set up specifically for the purpose of mobilisation of short-term funds for investment in money market instruments.

(vii) **Discount and Finance House of India:** The Discount and Finance House of India Limited (DFHI) has been set up by the Reserve Bank of India jointly with public sector banks and all-India financial institutions to deal in short-term money market instruments. It started operations in April, 1988. At present DFHI participates in the inter-bank call/notice money market and term deposit market, both as lender and borrower. It also rediscounts 182 Days Treasury Bills, commercial bills, CDs and CPs.

The DFHI's turnover in the various segments of the money market has shown improvements during the last few years.

(a) *Participation in the call money market:* The call money operations of DFHI has enabled the pooling of borrowers demand and lenders supplies to the extent both borrowers and lenders opt to avail of DFHI services for their operations. The DFHI's average daily lending in the call money market has grown significantly over the years. DFHI accounts for a market share of a little more than 10 per cent, in the call and notice money market.

(b) *Dealing in Treasury Bills:* The participation of DFHI in the money market has activated the secondary market specially for 182 Days Treasury Bills and commercial bills. As already stated, RBI does not purchase 182 Days Treasury Bills before maturity nor it sells these Treasury Bills except through the fortnightly auctions. DFHI fulfills the role of provider of liquidity to the Treasury Bills. It quotes every day its bid and offer discount rates for different instruments. While selling of Treasury Bills by DFHI at the 'offer' rate depends upon the availability of such bills in its assets portfolio, DFHI is always willing to purchase Treasury Bills at its bid rate.

(c) *Repo facility to banks:* The DFHI also provides 'repos' facility (buy-back and sell-back) to banks, selected financial institutions and public sector undertakings, upto a period of 14 days at negotiated interest rates.

(d) *Re-discounting short term commercial bills:* In regard to commercial bills, the introduction of derivative usance promissory notes (DPNs) for rediscounting bills has facilitated multiple rediscounting of this instrument in the secondary money market. DFHI purchases and sells DPN for a period of upto 90 days at its bid and offer rediscount rate.

(e) *Participating in the Inter-bank call money, notice money and term deposit market:* DFHI has been permitted by the RBI to operate in the inter-bank call money market both as a lender and a borrower of funds ranging from overnight money to money for 14 days

(f) *Dealing in Commercial papers, Certificate of Deposits and Government securities:* DFHI offers its bid rates in respect of commercial papers and Certificate of Deposit. The bid-rate is

the discount rate at which DFHI is ready to buy CDs/CPs from the market. DFHI also participates in the auction of government dated securities.

It may not be out of place to mention that after the setting up of DFHI, there has been an upsurge of activities in the money market. This, with selective relaxations of control on the money market operations by the Reserve Bank of India, has stimulated awareness for efficient fund management on the part of investors and borrowers in the money market. At the same time, it is imperative to point out that the money market is place for equilibrating the supply and demand for temporary short term funds at market related rates and prices. The DFHI is essentially an agency for smoothening out short term mismatches in the money market and not as a basic source for meeting fund requirements on a longer duration. With its own resources and the financial support from the Reserve Bank of India by way of refinance facilities and the broad-basing of the money market, DFHI is poised for continued sustained growth and more effective role to fulfill the basic objective of the money market.

3. Instruments

The money market in India is an important source of finance to industry, trade, commerce and the government sector for both national and international trade through bills–treasury/commercial, commercial papers and other financial instruments and provides an opportunity to the banks to deploy their surplus funds so as to reduce their cost of liquidity. The money market also provides leverage to the Reserve Bank of India to effectively implement and monitor its monetary policy.

The instruments of money market are characterised by

- a) short duration,
- b) large volume
- c) de–regulated interest rates.
- d) The instruments are highly liquid.
- e) They are safe investments owing to issuers inherent financial strength.

The traditional short-term money market instruments consists of mainly call money and notice money with limited players, treasury bills and commercial bills. The new money market instruments were introduced giving a wider choice to short term holders of money to reap yield on funds even for a day or to earn a little more by parking funds by instruments for a few days more or until such time till they need it for lending at a higher rate. The various features of individual instruments of money market are discussed.

The instruments used by above-mentioned players to borrow or lend in the money market, include, *inter-alia*, treasury bills (T-bills), Government of India securities (GOI secs), State government securities, government guaranteed bonds, public sector undertaking (PSU) bonds, commercial paper (CP) and certificates of deposit (CDs). Banks, which require short-term funds, borrow or sell these securities and those having surplus funds would lend or buy the securities. Banks experiencing a temporary rise (fall) in their deposits and hence, a

10.15 Strategic Financial Management

temporary rise (fall) in their statutory liquidity ratio (SLR) obligations, can borrow (lend) SLR securities from those experiencing a temporary fall (rise) in their deposits. Banks invest in T-bills, GOI and State government securities, government-guaranteed bonds and PSU bonds to fulfill their SLR obligations.

(a) Call/Notice money

1. **Location:** The core of the Indian money market structure is the inter-bank call money market which is centralised primarily in Mumbai, but with sub-markets in Delhi, Kolkata, Chennai and Ahmedabad.

2. **Duration:** The activities in the call money are confined generally to inter-bank business, predominantly on an overnight basis, although a small amount of business, known as notice money was also transacted side by side with call money with a maximum period of 14 days.

3. **Participants:**

- a. Those who can both borrow as well as lend in the market - RBI, Commercial Banks, Co-operative banks and Primary Dealers
- b. Those who can only lend Financial institutions-LIC, UTI, GIC, IDBI, NABARD, ICICI and mutual funds etc.
- c. Corporate entities having bulk lendable resources of minimum of ₹ 5 crores per transactions have been permitted to lend in call money through all Primary Dealers provided they do not have any short-term borrowings from banks.
- d. Brokers are not permitted in the market.

4. **Features:**

- a. Current and expected interest rates on call money are the basic rates to which other money markets and to some extent the Government securities market are anchored.
- b. Interest rate in the market is market driven and is highly sensitive to the forces of demand and supply. Within one fortnight, rates are known to have moved as high as and/or touch levels as low as 0.50% to 1% Intra-day variations as also quite large. Hence, the participants in the markets are exposed to a high degree of interest rate risk.

The call money rates have been fluctuating widely going upto 70 per cent and dropping to around 3 per cent in the recent past.

For many years, while a set of institutions like State Bank of India, UTI, LIC, GIC, etc. continue to be lenders, some banks which have limited branch network are regular borrowers.

- c. Although by no means as pronounced as it was once, the activities in the money market are subjected to fluctuations due to seasonal factors, i.e. busy (November to April) and slack (May to October) seasons.
- d. One of the most important factors contributing to volatility in the market is mismatches in assets and liabilities created by the banks. Some banks over-

extended themselves by using call money borrowings to finance the build-up of a large portfolio of Government of India securities, other long-term assets and non-food credit. It is this asset-liability mismatch which resulted in a sporadic volatility in the market.

- e. Apart from the mismatches in assets and liabilities, the inherent weakness of the bank of reasonably forecast their liquidity position had often pushed some of them to the pool of liquidity overhang or severe liquidity crunch.

The cash credit and the demand loan with automatic renewal/rollover facility, once in six months, systems of financing working capital requirements has a skewed demand pattern. While the drawls in the cash credit/loan accounts are to the brim during peak season or when liquidity crunch pervade in the financial system, large return flow of funds in the slack season overburdens the banking system with liquidity overhang. The disintermediation process accelerates the volatility in the use of cash credit/loan system. Any interest rate arbitrage opportunities in the market are being exploited by big corporates entities. Large scale issue of CPs, GDRs, Euro Currency Borrowings, Bonds, etc., for meeting working capital requirements/prepaying high cost debts often result in huge liquidity overhang in the banking system. On the other hand, when interest rates tends to rise in the market, the blue-chip corporates return to their cash credit/loan accounts thereby triggering a liquidity crisis and call money rates reaching dizzy heights.

- f. Large-scale diversion of working capital facilities for lending in the inter-corporate deposit market and investments in other treasury products by blue-chip companies amply testify the malady in the current system of working capital financing and its impact on the call money market. The uneasy calm in the money market is attributed to the corporates hunting for cheaper funds in the Euro Dollar and Indian money markets.

(b) Inter-Bank Term Money: This market which was exclusively for commercial banks and co-operative banks has been opened up for select All India Development Financial Institutions in October, 1993. The DFIs are permitted to borrow from the market for a maturity period of 3 to 6 months within the limits stipulated by Reserve Bank of India for each institution. The interest rates in the market are driven. As per IBA ground rules, lenders in the market cannot prematurely recall these funds and as such this instrument is not liquid. The market is predominantly 90-days market. The market has shown a lot of transactions following withdrawal of CRR/SLR on liabilities of the banking system.

The development of the term money market is inevitable due to the following reasons:

- a. Declining spread in lending operations
- b. Volatility in the call money market
- c. Growing desire for fixed interest rates borrowing by corporates

10.17 Strategic Financial Management

- d. Move towards fuller integration between forex and money market
- e. Stringent guidelines by regulators/ management of the institutions.

(c) Inter-Bank Participation Certificate (IBPC): The IBPCs are short-term instruments to even-out the short-term liquidity within the banking system. The primary objective is to provide some degree of flexibility in the credit portfolio of banks and to smoothen the consortium arrangements. The IBPC can be issued by scheduled commercial bank and can be subscribed to by any commercial bank. The IBPC is issued against an underlying advance, classified standard and the aggregate amount of participation in any account time issue. During the currency of the participation, the aggregate amount of participation should be covered by the outstanding balance in account.

The participation can be issued in two types, viz. with and without risk to the lender. While the participation without it can be issued for a period not exceeding 90 days. Participation is now with risk for a period between 91 days and 180 days. The interest rate on IBPC is freely determined in the market. The certificates are neither transferable nor prematurely redeemable by the issuing bank.

In the case of the bank issuing IBPC with risk, the aggregate amount of participation would be reduced from the aggregate advance outstanding. The participating bank would show the aggregate amount of such participation as part of its advances. In cases where risks have materialised, the issuing bank and participating bank should share the recoveries proportionately.

However, in without risk sharing management, the issuing bank will show the amount of participation as borrowing while the participating bank will show the same under advances to banks. In case of any loss, the issuing bank should compensate fully the participating bank.

The scheme is beneficial both to the issuing and participating banks. The issuing bank can secure funds against advances without actually diluting its asset-mix. A bank having the highest loans to total asset ratio and liquidity bind can square the situation by issuing IBPCs. To the lender, it provides an opportunity to deploy the short-term surplus funds in a secured and profitable manner. The IBPC with risk can also be used for capital adequacy management. A bank with capital shortfall can temporarily park its advances with other banks which have surplus capital. It can also be used for meeting shortfall in priority sector lending by swapping such advances with those banks who exceed the priority sector lending obligations.

(d) Inter Corporate Deposit: The inter corporate market operates outside the purview of regulatory framework. It provides an opportunity for the corporates to park their short-term surplus funds at market determined rates. The market is predominantly a 90 days market and may extend to a maximum period of 180 days. The market which witnessed flurry of activities has received a serious jolt in the wake of series of defaults.

Why do companies go for ICD?

- Immediate capital for short term requirements
- Transactions are free from bureaucratic and legal hassels

- Better than bank loans

The market of inter-corporate deposits maintains secrecy. The brokers in this market never reveal their lists of lenders and borrowers, because they believe that if proper secrecy is not maintained the rate of interest can fall abruptly. The market of inter-corporate deposits depends crucially on personal contacts. The decisions of lending in this market are largely governed by personal contacts.

Market for inter-corporate funds: The Vaghul Group had not paid much attention to this segment of the money market while the volume of transactions in this market amount to ₹ 1000 crores a year. Inter-corporate loans have been a traditional feature of corporate financing in India. It would have been more enlightening if the Vaghul Group had devoted requisite attention to this market. The reasons for the casual treatment seem to be that this scheme of market operates freely and outside the regulatory framework and the risk of lending in this market is such that periodic failures characterise this market. This is precisely why this market should be brought within the regulatory framework.

The inter-corporate money market is sustained by temporary surplus funds available with companies. Different corporate units have varying seasonal peaks. Therefore, the flow of funds to this market would be steady. Besides, inter-corporate market would be a source of funds to the commercial bill market.

It is desirable that the authorities not only refrain from restructuring the growth of this market but take positive measures to encourage it by evolving guidelines for the working of the market. This seems appropriate in the context of the plans by the Union Government to effect inter-corporate transfer of funds among public sector companies.

The other money market instruments viz. Swaps, Options and Futures, in rupees are yet to emerge in the Indian market.

(e) Treasury Bills (TBs): Among money market instruments TBs provide a temporary outlet for short-term surplus as also provide financial instruments of varying short-term maturities to facilitate a dynamic asset-liabilities management. The interest received on them is the discount which is the difference between the price at which they are issued and their redemption value. They have assured yield and negligible risk of default. The TBs are short-term promissory notes issued by Government of India at a discount for 14 days to 364 days.

More relevant to the money market is the introduction of 14 days, 28 days, 91 days and 364 days TBs on auction basis. In order to provide investors with instruments of varying short-term maturities, Government of India introduced the auction of 14 days TBs since June 1997. Further, with a view to developing TBs market and moving towards market rate of interest on Government securities, the auction of 91 days TBs was first introduced in January, 1993. The amount to be auctioned will be pre-announced and cut off rate of discount and the corresponding issue price will be determined in each auction. The amount and rate of discount is determined on the basis of the bids at the auctions. While the uniform price auction method is followed in respect of 91 days TBs, the cut off yield of other TBs are determined on the basis of discriminatory price auctions. The non-competitive bids in respect of 14 and 364 days TBs are accepted outside the notified amount. The discretion to accept non-competitive bids

10.19 Strategic Financial Management

fully or partially rest with RBI. The amount to be accepted at the auctions and the cut-off price are decided by the Reserve Bank of India on the basis of its public debt management policy, the conditions in money market and the monetary policy stance.

Although State Government also issued treasury bills until 1950, since then it is only the Central Government that has been selling them. In terms of liquidity, for short term financing, the descending order is cash, call loans, treasury bills and commercial bills. Although the degree of liquidity of treasury bills are greater than trade bills, they are not self liquidating as the genuine trade bills are. T-bills are claim against the government and do not require any grading or further endorsement or acceptance.

Following the abolition of 91 days Tap TBs, 14 days Intermediate TBs was introduced with effect from 1st April, 1997. The 14 days TBs are available on tap. State Governments, foreign, Central Banks and other specialised bodies with whom RBI has an agreement are only allowed to invest in this TBs.

(i) The salient features of 14 days TBs (Tap)

- Sold for a minimum amount of ₹ 1,00,000 and in multiples of ₹ 1,00,000.
- Issued only in book entry form.
- Not transferable.
- Discount rates are set at quarterly intervals; the effective yield is equivalent to the interest rate on Ways and Means Advances Chargeable to Central Government.
- Re-discounted at 50 basis points higher than the discount rate. On re-discounting, the TBs are extinguished.

TBs are issued at discount and their yields can be calculated with the help of the following formula :

$$Y = \left[\frac{F - P}{P} \right] \times \frac{365}{M} \times 100$$

where Y = Yield,
 F = Face Value,
 P = Issue Price/Purchase Price,
 M = Maturity.

Features of T-bills:

Form: The treasury bills are issued in the form of promissory note in physical form or by credit to Subsidiary General Ledger (SGL) account or Gilt account in dematerialised form.

Eligibility: TBs can be purchased by any person, firm, company corporate body and institutions. State Government, Non-Government Provident Funds governed by the PF Act, 1925 and Employees Provident Fund and Miscellaneous Provisions Act, 1952 are eligible to participate in the auctions of 14 days and 91 days TBs on a non-competitive basis. Non-competitive bids are accepted at the weighted average price arrived at on the basis of

competitiveness bids accepted at the auctions. TBs are approved securities for the purpose of SLR. While Reserve Bank of India does not participate in the auctions of 14 days and 364 days TBs, it will be at its liberty to participate in the auctions and to buy part or the whole of the amount notified in respect of 91 days TBs. The Primary Dealers also underwrite a minimum of 25% of the notified amount of the 91 days TBs. They also underwrite the amount offered by RBI in respect of 14 and 364 days TBs.

Minimum Amount of Bids: TBs are issued in lots of ₹ 25,000 (14 days and 91 days)/ ₹ 1,00,000 (364 days).

Repayment: The treasury bills are repaid at par on the expiry of their tenor at the office of the Reserve Bank of India, Mumbai.

Availability: All the treasury Bills are highly liquid instruments available both in the primary and secondary market.

Day Count: For treasury bills the day count is taken as 364 days for a year.

Additional Features: T- Bills have the following additional features:

- (1) Government's contribution to the money market,
- (2) Mop-up short-term funds in the money market,
- (3) Sold through auctions,
- (4) Discount rate is market driven, and
- (5) Focal Point for monetary policy
- (6) Helps to meet the temporary mismatches in cash flows

Advantages to Investors:

- (i) Manage cash position with minimum balances,
- (ii) Increased liquidity,
- (iii) Absence of risk of default
- (iv) Market related assured yield,
- (v) Eligible for repos,
- (vi) SLR security,
- (vii) No capital loss,
- (viii) Two-way quotes by DFHI/Primary Dealers (PDs)/Banks.
- (ix) Low transaction cost
- (x) No tax deducted at source
- (xi) Transparency
- (xii) Simplified Settlement
- (xiii) High degree of tradability and active secondary market facilitates meeting unplanned fund requirements.

10.21 Strategic Financial Management

The PDs have assumed the role of market makers in treasury bills and they regularly provides two-way quotes. This has added to the liquidity and deepened the secondary market of this instrument. Thus treasury bills have emerged as an effective instrument for dynamic asset-liability management. Apart from liquidating the treasury bills in the secondary market, treasury bills can be used for transactions which will help the fund managers to temporarily deploy or borrow funds without altering their assets portfolio. Due to its mode and periodicity of issue (weekly and fortnightly auctions) as also the existence of a well developed secondary market, the fund manager could build-up a portfolio of treasury bills with varying maturities which will match their volatile liabilities.

(ii) 182 Days Treasury Bills: The Chakraborty Committee which reviewed the working of the Monetary System in India had recommended that Treasury Bill should be developed as an active money market instrument with flexible interest rates. Accordingly, the Reserve Bank of India introduced 182 days Treasury Bills in November, 1986. These Treasury Bills were initially issued by the Reserve Bank of India on monthly basis, following the procedure of auction. The periodicity of auction was changed from monthly to fortnightly interval from July, 1988 with a view to providing a wider array of maturities.

Eligibility: 182 days Treasury Bills can be purchased by any person resident in India, firms, corporate bodies, banks, financial institutions. State Government and Provident Funds Organisations are not allowed to invest in these bills.

Minimum Amount of bid: 182 Days Treasury Bills are issued in minimum denomination of ₹ one lakh and in multiples thereof. However, in the secondary market, the deals are presently transacted for a minimum amount of ₹ 25 lakhs and thereafter in multiples of ₹ 10 lakhs.

Availability in the secondary market and re-discounting facilities: RBI does not purchase 182 Days Treasury Bills before maturity but the investors (holders of these Treasury Bills) can sell them in the secondary market. DFHI is ever willing to purchase these bills at its ruling rediscount rates.

Similarly, investors who wish to purchase these bills on days other than in the fortnightly auctions can do so in the secondary market. If available in its stock, DFHI also sells them at its ruling rate. Due to assured liquidity, investment can easily be converted into cash. The rediscounting market has also made it possible to create a spread of maturity periods from one day to 182 days among the Treasury Bills available in the money market for discounting. An investor who wishes to avoid uncertainty of rediscount rate at the time of sale can get Treasury Bills of desired balance maturity period (1 to 182 days) in the market for holding till maturity.

Repos Option: The option of repos (buy-back and sell-back) transaction is also available to banks, select financial institutions and PSUs at negotiated interest rate, if one simply wishes to park the funds for a duration of upto 14 days.

The 182 days treasury bills are, however, yet to become popular to combat the volatility of the call money market, as the yield is still not attractive though it is market determined. Moreover, RBI refinance against treasury bills is only 50% of the value.

(iii) 364 Days Treasury Bills: The Government of India has now floated Treasury bills of varying maturities upto 364 days on an auction basis which will be identical to that for the 182 days, treasury bills. The DFHI has already started auctioning 364 days treasury bills. The varying period of maturities help the short term investors to decide on the period of investment of their funds.

The RBI, has however, tightened bill discount rules to check misuse. It laid down special instructions to banks for strict compliance. The important ones are as follows:

1. Bills discounting facilities should not be provided by any bank outside the consortium arrangement.
2. Bill discounting limits should be part of the total working capital limits of the borrowers based on well established norms.
3. Bills for service charges, payment of duties, hire-purchase/lease rental installments, sale of securities and other types of financial accommodation should not be discounted.
4. Accommodation bills should never be discounted and
5. Banks should not re-discount the bills earlier discounted by non-banking financial companies.

(f) Commercial Bills: A commercial bill is one which arises out of a genuine trade transaction, i.e. credit transaction. As soon as goods are sold on credit, the seller draws a bill on the buyer for the amount due. The buyer accepts it immediately agreeing to pay amount mentioned therein after a certain specified date. Thus, a bill of exchange contains a written order from the creditor to the debtor, to pay a certain sum, to a certain person, after a certain period. A bill of exchange is a 'self-liquidating' paper and negotiable; it is drawn always for a short period ranging between 3 months and 6 months.

Bill financing is the core component of meeting working capital needs of corporates in developed countries. Such a mode of financing facilitates an efficient payment system. The commercial bill is instrument drawn by a seller of goods on a buyer of goods. RBI has pioneered its efforts in developing bill culture in India, keeping in mind the distinct advantages of commercial bills, like, self-liquidating in nature, recourse to two parties, knowing exact date transactions, transparency of transactions etc. The RBI introduced Bills Market Scheme (BMS) in 1952 and the Scheme was later modified into New Bills Market Scheme (NBMS) in 1970 on the recommendation of Narasimham Committee. Under the Scheme, commercial banks can discount with approved institutions (i.e. Commercial Banks, Insurance Companies, Development Financial Institutions, Mutual Funds, Primary Dealers, etc.) the bills which were originally discounted by them provided that the bills should have arisen out of genuine commercial trade transactions. The need for physical transfer of bills has been waived and the rediscounting institution can raise Derivative Usance promissory Notes (DUPNs). These DUPNs are sold to investors in convenient lots and maturities (15 days to 90 days) on the basis of genuine trade bills, discounted by the discounting bank. The discounting bank should, *inter alia*, comply with the following conditions,

- (i) Bank which originally discounts the bills only draw DUPN.
- (ii) Continue to hold unencumbered usance bills till the date of maturity of DUPN.

10.23 Strategic Financial Management

- (iii) Matured bills should be substituted by fresh eligible bills.
- (iv) The transactions underlying the DUPN should be *bona fide* commercial or trade transactions.
- (v) The usance of the bill should not exceed 120 days and the unmatured period of such bills for drawing DUPN should not exceed 90 days.

The interest rate on re-discounting of bills was deregulated in May, 1989. Notwithstanding various benefits accruing to this mode of financing, bill financing is yet to develop on a scale commensurate with the credit provided by the banks to the commercial sector. The volume of bills finance to total finance is still an insignificant portion. The DUPNs, like commercial bills, are exempted from stamp duty.

The DUPN is issued at a discount which is realised at front-end. For example, if a bank re-discounted a commercial bill with a face value of ₹ 100/- @ 15% for 2 months will fetch ₹ 97.50, on the basis of the following calculation.

$$\text{Discount} = 100 \times \frac{15}{100} \times \frac{2}{12} = ₹ 2.50$$

However, as the discount amount is paid at front-end, the yield to the investor or cost to the borrower will be higher than the discount rate in view of the fact that the discounter can deploy the amount of discount received for earning further income. This can be calculated with the following formula:

$$Y = \frac{FV - SV}{SV} \times \frac{\text{Days or months in a year}}{M} \times 100$$

where

- Y = Yield
- FV = Face Value
- SV = Sale Value
- M = Period of Discount

Accordingly the Yield as per the data given in the example will be:

$$\frac{100 - 97.50}{97.50} \times \frac{12}{2} \times 100 = 15.385\%$$

In pursuance to various irregularities noticed in bills re-discounting RBI has issued certain directions in this regard. They are:

- (i) The bill finance should be the part of the MPBF/working capital limits.
- (ii) Only bills covering purchase of raw material/inventory for production purpose and sale of goods should be discounted by banks. Bills covering payment in respect of electricity charges, customs duty, sale of securities and other types of financial accommodations should not be discounted by banks.

- (iii) Accommodation bill should never be discounted by banks. The underlining trade transaction should be clearly identified.
- (iv) Bank should be circumspect while discounting bills drawn by front companies set up by large industrial groups or other group companies.
- (v) Funds accepted by banks from their constituents under Portfolio Management Scheme (PMS) should not be deployed for discounting bills.
- (vi) Banks should not re-discount the bills earlier discounted by non-banking financial companies.
- (vii) Banks should seek re-discounting facility only to the extent of eligible usance bills held by them. Any excess amount obtained by any bank either due to inadequate cover or by obtaining re-discounting facilities against ineligible bills will be treated as borrowing and the bank will have to maintain CRR/SLR on such borrowings.

Advantages of a developed bill market

A developed bill market is useful to the borrowers, creditors and to financial and monetary system as a whole. The bill market scheme will go a long way to develop the bill market in the country. The following are various advantages of developed bill markets.

- (i) Bill finance is better than cash credit. Bills are self-liquidating and the date of repayment of a bank's loans through discounting or rediscounting is certain.
- (ii) Bills provide greater liquidity to their holders because they can be shifted to others in the market in case of need for cash.
- (iii) A developed bill market is also useful to the banks in case of emergency. In the absence of such a market, the banks in need of cash have to depend either on call money market or on the Reserve Bank's loan window.
- (iv) The commercial bill rate is much higher than the treasury bill rate. Thus, the commercial banks and other financial institutions with short-term surplus funds find in bills an attractive source of both liquidity as well as profit.
- (v) A developed bill market is also useful for the borrowers. The bills are time-bound, can be sold in the market and carry the additional security in the form of acceptor's signature. Therefore, for the borrowers, the cost of bill finance is lower than that of cash credit.
- (vi) A developed bill market makes the monetary system of the country more elastic. Whenever the economy requires more cash, the banks can get the bills rediscounted from the Reserve Bank and thus can increase the money supply.
- (vii) Development of the bill market will also make the monetary control measures, as adopted by the Reserve Bank, more effective.

As pointed out by the Narasimhan Study Group, "the evolution of the bill market will also make the Bank Rate variation by the Reserve Bank a more effective weapon of monetary control as the impact of any such changes could be transmitted through this sensitive market to the rest of the banking system."

10.25 Strategic Financial Management

Borrowings by BRS is not reckoned for NDTL purpose. Thus, borrowings under BRS involve only a switch of assets without affecting the liability side of the balance sheet. Further, the instrument is highly liquid as DFHI and other financial institutions support a deeper secondary market.

(g) Certificate of Deposits (CDs): The CDs are negotiable term-deposits accepted by commercial bank from bulk depositors at market related rates. CDs are usually issued in demat form or as a Usance Promisory Note.

Eligibility: All scheduled banks (except RRBs and Co-operative banks) are eligible to issue CDs. They can be issued to individuals, corporates, trusts, funds and associations. NRIs can also subscribe to CDs but on non-repatriable basis only. In secondary markets such CDs cannot be endorsed to another NRI.

Term: The CDs can be issued by scheduled commercial banks (excluding RRBs) at a discount to face value for a period from 3 months to one year.

For CDs issued by Financial institutions maturity is minimum 1 year and maximum 3 years.

Denomination: The CDs can be issued for minimum amount of ₹ 5 lakhs to a single investor. CDs above ₹ 5 lakhs should be in multiples of ₹ 1 lakh. There is, however, no limit on the total quantum of funds raised through CDs.

Transferability: CDs issued in physical form are freely transferable by endorsement and delivery. Procedure of transfer of dematted CDs is similar to any other demat securities. The CDs can be negotiated on or after 30 days from the date of issue to the primary investor.

Others: The CDs are to be reckoned for reserve requirements and are also subject to stamp duty. Banks are prohibited from granting loans against CDs as buy-back of their own CDs.

Discount: As stated earlier, CDs are issued at discount to face value. The discount is offered either front end or rear end. In the case of front end discount, the effective rate of discount is higher than the quoted rate, while in case of rear end discount, the CDs on maturity yield the quoted rate. The discount on CDs is deregulated and is market determined. Banks can use the CD Scheme to increase their deposit base by offering higher discount rates than on usual time deposits from their retail customers.

CDs issued at front end discount

Amount of Issue – ₹ 100

Period - 6 months

Rate of discount – 20%

$$\text{Discount} = 100 \times \frac{20}{100} \times \frac{6}{12} = ₹ 10.00$$

Hence CD will be issued for ₹ 100 – 10 = ₹ 90.00. The effective rate to the bank will, however, be calculated on the basis of the following formula:

$$E = \frac{FV - SV}{SV} \times \frac{\text{Days or months in a year}}{M} \times 100$$

where

- E = Effective Yield
- FV = Face Value
- SV = Sale Value
- M = Period of Discount

Accordingly the Yield as per the data given in the example will be:

$$\frac{100-90}{90} \times \frac{12}{6} \times 100 = 22.226\%$$

The CDs was introduced in June, 1989 with the primary objective of providing a wholesale resource base to banks at market related interest rates. The instrument was effectively used to cover certain asset sources and has since emerged as instrument for effective asset-liability management. Free transferability of instrument (after 30 days from issue) assures liquidity to the instrument. Banks can invest in CDs for better funds management; such investments beside yielding high return can be netted with liability to the banking system for CRR/SLR purpose. This type of asset also attracts only lower rate of weight under Capital Adequacy Standards. The CDs market witnessed a spurt in activities during 1995 against the backdrop of liquidity crisis.

Certificate of Deposit (CD) is a front-ended negotiable instrument, issued at a discount and the face value is payable at maturity by the issuing bank. In terms of the provisions of CD Scheme, banks were allowed to issue CDs to their customers upto an aggregate amount equivalent to 5 per cent of their aggregate deposit. These instruments are subject to payment of stamp duty like the usance promissory notes. Since a CD is eligible for rediscounting in the money market only after 30 days of holding, the maturity period of CDs available in the market can be anywhere between 1 month to one year. A CD is, therefore, another step in filling the gap between Treasury Bills/Commercial Bills and dated securities. Banks also find this instrument suitable to reward its big size depositors with better rate of return as an incentive.

Despite the large size of the primary market for CDs, there has been virtually no activity in the secondary market and the holders keep the CDs till maturity. So long as there is sluggish growth of deposits at administered low rates vis-a-vis the high rates offered by the non-banking non-financial institutions and others, banks in distress for funds will always need CDs at any cost. They may be useful where the average yield on advances is higher than the effective cost of CDs and the loan assets are largely in Health Code No. 1.

The Banks are facing some of the problems in issuing certificate of deposits (CDs). For the banks CDs are subject to reserve requirements, while for FIs, there is no such need. Recently, FIs have been allowed to issue CDs. It is contended that whereas the cost of borrowing for FIs does not change, for banks the break even for lending is put at 30 per cent per annum against the competition pricing of 16 to 17 per cent. The banks feel a review is necessary to remove the anomaly.

(h) Commercial Paper: Commercial paper (CP) has its origin in the financial markets of America and Europe. When the process of financial dis-intermediation started in India in 1990, RBI allowed issue of two instruments, viz., the Commercial Paper (CP) and the Certificate of Deposit (CD) as a part of reform in the financial sector as suggested by Vaghul Committee. A notable feature of RBI Credit Policy announced on 16.10.1993 was the liberalisation of terms of issue of CP. At present it provides the cheapest source of funds for corporate sector and has caught the fancy of corporate sector and banks. Its market has picked up considerably in India due to interest rate differentials in the inter-bank and commercial lending rates.

Commercial Paper (CP) is an unsecured debt instrument in the form of a promissory note issued by highly rated borrowers for tenors ranging between 15 days and one year. Corporates raise funds through CPs on an on going basis throughout the year. Some go in for CPs issuance to redeem old issues. It is generally issued at a discount freely determined by the market to major institutional investors and corporations either directly by issuing corporation or through a dealer bank.

It partly replaces the working capital limits enjoyed by companies with the commercial banks and there will be no net increase in their borrowing by issue of CP.

Role of RBI

As a regulatory body, RBI lays down the policies and guidelines with regard to commercial paper to maintain a control on the operational aspects of the scheme.

- Prior approval of RBI is required before a company can issue CP in the market.
- RBI controls the broad timing of the issue to ensure orderly fund-raising.
- Every issue of CP launched by a company, including roll-over will be treated as fresh issue and the issuing company will be required to seek prior permission from RBI, before each roll-over.
- RBI approval is valid for 2 weeks only.

RBI guidelines [as per notification No IECD 1/87 (CP) 89-90] prohibits the banks from providing any underwriting support or co-acceptance of issue of CP.

CPs are unsecured and negotiable promissory notes issued by high rated corporate entities to raise short-term funds for meeting working capital requirements directly from the market instead of borrowing from banks. CP is issued at discount to face value and is not transferable by endorsement and delivery. The issue of CP seeks to by pass the intermediary role of the banking system through the process of securitisation.

The concept of CPs was originated in USA in early 19th century when commercial banks monopolised and charged high rate of interest on loans and advances. In India, the CP was introduced in January 1990 on the recommendation of Vaghul Committee. Conditions under which the CPs can be issued are:

- (i) The issuer company should have a minimum net worth and fund-based working capital limit of not less than ₹ 4 crores each
- (ii) The company should obtain a minimum rating of P2/A2/PR2/D2 (from CRISII/ICRA/CARE/ Duff and Phelps, respectively) which should not

be more than 2 months old at the time of issue of CPs,

- (iii) The maturity of a CP could be varying between 15 days and less than one year,
- (iv) Minimum amount of CP issued for a single investor will be ₹ 25 Lakhs in the minimum denomination of ₹ 5 Lakhs. The aggregate amount of CP from an issuer shall be within the limit as approved by its Board of Directors or the quantum indicated by the Credit Rating Agency for the specified rating, whichever is lower. As regards FIs, they can issue CP within the overall umbrella limit prescribed in the Master Circular on Resource Raising Norms for FIs, issued by DBOD and updated from time-to-time.
- (v) CPs can be issued to a maximum of 100% of the fund-based working capital limits of issuer company,
- (vi) The banks can neither extend any stand-by or underwriting facility nor guarantee payment of the instrument on maturity. However, Banks and FIs have the flexibility to provide for a CP issue, credit enhancement by way of stand-by assistance/credit backstop facility, etc., based on their commercial judgement and as per terms prescribed by them. This will be subjected to prudential norms as applicable and subject to specific approval of the Board.
- (vii) The CPs are subject to stamp duty. Besides, the issuer has to incur rating agency fee, issuing and paying agents fee, etc.
- (viii) The total amount of CP proposed to be issued should be raised within a period of two weeks from the date on which the issuer opens the issue for subscription.

The CPs can be issued by all non-banking (financial as well as non-financial) companies and All-India Financial Institutions. Effective from September 6, 1996, Primary dealers (PDs) have also been permitted to raise funds by issuing CPs. The instrument is instantly advantageous to the issuer and the investor. The issue of CPs does not involve bulky documentation and its flexibility with the opportunities can be tailored to meet the cash flow of the issuer. A highly rated company can raise cheaper funds than from the financing bank while the investor can deploy its short-term surplus at relatively high return. The secondary market for CPs ensure liquidity and the compulsory credit rating imparts inherent strength to the issuer's ability to meet the obligations on maturity. The bank as managers or dealers of the instrument get fees to supplement their income. Bank can also invest their surplus short-term funds in CP.

Role of credit Rating agencies: The rating is based on parameters like net cash accruals, unutilised cash credit limits, assets like units and good tradeables securities, which allow instant liquidity. If companies ask for ratings for very big amounts, there is a chance that the rating might not be as good as for a smaller amount. In which case, the interest cost for the company too will be higher. A rating is assigned for a particular amount and depends on the company's debt obligation vis-a-vis the level of cash accruals.

The Credit Rating Information Services of India Limited (CRISIL) promoted by ICICI is one of the credit rating agencies in India, the other being ICRA and CARE. CRISIL's principal objective is to rate the debt obligations of Indian companies. Its ratings provide a guidance to investors as to the risk of timely payment of interest and principal on debentures, preference shares,

10.29 Strategic Financial Management

fixed deposit programme or a short term instrument like CP. CRISIL rating is a critical part of CP issue and every 6 months, the company would have to approach CRISIL for review of their rating.

CRISIL takes into account:

- business analysis;
- financial analysis;
- management evaluation;
- the regulatory and competitive environment, and
- fundamental analysis for determination of the ratings.

The key factors considered from the point of view of business analysis are the industry risk, the market position of the company within the industry and its operating efficiency.

From the point of view of financial analysis, the accounting quality, the earnings protection, the adequacy of cash flows, and the financial flexibility of the company are the factors taken into consideration.

The fundamental analysis involves a study of liquidity management, the asset quality, the profitability and financial position, and the interest and tax sensitivity of the corporation.

For the borrowing company, the ratings enhance the marketability of the instrument. For the investor, CRISIL's ratings serve as an objective guide to the risks involved in a particular instrument.

a. Code of Conduct prescribed by the SEBI for CRAs (Credit Rating Agencies) for undertaking rating of capital market instruments shall be applicable to them (CRAs) for rating CP.

b. Further, the credit rating agencies have the discretion to determine the validity period of the rating depending upon its perception about the strength of the issuer. Accordingly, CRA shall at the time of rating, clearly indicate the date when the rating is due for review.

c. While the CRAs can decide the validity period of credit rating, CRAs would have to closely monitor the rating assigned to issuers vis-a-vis their track record at regular intervals and would be required to make its revision in the ratings public through its publications and website

The issuers shall ensure at the time of issuance of CP that the rating so obtained is current and has not fallen due for review.

Timing of CP

The timing of the launch of the CP issue would be indicated by RBI while giving its permission, to ensure an orderly approach to the market.

Denomination and size of CP

Minimum size of CP issue	–	₹ 25 lakhs.
Denomination of CP note	–	₹ 5 lacs or multiples thereof.
Maximum size of CP issue	–	100% of the issuer's working capital (fund based) limits (determined by the consortium leader).

The entire approved quantum of CP can be issued on a single date, or in parts on different dates, within two weeks of the Reserve Bank of India's approval, subject to the condition that the entire amount of issue matures on the same date.

Period of CP

Minimum currency – 15 days from the date of issue.

Maximum currency – 360 days from the date of issue.

No grace period for repayment of CP.

If maturity date happens to be a holiday, issuer has to make the payment on the immediate preceding working day.

The entire approved amount should be raised within a period of 2 weeks from the date of approval of RBI.

Each CP issue (including roll-over) has to be treated as a fresh issue has to seek permission from RBI.

Mode of CP

CP has to be issued at a discount to face value.

Discount rate has to be freely determined by the market.

Negotiability of CP: CP (being usance promissory note) would be freely negotiable by endorsement and delivery.

Underwriting/co-acceptance of CPs: The CP issue cannot be underwritten or co-accepted in any manner. Commercial Banks, however, can provide standby facility for redemption of CPs on the maturity date.

Printing of CP: Issuer has to ensure that CP is printed on good quality security paper and that necessary precautions are taken to guard against tampering with the documents, since CP will be freely transferable by endorsement and delivery. CP should be signed by at least 2 authorised signatories and authenticated by the issuer's agent (bank).

Issue expenses: The issue of CP would be subject to payment of stamp duty. All issue expenses such as dealer's fees, issuing and paying agent's fees, rating agency fees, charges levied by banks for providing redemption standby facilities and any other charges connected with the issue of CPs are to be borne by the issuer.

The issuer: The CP issuer can be a Company incorporated under the Companies Act, 1956, which satisfies the following requirements:

1. A tangible net worth of at least ₹ 4 crores, as per the latest audited balance sheet. The tangible net worth will comprise of paid up capital plus free reserves less accumulated balance of losses, balance of deferred revenue expenditure and also other intangible assets. Free reserves includes balance in share premium account, capital and debenture redemption reserves but exclude reserves created for any future liability, or for depreciation of assets, or for bad debts, or for revaluation reserve.

10.31 Strategic Financial Management

2. A working capital (fund based) limit of not less than ₹ 4 crores.
3. The Company's shares should be listed on at least one Stock Exchange (This stipulation regarding listing on the Stock Exchange does not apply to public sector companies).
4. The issuer should obtain a minimum credit rating from an RBI approved agency like (CRISIL) of P1 + for CP.
5. The issuer should fall under Health code No. 1 status.
6. The issuer should have a minimum current ratio of 1:33:1 as per the latest audited balance sheet. (For the purpose of computing the current ratio, the current assets and current liabilities are classified as per the RBI guidelines issued from time to time).
7. The issuer should ensure that the credit rating is not more than two months old at the time of applying to RBI for approval to issue CP.
8. The entire amount of CP is to be raised within a period of 2 weeks from the date of approval by RBI.
9. The borrowal account of the company is classified as a Standard Asset by the financing bank/s/ institution/s.

Benefits of CP: CPs have been introduced in the Indian market so as to provide a diversified source of funding to the borrowers as well as an additional investment option to the investors. CPs can now be issued as a low cost alternative to bank financing to meet a part of working capital requirements.

Benefits to the Issuer

Low interest expenses: The interest cost associated with the issuance of CP is normally expected to be less than the cost of bank financing, as among other things, it is related to the inter-corporate money market rate, which in normal times is within the cost of bank finance.

Access to short term funding: CP issuance provides a company with increased access to short term funding sources. By bringing the short term borrower into direct contact with investors, the CP market will, to some extent, disintermediate the established role of banks and pass on the benefit to both issuers and investors.

Flexibility and liquidity: CP affords the issuer increased flexibility and liquidity in matching the exact amount and maturity of its debt to its current working capital requirement.

Investor recognition: The issuance of CP provides the issuer with favourable exposure to major institutional investors as well as wider distribution of its debt.

Ease and low cost of establishment: A CP programme can be established with ease at a low cost, once the basic criteria have been satisfied.

Benefits to the Investor

Higher yield: Higher yields are expected to be generally obtainable on CP than on other short term money market instruments like bank deposits. Investment managers are increasingly

looking to match investible excess cash with higher yielding securities as compared to those presently available in the market.

Portfolio diversification: Commercial Paper provides an attractive avenue for short term portfolio diversification.

Flexibility: CPs can be issued for periods ranging from 15 days to less than one year, thereby affording an opportunity to precisely match cash flow requirements.

Liquidity: Liquidity in CP is generally provided by a dealer offering to buy it back from an investor prior to maturity, for which a market quote will be available. The investment in CP will therefore be quite liquid.

The Other CP Players

Principal parties: The principal parties to a CP transaction would include the Issuer, the Lead Bank, the Issuing and Paying Agent (Commercial Bank), Investor, the Dealer (Merchant Bank), credit rating agency like CRISIL and RBI. The responsibilities of each are briefly described as follows:

The issuer will

- appoint a Merchant Bank and an Issuing and Paying Agent to pilot the CP issue through various stages;
- apply to CRISIL for a rating;
- get the stamp duty to be affixed on the CP notes, adjudicated;
- authorise the issue of CP by the Issuing and Paying Agent;
- advise RBI, through the Lead Bank, about CP actually issued, and;
- Provide funds for repayment of the notes at maturity.

The Lead Bank will

- scrutinise the Company's application as to eligibility criteria and forward it to RBI;
- effect a reduction in the consortium credit limit to the extent of CP quantum on receipt of RBI's approval;
- restore the working capital limits, if the Issuer does not rollover the CP issue;
- arrange for a standby facility for redemption of the CP on the maturity date, if so required, and;
- generally liaise with the consortium member banks of the CP issue.

The application, seeking RBI approval for CP issuance, will be routed through the lead bank, since the working capital limit to the extent of the issue approved, will stand reduced. If the company issuing CP decides not to roll-over the CPs, the lead bank has a crucial role to play in the restoration of the bank facilities.

10.33 Strategic Financial Management

The issuing & paying agency will

- verify the CP notes and ensure that issuer has the minimum credit rating as stipulated by the RBI and amount mobilised through issuance of CP is within the quantum indicated by CRA for the specified rating or as approved by its Board of Directors, whichever is lower.
- verify all the documents submitted by the issuer viz., copy of board resolution, signatures of authorised executants (when CP in physical form) and issue a certificate that documents are in order.
- hold the notes in safekeeping for the issuer;
- deliver the notes to the dealer;
- receive the proceeds of the CP and pass them on to the issuer, and;
- act as the issuer's agent for the repayment of the notes presented by holders, on maturity.

In order to properly administer this function, the issuing & paying agent establishes special bank account for the issuer, specifically to handle CP transactions.

Normally the lead bank in the consortium can be appointed as the issuing & paying agent, though any commercial bank can be entrusted with these functions.

The Investor will

- remit funds to the issuer's account on the value date, and;
- Present the notes to the issuing company, at maturity, for repayment.

Investors in CP could be individuals, corporate as well as unincorporated bodies, NRIs and banks. NRIs can invest in CP on non-repatriable and non-transferable basis.

The Dealer will

- assist in the rating exercise;
- pilot the CP application with the lead bank and RBI for necessary approvals;
- price the CP at the time of issue;
- place the CP with investors, and;
- maintain a secondary market in the instrument by quoting a two way price.

Interest and charges: Indian Banks Association advises all member banks to charge a minimum rate of interest on CP. In addition to interest, the stamp duty and issuing and paying agency charges @ 0.25 per cent and 0.50 per cent, respectively, are also payable.

There are some critical issues that need to be addressed by the regulatory authorities to make the instrument more popular in the Indian Money Market.

Restoration of credit limits: When the instrument was initially introduced, the issuers enjoyed the guarantee of their limits being restored automatically on maturity of the CP. This also infused confidence in the investors as the facility coupled with the Standby agreement almost nullified the credit risks.

This measure also helped in making the instrument acceptable in the nascent Indian money market during the initial period of introduction, even though the issuers found to their dismay that the Standby agreement fee of 1 per cent was on the higher side. This facility of automatic reinstatement of credit limits has since been withdrawn and the comfort enjoyed in the past is no longer available.

Active secondary market: The success of any short term financial instrument lies in developing a sound and active secondary market. Since virtually no secondary market exists for CPs today, it has become imperative that steps to develop a healthy secondary market with proper regulatory framework wherever necessary are initiated to make this instrument survive the present crisis.

Lack of Liquidity: Investors may buy commercial paper and then find they need the money they invested before the security's maturity date. However, this is not a very liquid investment and there is no active secondary market. This makes it difficult for the investor to sell off the commercial paper before its scheduled maturity date.

Commercial paper represents a form of financing that allows the issuer of the paper to borrow money at relatively low interest rates. The availability of funding through the commercial paper market means the firm can negotiate to get bank loans, another source of financing, on better terms. From the issuer's point of view, the inability to retire the debt before the end of its term without paying a penalty is a disadvantage. The firm may want to retire the debt early and save money on interest payments.

Delinking Working Capital and CP: The purpose of CP, as an instrument, is to give highly rated borrowers an opportunity to raise resources at a cheaper cost. Currently, the scope of the instrument is restricted to making use of the proceeds for working capital purposes. The scope can be enlarged to cover issue of CP to meet capital expenditures and other specific requirements till long term arrangements are made i.e. CP is used as an alternative for bridge loan. Such issues can be restricted to very few corporates with high net worth and market capitalisation, with strict adherence to end use objectives. Separate rating for such issues taking into account the potential cash flows including the arrangements made for long term funds, could be introduced. Banks can also be asked to give such comfort as may be necessary to assure the investors of liquidity, albeit for a fee.

Delinking CP from the Working Capital could be new to India but it is common abroad.

Till RBI takes adequate policy initiatives, this instrument which has been a very popular and time-tested one in the West, will never take-off in India.

The Reserve Bank of India has said that the issuance of Commercial paper (CP) by corporates can go upto 100 per cent of their eligible working capital limits. But CPs will first be adjusted against the cash credit component of the overall working capital.

The RBI however, does not allow the pre-payment of the loan component already availed of by the borrower in case he wants to make a CP issue in lieu of it. Moreover, the RBI makes its clear that, "on the issuance of a CP, there shall be no further increase in the overall short term borrowing facility of a company.

10.35 Strategic Financial Management

By abolishing the standby arrangement for commercial paper, the central bank has corrected what it considered an anomaly: that an unsecured instrument was being rated as a secured one as long as a standby arrangement was in place. The pricing of commercial paper will now be more realistic, and the real risk will be analysed. The rates will reflect the real risk on the paper; deregulation then means that the entire rating system will undergo a review.

The Reserve Bank has said that there cannot be an automatic reinstatement of a corporate's limits with banks on the maturing of a CP.

One way by which banks can exert pressure is by levying high reinstatement charges. Banks normally levy reinstatement charges justifiably so because they claim they are losing out on the yield and cannot be expected to lend to companies once again (after the CP issue) at the same rate as before. These are not standardised. Some banks (smaller ones) do not levy any charges at all, while the banks with more clout charge more. The rates range between 0.5 to one per cent per annum.

There are several complaints about stand by charges too. A stand by charge is levied if the borrower wants his limit restored immediately after the CP matures. Some banks ask for as much as 2 per cent per annum. In fact, these factors also dictate the size of a CP float. If for some reason, the CP cannot be rolled over, the reinstatement fees will be charged till the next credit requirement appraisal. This could be far as long as a year.

Moreover, since CP is a part of cash credit, it takes time before the banks credit level is brought down. To issue a CP the issuer need to gradually bring down the cash credit balance with banks. For instance, X Company has cash credit limit of ₹ 40 crores, so it can float a CP upto ₹ 30 crores.

The CP is closely linked to call money rates as banks generally funds their CP investments through overnight call money. As a result, if the weighted average of call rates remains below 12 – 12.5 per cent, the dealers would have gained from the investment.

However, with call money rates tightening over the past few days, banks have reworked their forecasts for the next few weeks. Not expecting call rates to ease to very low levels, bankers appetite for the instrument seems to be on the wane.

The credit policy also induced several corporates to turn to the CP market.

With the cash credit limits reduced from 40 to 25 per cent, the corporates would have to convert the 15 per cent into a demand loan component. According to sources, corporates treasurers have indicated a preference for issuing CPs for this converted amount instead of borrowing it under the demand loan component, primarily because corporates do not have the flexibility of prepaying their demand loan component and issuing CPs.

In addition to this, CPs also carry a lower rate of interest than the demand loan component which helps reduce the corporate's cost of funds.

Difference between Commercial Bill and Commercial Paper

Commercial Bill	Commercial Paper
Commercial Bill arises from sale transactions. Banks finance commercial bills. Usually the bills consist of an invoice drawn on the buyer, the documents to title to goods and a bill of exchange. The bills are given to the bank for advancing money against sale of goods. Commercial Bill financing is post sale finance. The Bill of Exchange may be on D/P (document against Payment) or D/A (document against acceptance) terms.	Commercial paper is an unsecured and discounted promissory note issued to finance the short-term credit needs of large institutional buyers. Banks, corporations and foreign governments commonly use this type of funding.

4. Determination of Interest Rates

Call money rates were regulated in the past by the RBI or by a voluntary agreement between the participants through the intermediation of the Indian Banks Association (IBA). The interest rates have been deregulated and left to the market forces of demand for; and supply of, short-term money as part of the financial sector reforms.

The call money market witnessed a turbulence in the recent past when the rates shot up to as high as 130 per cent. The reasons for increase in volatility in the call money market, amongst others, include advance corporate tax payments, investors' interest in primary and secondary capital markets including the units issued by mutual funds, large withdrawals on banks' credit lines, imprudent practices of banks, and developments in the foreign exchange market. Banks were reported to have invested in government securities by borrowing on call to earn the spread when call rates were low.

Issuers, Instruments and Investors in Money Market

Issuer	Instrument	Issuance maturity	Investors
Central government	GOI secs	2 to 10 years	Banks, LIC, GIC, UTI, FIs, FIIS, MFs, MMMFs, PFs, pension funds, corporates, NBFCs, & RBI
Central government	T-bills	3 months to 1 year	Banks, UTI, LIC, GIC, PFs, MFs MMMFs, pension funds, corporates, NBFCs & RBI
State	State	5 to 10	Banks, UTI, LIC, GIC, FIs, PFs,

10.37 Strategic Financial Management

government	government securities	years	MFs, MMMFs, pension funds, corporates & NBFCs.
Government agencies & PSUs	Government guaranteed bonds	5 to 10 years	Banks, UTI, LIC, GIC, FIs, PFs, MFs, MMMFs, pension funds, corporates & NBFCs.
PSUs	PSU bonds	5 to 10 years	Banks, UTI, LIC, GIC, FIs, MFs, MMMFs, NBFCs & corporates
Private sector corporates	Corporates debentures	1 to 12 years	UTI, other MFs, LIC, GIC, FIs, MMMFs & corporates
Public & private sector corporates	Commercial paper	15 days to less than one year	Banks, MFs, FIs, MMMFs, & corporates
Banks & FIs	Certificates of deposit	3 months (banks) 1-3 years (FIs)	Banks, FIs, MFs, MMMFs, & corporates

5. Future Possibilities

It will be appropriate to discuss some relevant thought on the likely developments in the money market. RBI has already decided to allow entities with bulk lendable resources (at least ₹ 20 crores per transaction) to lend in the call market and bill rediscounting market through DFHI. This opens up the money market to all entities—corporate bodies, trusts, Associations, etc. —and there will be real augmentation of resources in the market. The money market culture will grow and entities will try to put money lying idle to productive/income generating use. The money management will receive greater attention. It will be possible to work out gains/losses on account of delayed realisation of dues or allowing credit to buyers. Better discipline in monetary transactions will come up.

Selected Financial Institutions: (FIS) have been permitted by RBI to operate in money market as lenders. Institutions like UTI, LIC, having sizable funds at their disposal are a very important supplier of funds in call market.

Corporate Entities: Effective from October, 1990 authorised Corporate bodies have also been permitted to operate in call market and bill re-discounting market – through DFHI provided minimum amount per transaction is ₹ 20 crores and they do not have short term borrowing from banking sector.

6. Recent Development In Money Market

(i) **Debt Securitisation:** The buzzword in the money market is now debt securitisation, which refers to converting retail loans into whole sale loan and their reconverting into retail

loans. For example, a bank lends ₹ 10 lakhs each to 300 borrowers as part of its loan portfolio. The total debt thus on the books of the bank will be ₹ 30 crores. By way of securitisation, the bank can break the entire portfolio of loans/debt of ₹ 30 crores into a paper of ₹ 300 each for instance, and market it in the secondary market to investors. The philosophy behind the arrangement is that an individual body cannot go on lending sizable amount for about a longer period continuously but if the loan amount is divided in small pieces and made transferable like negotiable instruments in the secondary market, it becomes easy to finance large projects having long gestation period.

The experiment has already been initiated in India by the Housing Development Finance Corporation (HDFC) by selling a part of its loan to the Infrastructure Leasing and Financial Services Ltd. (ILFS) and has therefore become a pacesetter for other kinds of debt securitisation as well.

The Industrial Credit and Investment Corporation of India (ICICI) as well as other private financial companies have been trying similar deals for lease rentals. Some finance companies are also following the same route for financing promoters contribution for projects. The HDFC has entered into an agreement with ILFS to securitise its individual housing loan portfolio to the extent of ₹ 100 crores.

Debt Securitisation will thus provide liquidity to the instrument. As market maker, ILFS will quote a bid and offer a price for the paper. Given the scarcity of resource and to provide flexibility to investors, innovative financing techniques such as debt securitisation which will mobilise additional resources through a wider investor base, is a step in the right direction.

A major trend in the international financial markets in recent years has been towards securitisation of long dated assets, held by them as security/mortgage against credit to customers. In India, also a beginning was made to a limited extent, by introducing Inter-bank Participations (IBPs). In October, 1988, two types of IBPs were introduced (i) a risk bearing IBP with 91–180 days maturities, and (ii) non-risk bearing IBP with maturities upto 90 days. The first type of IBPs is nothing but the securitisation of bank's advances under Health Code category-I. Since the scheme was confined to scheduled commercial banks only and IBPS were not transferable, it lacked liquidity or successive tier of operations.

(ii) Money Market Mutual Funds (MMMFs): One of the recent development in the sphere of money market is the establishment of Money Market Mutual Funds, the guidelines of which have been made public by the Reserve Bank of India. Money Market Mutual Funds (MMMFs) can be set up by the banks and public financial institutions. There can also be Money Market Deposit Accounts (MMDAs).

Limit: The limit for raising resources under the MMMF scheme should not exceed 2% of the sponsoring bank's fortnightly average aggregate deposits. If the limit is less than ₹ 50 crores for any bank, it may join with some other bank and jointly set up MMMF. In the case of public financial institutions, the limit should not exceed 2% of the long term domestic borrowings as indicated in the latest available audited balance sheets.

10.39 Strategic Financial Management

Eligibility: MMMFs are primarily intended for individual investors including NRIs who may invest on a non-repatriable basis. MMMFs would be free to determine the minimum size of the investment by a single investor.

Minimum rate of return: There is no guaranteed minimum rate of return.

Lock in period: The minimum lock in period would be 46 days.

Deployment of capital: The resources mobilised by MMMFs should be invested exclusively in various money market instruments.

Money Market Instruments at a glance and MMMFs investment limits:

- (1) Treasury bills and dated government securities having an unexpired maturity upto 1 year – Minimum 25%.
- (2) Call/notice money – Minimum 30%.
- (3) Commercial Paper – Maximum 15%. The exposure to CP issued by an individual company should not be more than 3%.
- (4) Commercial bills accepted/co-accepted by banks – Maximum 20%.
- (5) Certificate of deposits – No limit.

(iii) Repurchase Options (Repo.) and Ready Forward (RF) contracts:

Repurchase Options (Repo.)

Nature: Repo transactions are of recent origin which has gained tremendous importance due to their short tenure and flexibility to suit both lender and borrower. Under this transactions the borrower places with lender certain acceptable securities against funds received and agrees to reverse this transaction on a pre-determined future date at agreed interest cost.

Period: No fixed period has been prescribed for this transaction. However, generally repo-transactions are for minimum period of 14 days and maximum period of 1 year.

Interest: The interest on such transactions is market determined and built in the structure of the Repo.

Eligibility: The transactions can be undertaken by commercial banks, financial institutions, brokers, DFHI.

Prohibition: At present Repo transactions have been prohibited in all securities except treasury bills. However, Nand Karni panel set up for examining transactions in PSU bonds and UTI units have recognised the importance of this instrument as a money market instrument and recommended its re-introduction.

Ready Forward (RF) contracts: Ready forward (RF) transactions are structured to suit the requirements of both borrower and lender and have therefore, become extremely popular mode of raising/investing short term funds. The borrower has advantage of raising funds against its securities without altering its assets mix while lender finds a safe avenue giving attractive returns. Moreover, the funds management for both borrower and lender is improved as the date of reversal of transaction is known in advance.

Role of RBI: The RBI intervenes in the market as and when required by conducting repos (ready forward purchases) through its two subsidiaries, namely, Securities Trading Corporation of India (STCI) and Discount and Finance House of India (DFHI). The central bank banned these transactions between banks following their misuse to divert funds from the banks to the stock market and reintroduced the same in April, 1992. The RBI has permitted repos in dated securities, and reverse repo transactions by non-bank subsidiary general ledger (SGL) account holders in the lean season credit policy announced in April, 1997. Non-bank entities holding SGL accounts can lend their surplus money to banks by entering into a reverse repurchase agreement or reverse repo. These entities entering into a reverse repo with banks purchase (permitted) repo securities from banks with a commitment to sell the same at an agreed future date and price.

Example: *Repo or ready-forward deal*, is a sale of RBI-approved securities (or repo securities) by a bank to another bank, or STCI or DFHI, with a commitment to repurchase the same at an agreed future date. For example, Bank A, which is short of cash, can sell its repo securities to Bank B or STCI or DFHI at ₹ 96.25 with a commitment to repurchase them at ₹ 96.75 after 14 days. The difference between the sale price and the repurchase price or the spread represents the interest rate on the borrowed money. When there is a spurt in call rates, the RBI intervenes through STCI/DFHI by conducting these repos to inject the required liquidity. STCI and DFHI are market-makers in dated GOI secs and T-bills. They give a two-way quote for the securities which they make the market for. The bid, or the buying rate, is always lower than the ask, or selling rate, for a given security. The spread between bid and ask (or offer) rate accounts for the transaction cost and normal profit from operations. The RBI intervenes to prevent the diversion of investment funds to the call money market.

The term Repurchase Agreement (Repo) and Reverse Repurchase Agreement (Reverse Repo) refer to a type of transaction in which money market participant raises funds by selling securities and simultaneously agreeing to repurchase the same after a specified time generally at a specified price, which typically includes interest at an agreed upon rate. Such a transaction is called a Repo when viewed from the perspective of the seller of securities (the party acquiring funds) and Reverse Repo when described from the point of view of the supplier of funds. Thus, whether a given agreement is termed a Repo or a Reverse Repo depends largely on which party initiated the transaction. In many respects, Repos are hybrid transactions that combine features of both secured loans and outright purchase and sale transactions but do not fit clearly into their classification. The use of margins or haircuts in valuing repo securities, and the use of mark-to-market provisions are examples of Repo features that typically are characteristics of secured lending arrangements but are rarely found in outright purchase and sale transactions. The Repo buyers rights to trade the securities during the term of the agreement, by contrast, represents a transfer of ownership that typically does not occur in collateralised lending arrangements.

Characteristic of Repo

Term: Repos are usually arranged with short-term maturity – overnight or a few days. However, the minimum period of Repo in India is fixed at 3 days. Elsewhere in the world, longer-term repos are arranged for standard maturities between one day and 1 year.

10.41 Strategic Financial Management

Repo rates: The lender or buyer in a Repo is entitled to receive compensation for use of the funds provided to the counterparty. This is accomplished by setting the negotiated repurchase price over the initial sale price, the difference between the two representing the amount of interest or Repo rate owed to the lender. The Repo rate is negotiated by the counterparties independently of the coupon rate or rates of the underlying securities and are influenced by overall money market conditions. In India, Repo rates are determined on the basis of expected call money rates during a reserve mark-up period.

The amount of interest earned on funds invested in a Repo determined as follows :

$$\text{Interest earned} = \text{Funds Invested} \times \text{Repo Rate} \times \text{Number of Days}/365$$

For example, if ₹ 1 crore is for 3 days @ 5% would yield interest return of ₹ 0.04 lakhs.

$$1,00,00,000 \times 0.05 \times 3/365 = ₹ 4110$$

The cash outflows and inflows under a typical 14 days Repo is illustrated below. Let us assume that Bank 'A' entered into a Repo of 14 days with Bank 'B' in 13.60% Govt. Stock 2009 at a rate of 5%. Let us also assume that the purchase price agreed upon was ₹ 101 and the last coupon was paid 30 days ago.

	<i>First leg (In Rupees)</i>		<i>Second Leg (In Rupees)</i>
Sale Price	101.00	Purchase Price*	100.67
+ Accrued interest $\left(101 \times 13.60\% \times \frac{30}{365}\right)$ for 30 days	<u>1.13</u>	+ Accrued interest $\left(101 \times 13.60\% \times \frac{44}{365}\right)$ for 44 days	<u>1.66</u>
Net Cash Outflow	102.13	Net Cash Inflow	102.33

*Derived price by deducting Accrued interest from net cash inflow, which includes Repo interest as well.

Repo Interest Income = $102.13 \times 0.05 \times 14/365 = ₹ 0.20/$. So the cash inflow should be ₹ 102.33 (i.e. ₹ 102.13 + ₹ 0.20).

In India, the repo market in Government securities and PSU bonds became very active in 1980s, and the deals were generally interbank. While certain regulatory restrictions were put in place in 1987, in the aftermath of securities scam, RBI imposed a ban on inter-bank repos in 1992 in all instruments except TBs. Since then RBI has made several relaxations in regard to Repo Transactions.

The conditions imposed by RBI in regard to repo transactions are:

- (i) The banks should enter into Repo transactions only in respect of TBs of all maturities, notified Government of India dated securities, and private corporate bonds/PSU bonds which are in dematerialised form and the transactions are done in recognised Stock Exchanges;

- (ii) Repo transactions should be entered only with commercial and co-operative banks and Primary Dealers. However, non-bank entities who are holders of SGL Account with RBI can enter into Reverse Repo transactions with banks/Primary Dealers in TBs, notified Government of India stocks, debentures/PSU bonds;
- (iii) The purchase/sale price should be in alignment with the ongoing market rates;
- (iv) No sale of securities should be affected unless such securities are actually held by them in their own investment portfolio;
- (v) Immediately on sale, the corresponding amount should invariably be deducted from the investment account of the banks;
- (vi) The minimum period of the Repo should be 3 days; and
- (vii) The securities under Repo should be marked to market on the balance sheet date.

DFHI/STCI/PDS are very active in Repo market and the volume of such transactions has shown substantial increase when the call money rates move up beyond a particular level. Of late, RBI has been conducting Repo auctions for 3/4 days to mop-up the excess liquidity released to the system through reduction of CRR/Intervention in the forex market.

Repo transactions are structured to suit the requirements of both the borrowers and the lender of funds and have become extremely popular mode of raising/investing short-term funds. Further, a SLR surplus and CRR deficit bank can use the repo deals as a convenient way of adjusting SLR/CRR positions simultaneously. The Repo is a convenient instrument for Asset-Liability management.

"Non-banking institutions like corporates, mutual funds and financial institutions can go to repo (repurchase) market for meeting their short-term funds or securities requirement".

Of late the Reserve Bank has been making efforts to develop the repo market in the country. Last year, it has initiated a series of measures to popularize and widen the participation in the repo market.

The measures include: permission to non-bank participants to undertake repo and reverse repo transactions, reduction in the minimum maturity for repo transactions to one day and offering even State government securities for undertaking repos.

"What we need is quick settlements in the repo market. The setting up of a clearing corporation will develop repo market very strongly. We expect the clearing corporation to come up before year." The repo (repurchase) market is mainly a buyback arrangement.

Under such an arrangement the seller sells specified securities with an agreement to repurchase the same at a mutually decided future date and a price.

Similarly, the buyer purchases the securities with an agreement to resell the same to the seller on an agreed date in future at a prefixed price.

This is done mainly to bridge the short-term gap of either cash flow or securities (to meet SLR — statutory liquidity ratio — requirements).

The primary dealers are also asking for back up funds from the RBI as available to other major players, i.e., banks in the market.

"We don't have anything to fall back upon. We should get some back up facility from the Reserve Bank just in case we don't get funds in the call money market".

Primary dealers are expecting a hike in the paid up capital from the existing ₹ 50 crores.

Summary

- **Conceptual Framework**

The money market thus may be defined as a centre in which financial institutions congregate for the purpose of dealing impersonally in monetary assets. In a wider spectrum, a money market can be defined as a market for short-term money and financial assets that are near substitutes for money. The term short-term means generally a period upto one year and near substitutes to money is used to denote any financial asset which can be quickly converted into money with minimum transaction cost.

Call money market, or inter-bank call money market, is a segment of the money market where scheduled commercial banks lend borrow on call (i.e., overnight) or at short notice (i.e., for periods upto 14 days) to manage the day-to-day surpluses and deficits in their cash-flows. These day to day surpluses and deficits arise due to the very nature of their operations and the peculiar nature of the portfolios of their assets and liabilities.

- **The Distinct features of Money Market**

- (i) It is one market but collection of markets, such as, call money, notice money, repose, term money, treasury bills, commercial bills, certificate of deposits, commercial papers, inter-bank participation certificates, inter-corporate deposits, swaps futures, options, etc. and is concerned to deal in particular type of assets, the chief characteristic is its relative liquidity.
- (ii) The activities in the money market tend to concentrate in some centre which serves a region or an area; the width of such area may vary considerably in some markets like London and New York which have become world financial centres.
- (iii) The relationship that characterises a money market should be impersonal in character so that competition will be relatively pure.
- (iv) In a true money market, price differentials for assets of similar type (counterparty, maturity and liquidity) will tend to be eliminated by the interplay of demand and supply.
- (v) Due to greater flexibility in the regulatory framework, there are constant endeavours for introducing new instruments/innovative dealing techniques; and
- (vi) It is a wholesale market and the volume of funds or financial assets traded in the market are very large.
- (vii) It has a simultaneous existence of both the organized money market as well as unorganised money markets.
- (viii) The demand for money in Indian money market is of a seasonal nature.

- (ix) In the Indian money market, the organized bill market is not prevalent.
- (x) In our money market the supply of various instruments is very limited.
- **Pre-Conditions for an Efficient Money Market**
 - (i) Institutional development, relative political stability and a reasonably well developed banking and financial system.
 - (ii) Integrity is *sine qua non*. Thus banks and other players in the market may have to be licensed and effectively supervised by regulators.
 - (iii) There must also exist a demand for temporarily available cash either by banks or financial institutions for the purpose of adjusting their liquidity position and finance the carrying of the relevant assets in their balance sheets.
 - (iv) Efficient payment systems for clearing and settlement of transactions.
 - (v) Government/Central Bank intervention to moderate liquidity profile.
 - (vi) Strong Central Bank to ensure credibility in the system and to supervise the players in the market.
 - (vii) The market should have varied instruments with distinctive maturity and risk profiles to meet the varied appetite of the players in the market. Multiple instruments add strength and depth to the market; and
 - (viii) Market should be integrated with the rest of the markets in the financial system to ensure perfect equilibrium.

- **Rigidities in the Indian Money Market**

The most important rigidities in the Indian money market are:

- (i) Markets not integrated,
- (ii) High volatility,
- (iii) Interest rates not properly aligned,
- (iv) Players restricted,
- (v) Supply based-sources influence uses,
- (vi) Not many instruments,
- (vii) Players do not alternate between borrowing and lending,
- (viii) Reserve requirements,
- (ix) Lack of transparency, and,
- (x) Inefficient Payment Systems.
- (xi) RBI should encourage banks to make use of Commercial Papers instead of Cash Transfer.

- **Distinction between Capital and Money Market**

Basis	Money Market	Capital Market
1. Maturity of Instruments	1 year or less	More than 1 year
2. Risks	Less	More and varied
3. Instruments	Treasury bills, CDs, etc	Shares, bonds, etc
4. Finance	Short term	Long term
5. Relation with Central Bank	Direct	Indirect

- **Institutions**

The important institutions operating in money market are:

(i) **Reserve Bank of India (RBI)** is the most important participant of money market which takes requisite measures to implement monetary policy of the country.

(ii) **Schedule Commercial Banks (SCBs)** form the nucleus of money market. They are the most important borrower/supplier of short term funds.

(iii) **Co-operative Banks:** Function similarly as the commercial banks.

(iv) **Financial and Investment Institutions:** These institutions (e.g. LIC, UTI, GIC, Development Banks, etc.) have been allowed to participate in the call money market as lenders only.

(v) **Corporates:** Companies create demand for funds from the banking system. They raise short-term funds directly from the money market by issuing commercial paper. Moreover, they accept public deposits and also indulge in inter-corporate deposits and investments.

(vi) **Mutual Funds:** Mutual funds also invest their surplus funds in various money market instruments for short periods.

(vii) **Discount and Finance House of India:** The Discount and Finance House of India Limited (DFHI) has been set up by the Reserve Bank of India jointly with public sector banks and all-India financial institutions to deal in short-term money market instruments.

- **Instruments**

(a) **Call/Notice money:** The core of the Indian money market structure is the inter-bank call money market which is centralised primarily in Mumbai, but with sub-markets in Delhi, Kolkata, Chennai and Ahmadabad. The activities in the call money are confined generally to inter-bank business, predominantly on a overnight basis, although a small amount of business, known as notice money was also transacted side by side with call money with a maximum period of 14 days.

(b) **Inter-Bank Term money:** This market which was exclusively for commercial banks and co-operative banks has been opened up for select All India Development Financial Institutions in October, 1993. The DFIs are permitted to borrow from the market for a maturity period of 3 to 6 months within the limits stipulated by Reserve Bank of India for each institution. The interest rates in the market are driven. The market is predominantly 90-days market.

(c) **Inter-Bank Participation Certificate (IBPC):** The IBPCs are short-term instruments to even-out the short-term liquidity within the banking system. The IBPC is issued against an

underlying advance, classified standard and the aggregate amount of participation in any account time issue.

(d) Inter Corporate Deposit: The inter-corporate market operates outside the purview of regulatory framework. It provides an opportunity for the corporates to park their short-term surplus funds at market determined rates. The market is predominantly a 90 days market.

(e) Treasury Bills (TBs): Among money market instruments TBs provide a temporary outlet for short-term surplus as also provide financial instruments of varying short-term maturities to facilitate a dynamic asset-liabilities management. The TBs are short-term promissory notes issued by Government of India at a discount for 14 days to 364 days.

More relevant to the money market is the introduction of 14 days, 28 days, 91 days and 364 days TBs on auction basis. The amount to be auctioned will be pre-announced and cut off rate of discount and the corresponding issue price will be determined in each auction. The amount and rate of discount is determined on the basis of the bids at the auctions

(h) Commercial Bills: A commercial bill is one which arises out of a genuine trade transaction, i.e. credit transaction. As soon as goods are sold on credit, the seller draws a bill on the buyer for the amount due. The buyer accepts it immediately agreeing to pay amount mentioned therein after a certain specified date. Thus, a bill of exchange contains a written order from the creditor to the debtor, to pay a certain sum, to a certain person, after a creation period. A bill of exchange is a 'self-liquidating' paper and negotiable; it is drawn always for a short period ranging between 3 months and 6 months.

(g) Certificate of Deposits (CDs): The CDs are negotiable term-deposits accepted by commercial bank from bulk depositors at market related rates. The CDs can be issued by scheduled commercial banks (excluding RRBs) at a discount to face value for a period from 3 months to one year. The CDs can be issued for minimum amount of ₹ 5 lakhs to a single investor. CDs above ₹ 5 lakhs should be in multiples of ₹ 1 lakh.

(h) Commercial Paper: Commercial Paper (CP) is an unsecured debt instrument in the form of a promissory note issued by highly rated borrowers for tenors ranging between 15 days and one year.

Thus CP is a short term unsecured promissory note issued by high quality corporate bodies directly to investors to fund their business activities. It is generally issued at a discount freely determined by the market to major institutional investors and corporations either directly by issuing corporation or through a dealer bank.

- **Determination Of Interest Rates**

Call money rates were regulated in the past by the RBI or by a voluntary agreement between the participants through the intermediation of the Indian Banks Association (IBA). The interest rates have been deregulated and left to the market forces of demand for; and supply of, short-term money as part of the financial sector reforms.

- **Future Possibilities**

The money management will receive greater attention. It will be possible to work out gains/losses on account of delayed realisation of dues or allowing credit to buyers. Better discipline in monetary transactions will come up.

Selected Financial Institutions: (FIS) have been permitted by RBI to operate in money market as lenders. Institutions like UTI, LIC, having sizable funds at their disposal are a very important supplier of funds in call market.

Corporate Entities : Effective from October, 1990 authorised Corporate bodies have also been permitted to operate in call market and bill re-discounting market – through DFHI provided minimum amount per transaction is ₹ 20 crores and they do not have short term borrowing from banking sector.

- **Recent Development In Money Market**

(i) **Debt Securitisation:** The buzzword in the money market is now debt securitisation, which refers to converting retail loans into whole sale loan and their reconverting into retail loans. The philosophy behind the arrangement is that an individual body cannot go on lending sizable amount for about a longer period continuously but if the loan amount is divided in small pieces and made transferable like negotiable instruments in the secondary market, it becomes easy to finance large projects having long gestation period. The experiment has already been initiated in India by the Housing Development Finance Corporation (HDFC) by selling a part of its loan to the Infrastructure Leasing and Financial Services Ltd. (ILFS) and has therefore become a pacesetter for other kinds of debt securitisation as well.

(ii) **Money Market Mutual Funds (MMMFs) :** MMMFs are primarily intended for individual investors including NRIs who may invest on a non-repatriable basis. MMMFs would be free to determine the minimum size of the investment by a single investor. There is no guaranteed minimum rate of return. The minimum lock in period would be 46 days.

The resources mobilised by MMMFs should be invested exclusively in various money market instruments.

(iii) **Repurchase Options (Repo.) and Ready Forward (RF) contracts:** Under Repo transactions the borrower places with lender certain acceptable securities against funds received and agrees to reverse this transaction on a pre-determined future date at agreed interest cost. No fixed period has been prescribed for this transaction. However, generally repo-transactions are for minimum period of 14 days and maximum period of 1 year. The interest on such transactions is market determined and built in the structure of the Repo. Ready forward (RF) transactions are structured to suit the requirements of both borrower and lender and have therefore, become extremely popular mode of raising/investing short term funds. The borrower has advantage of raising funds against its securities without altering its assets mix while lender finds a safe avenue giving attractive returns. Moreover, the funds management for both borrower and lender is improved as the date of reversal of transaction is known in advance.

The term Repurchase Agreement (Repo) and Reverse Repurchase Agreement (Reverse Repo) refer to a type of transaction in which money market participant raises funds by selling securities and simultaneously agreeing to repurchase the same after a specified time generally at a specified price, which typically includes interest at an agreed upon rate. Such a transaction is called a Repo when viewed from the perspective of the seller of securities (the party acquiring funds) and Reverse Repo when described from the point of view of the supplier of funds. Thus, whether a given agreement is termed a Repo or a Reverse Repo depends largely on which party initiated the transaction.