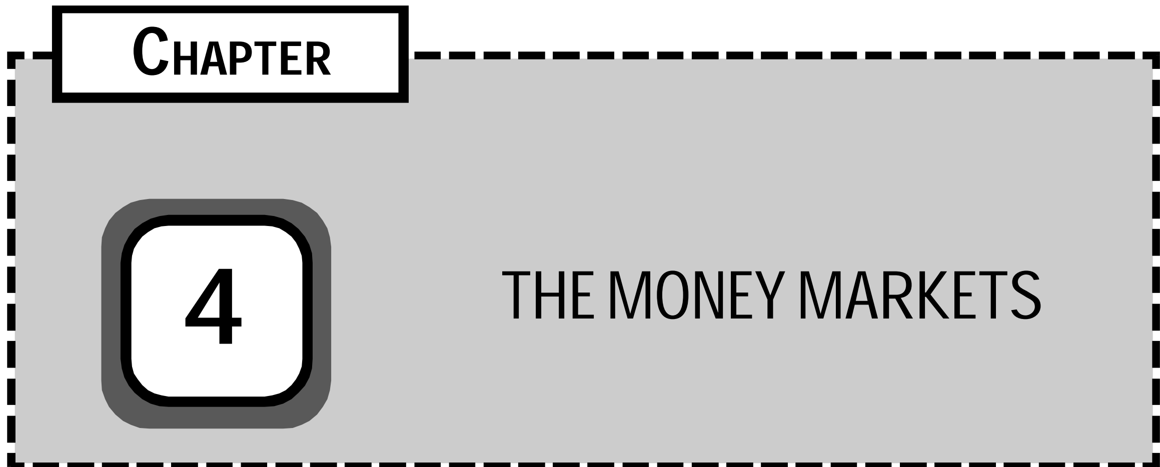
☞ PART TWO ☜
Financial Markets



INTRODUCTION

The financial markets are in the forefront in developing economics. Efficient financial markets are a *sine qua non* for speedy economic development. The vibrant financial market enhances the efficiency of capital formation. This market facilitates the flow of savings into investment *vis-a-vis* capital formation. Dr. Khan has opined that, A variegated financial market can appeal to the security, motivation and other such aspects of savers and attracts more savings by the creation of an array of attractive financial assets. It also tends to promote the development financial structure. The role of financial markets in the financial system is quite unique. The relevance of the financial markets in the financial system is not merely quantitative but also supportive. Thus, the financial markets bridge one set of financial intermediaries with another set of players.

Well-developed financial markets diversify resource mobilisation channels and enlarge the range of financial services. More importantly, under appropriate conditions, financial (capital) markets can provide long-term finance to government and large business firms. Well regulated banks and well functioning securities markets cater to the financing requirements of various segments of the economy.

The development of securities markets usually starts with trading in a short-term money market instrument, often a government security. Other money market instruments are interbank deposits, bankers' acceptances, certificates of deposit, and commercial paper issued by non-financial corporations. Money markets provide a non inflationary way to finance government deficits. They also allow governments to implement monetary policy through open market operations and provide a market-based reference point for setting other interest rates. Furthermore, money markets are a source of funds for commercial banks and other institutions with limited branch networks, including foreign banks and leasing and factoring companies. By enabling large corporations to issue short-term securities in the form of commercial paper, money markets make the corporate loan market more competitive and reduce the market power of large commercial banks.

India has benefited from the creation of money and capital markets. Money markets can provide competition for banks, a flexible means for managing liquidity, a benchmark for market-based interest rates, and an instrument of monetary policy. Capital market can be a source of long-term finance — both debt and equity — and can help to foster sounder corporate capital structures.

FINANCIAL MARKET EVOLUTION

The importance of developing appropriate financial institutions and financial markets in promoting economic growth can be hardly overemphasised. Central banks in emerging markets have made conscious efforts towards developing efficient markets and institutions in recent years, especially after some weaknesses in the system were revealed during several financial crises that occurred in the 1990s in different parts of the world. There is a growing recognition among central bankers around the world that a well functioning financial market enables efficient use of market-based instruments of monetary policy by improving interest rate signals in the economy. Apart from enhancing the efficiency of monetary policy, deep and well functioning financial markets promote mobilisation of domestic savings and improve the allocative efficiency of financial intermediation, and foster the necessary conditions to emerge as an international or a regional financial centre. Strong domestic financial markets also act as a buffer against external disturbances and help in absorbing shocks to the domestic banking system during crises. Further, they provide incentives for development of hedging instruments, and lower macroeconomic volatility and financial instability. Efficient financial markets also have several indirect benefits such as rapid accumulation of physical and human capital, more stable investment financing, and faster technological progress.

Financial market development is a complex and time-consuming process. There are no shortcuts for developing well-functioning markets with depth and liquidity. Some of the pre-conditions for financial market reform are macroeconomic stability, sound and efficient financial institutions and structure, prudential regulation and supervision, strong creditor rights, and contract enforcement. Measures to improve market infrastructure must be implemented at an early stage of reform alongside appropriate legal framework.

These conditions facilitate growth of financial transactions including inter-bank transactions and active liquidity management. At the same time, there are at least three major macroeconomic features which can inhibit reform of domestic financial markets. *First,* large Government deficits can crowd out financing of the private sector thereby inhibiting the growth of corporate debt markets. *Second,* high and variable inflation rates and unrealistic exchange rates also stifle the financial markets by raising uncertainties about the risks and returns to financial activity. *Third,* financial repression policies such as high inflation taxation, high required reserve ratios' subsidised or directed credit programmes, credit rationing, and ceilings on deposit and loan interest rates also hinder financial market development.

THE ROLE OF FINANCIAL MARKETS

The role of financial markets assumes greater importance in the modern economy. Financial markets perform an important function of channelling surplus funds from savers to those who are short of funds, thereby contributing to higher production and efficiency in the economy.

In the wake of increased degree of globalisation, financial markets facilitate across border movements of funds from the countries lacking profitable avenues for investments to countries providing higher returns. Another crucial role of financial markets is the pricing and management of economic and financial risks.

Financial markets also play a cracial role in the transmission of monetary policy impulses. Developed and stable financial markets also enable central banks to use market-based instruments of monetary policy to target monetary variables more effectively.

Thus, the financial markets through their linkages with the real economy, enhance the level of output and employment. Therefore, efficient functioning of the financial market is important.

MONETARY POLICY

Monetary policy in any country is largely determined by the institutional framework and environment in which it is expected to operate. It is necessarily moulded by the world in which it takes shape.[1] The structure of the money market is the base on which depends the operation of the monetary policy. Monetary management is largely governed by such institutional factors as the use of credit, credit consciousness of the people and their preferences, the general banking structure and the development of the banking habit among the people as a whole.[2] Any effective organisation and the response of financial institutions in general and banks in particular depend upon the nature of the organisation of the money market and the degree of co-operation between its various components. The structure of the money market is, therefore, a base for introducing monetary discipline and for implementing monetary policies in any economic system. One of the most remarkable features in all discussions on central banking is the unanimity with which all writers regard a developed money market as essential for the effective functioning of the central bank.[3] An attempt has been made here to examine the effectiveness of the monetary policy in India in the context of the money market in this country.

MONETARY MANAGEMENT

The monetary policy in India is a case study of monetary management in a developing economy with an unorganised money market. The study is, therefore, valuable for the undeveloped and underdeveloped countries as well as for developed countries. Since the monetary policy in India operates in the organised and unorganised sectors of money markets, the structural changes have to be analysed first. An objective analysis of the structure of the Indian money market, therefore, assumes great importance in the study of monetary policy and central banking activities.

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1. Report of the Committee on the Working of Monetary System (Radcliffe Committee), 1959, p. 6.
2. Gupta, G.P.: *The Reserve Bank of India and Monetary Management,* 1962, p. 18.
3. Sen, S.N.: *Central Banking in Undeveloped Money Market,* 1961, p. 1.

MONEY MARKET

The money market forms an important part of the financial system by providing an avenue for equilibrating the surplus funds of lenders and the requirements of borrowers for short periods ranging from overnight up to a year. It also provides a focal point for central bank's intervention for influencing the liquidity in the financial system and thereby transmitting the monetary policy impulses.

At the outset, it is necessary to examine what we mean by the term *money market,* which has sometimes been defined as an organisation for dealings in loan money or borrowed funds. This is a very broad definition and has been adopted by a number of writers. It is also defined as follows:

A money market is a mechanism through which short-term funds are loaned and borrowed and through which a large part of the financial transactions of a particular country or of the world are cleared. Broadly conceived, it includes the entire mechanism employed in financial business of all types. In the narrower sense, in which the term is generally used, however, a money market includes only dealings in more or less standardised types of loans, such as call loans and in credit instruments, such as acceptance and treasury bills, in which personal relations between lender and borrower are of negligible importance. In this sense, a money market is distinct from, but supplementary to the commercial banking system.[4]

The RBI defines the money market as, "a market for short-term financial assets that are close substitutes for money, facilitates the exchange of money for new financial claims in the primary market as also for financial claims, already issued, in the secondary market."

Traditionally, the money market in India comprised mainly the call money market. Although other money market segments, *viz.,* commercial bills market and inter-corporate deposits market have been in existence for a long time, there has not been much activity in these segments. Therefore, for assessing the impact of reforms on the money market the focus is mainly on the call money market. The impact of reforms is assessed in terms of behaviour of the call money market and the market growth related parameters, including those instruments, which were introduced in the 1990s.

The development of securities markets usually starts with trading in a short-term money market instrument, often a government security. Other money market instruments are inter-bank deposits, bankers' acceptances, certificates of deposit and commercial paper issued by non-financial corporations. Money markets provide a non-inflationary way to finance government deficits. They also allow governments to implement monetary policy through open market operations and provide a market-based reference point for setting other interest rates. Furthermore, money markets are a source of funds for commercial banks and other institutions with limited branch networks, including foreign banks and leasing and factoring companies. By enabling

4. Madan, J.T. and Nadler, M.: *The International Money Markets,* 1935, p. 108. See also Wilson, J.S.G.: 'The Business in India', in *Banking in the British Commonwealth*, edited by R.S. Sayers, 1952, p. 102, where Wilson writes: "In essence, a money market is a place where the borrowers and lenders of by short-term funds are brought together."

large corporations to issue short-term securities in the form of commercial paper, money markets make the corporate loan market more competitive and reduce the market power of large commercial banks.

ROLE OF THE MONEY MARKET

The role of the money market in the economy is quite unique. The money market forms the first and foremost link in the transmission of monetary policy impulses to the real economy. With a view to achieve price stability, ensuring growth and promoting financial stability, the central bank intervenes in financial markets to ensure that short-term interest rates and liquidity are maintained at appropriate levels.

The money market serves as the corner-stone of a competitive and efficient system of market-based interventiion by the central bank. It stimulates an active secondary bond market by reducing the liquidity risk of bonds and other short-term financial instruments. The money market also serves as the medium for Government cash management. Further, efficient pricing of derivatives is contingent upon an active and liquid market for the underlying financial asset. A well functioning money market is essential for conducting indirect, market-based monetary policy operations for providing the liquidity necessary for the market in government securities and private sector (corporate) bonds. The stable money market is a key to economic growth.

STRUCTURE OF THE MONEY MARKET

In view of the rapid changes on account of financial deregulation and global financial markets integration, central banks in several countries have striven to develop and deepen the money market by enlarging the ambit of instruments and participants so as to improve the transmission channels of monetary management. In fact, money market instruments facilitate transfer of large sums of money quickly and at a low cost from one economic unit to another for relatively short periods of time. The structure of the money market determine the market oriented instruments that will help to promote broader market development.

In the United States, a large group of short-term credit instruments, future market instruments and the Federal Reserve discount window encompasses the money market.

In the United Kingdom, the money market has emerged as a mechanism for short-term funding through the issuance of money market or an active fixed-term cash deposit market.

In the Euro system, during the course of the 1990s, repurchase transactions were adopted as a main liquidity management instrument.

In Japan, the most active money market segment involves very short-term transactions, which include the borrowing and lending of funds in the call market with or without collateral.

In most countries, commercial banks, central banks, regional banks, specialised banks, investment and finance companies, merchant bank investment trust companies, money market mutual funds, insurance companies, securities finance corporations, credit insurance funds, business enterprises, government-sponsored enterprises, brokers and dealers are the major participants in the money market.

The Indian money market prior to the 1980s was characterised by the paucity of instruments, lack of depth and dichotomy in the market structure.

The money market consisted of the inter-bank call market, treasury bills, commercial bills and participation certificates.

The call money market in India was purely an inter-bank market until 1976.

Treasury Bills constituted the main instrument of short-term borrowing the government and served as a convenient gilt-edged security for the money market.

Participation certificates (PCs) and commercial bills were introduced in the money market in 1970s.

In pursuance of the recommendations of then Vaghul Committee (1987) and M. Narasimham Committee (1991), the Reserve Bank of India took a set of measures to develop the money market. These included:

(i) Withdrawal of interest rate ceilings in the money market;
(ii) Introduction of auctions in Treasury Bills;
(iii) Abolition of ad hoc Treasury Bills,
(iv) Gradual move away from the cash credit system to loan-based system.
(v) Relaxation in the issuance restriction and subscription norms in the case of many money market instruments;
(vi) Introductions of new financial instruments;
(vii) Widening of participation in the money market; and
(viii) Development of a secondary market.

All these policy measures have helped considerably in developing the money market over the years.

Table 4.1: Structure of Indian Money Markets

Sr. No.	*Instruments*	*Tenor*	*Major Participants*
(1)	Call Money	Overnight	Scheduled Commercial banks (excluding RRB's), Co-operative banks, Primary Dealers (PDs)
(2)	Notice Money	2 to 14 days	(Till August 5, 2005, select all-India financial institutions, insurance companies and mutual funds)
(3)	Term Money	15 days to 1 year	Banks, all-India financial institutions and PDs.
(4)	Certificates of Deposits (1989)	Minimum 7 days	Scheduled commercial banks (excluding RRBs and Local Area Banks) and select all-India financial institutions

(5)	Commercial Paper (1990)	Minimum 7 days	Corporates all-India financial institutions and PDs.
(6)	Forward Rate Agreements /Interest Rate Swaps (1999)	Contracts are available for maturities upto 10 years	Scheduled Commercial banks, PDs and all-India financial institutions
(7)	Bill Rediscounting		Banks, PDs, select all-India financial institutions, insurance companies as mutual funds
(8)	Repurchase Agreements (1992)		
	(a) Market Repo	1 day to 1 year	Banks, PDs, all-India Financial institutions, in-surance companies, mutual funds as listed corporates.
	(b) RBI Repo (LAF) (Liquidity Adjust-ment facility)	1 day*	Banks and PDs
(9)	Treasury Bills	91, 182 and 364 days	Banks, PDs, financial institutions and other non-bank entities.
(10)	Inter-bank Participation certificates (1988)	91 to 180 days	Scheduled commercial banks
(11)	Collateralised Borrowing and Lending obligations (CBLO) 2003.	1 day to 1 year	Scheduled commercial banks, co-operative banks, PDs, select all-India financial institutions, insurance companies, mutual funds & other corporates.

* The Reserve Bank of India (RBI) retains the option to condiuct longer term under market conditons and other relevant factors.

Source: Report on currency and finance — 2005, 06, pp-115-116.

SUB-MARKETS

However, with the development of the economy and techniques, the money market is composed of money sub-markets of a sort in almost every country in the form of institutions that lend and borrow money for short periods. Some of these markets, for example, the call money market, short-term market, capitalmarket, stockmarket or bond market, commercial bill market, treasury bill market, discount market, etc., are highly developed and well organised. The larger the number of sub-markets, the broader and more developed is the structure of the money market. In developed money markets, large varieties of sub-markets have been organised for specialised dealings in almost all sources of loanable funds. Money markets that are undeveloped generally lack such of a variety of sub-markets.[5]

5. Sen, S.N.: *Central Banking in Undeveloped Money Markets,* 1961, p. 17.

Since 1999, Repo market is in operation. In addition, Collateralised Borrowing and Lending Obligation (CBLO), Term Money market are in operation since 2002 and 2001 respectively.

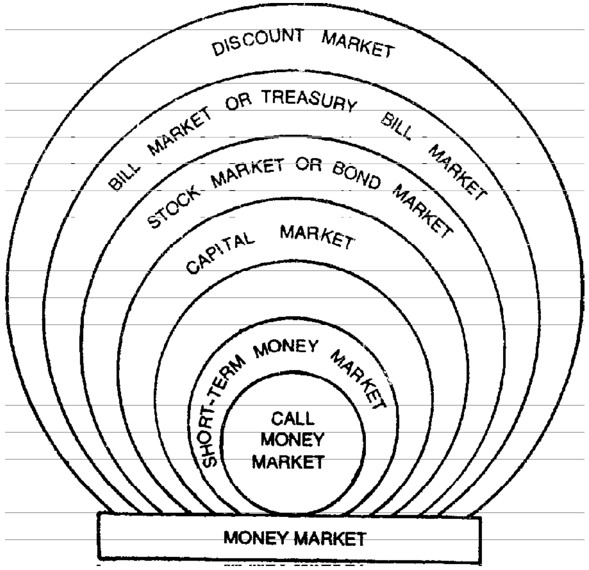
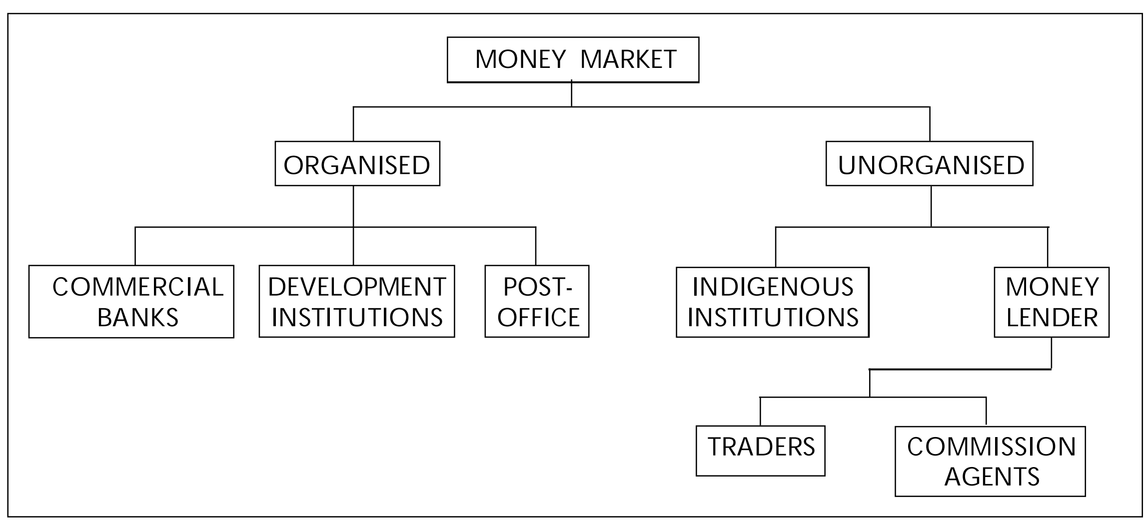


Figure 4.1: Sub-markets within the Organised Money Market

The Indian money market has generally been divided into two watertight compartments: that which concerns itself with modern commercial banking and that which derives from indigenous practice with a tradition going back many hundred years.[6] The "black market money" or "unaccounted money" is made up of accumulated gains, largely of illegal transactions which cannot be brought into account books or into bank accounts.[7]



6. See Gupta, G.P.: *Reserve Bank of India and Monetary Management,* 1962, p. 234.
7. Gadgil, D.R.: "Effectiveness of Credit Regulation by the Reserve Bank of India," *Artha-Vijnana,* March 1963, p. 2.

ORGANISED SECTOR

The organised sector of the money market consists of the Reserve Bank of India, commercial banks, large-sized joint stock companies lending money, financial intermediaries such as the Life Insurance, Credit and Investments Corporation of India, the Unit Trust of India, the Agricultural Refinance and Development Corporation, Land Mortgage Banks, Co-operative Banks, Insurance Companies, etc., and call-loan brokers, general finance brokers and stock brokers. The unorganised sector of the money market is largely made up of indigenous bankers, moneylenders, traders, commission agents, etc., some of whom combine moneylending with trade and other activities. Then there are the co-operative credit institutions set up mainly with a view to supplanting the indigenous sources of rural credit, particularly the moneylenders. These co-operative institutions are liberally assisted by the Reserve Bank and are being brought into closer contact with the commercial banks. Generally speaking, these two sectors in the Indian money market — those institutions which come directly or indirectly under the broad regulations of the Reserve Bank constitute the organised sector, while the others, which fall completely outside the purview of the central banking regulations, make up the unorganised sector.

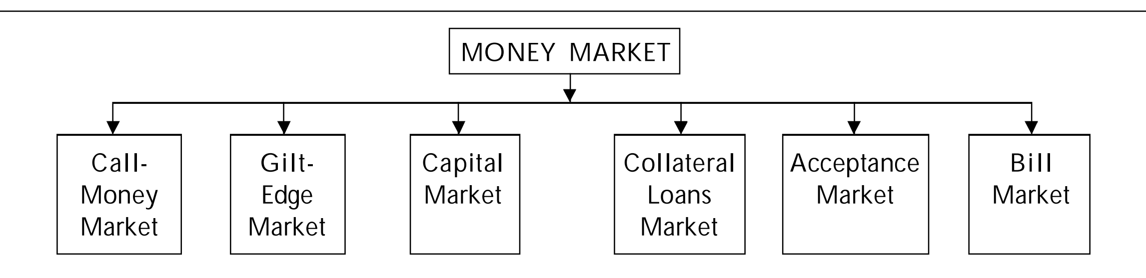


Figure 4.3: The Classification of Money Market

The organised sector of the Indian money market is comparatively well-developed in terms of organised relationships and specialisation of functions. It more or less centres round the Reserve Bank of India; and the State Bank, commercial banks and co-operative banks are associated with it. The policies and operations of the co-operative banks are governed by the NABARD and are also dependent on it for direct financial assistance. In fact, a substantial portion of the funds which co-operative credit agencies lend out is provided by the Reserve Bank. Financial intermediaries, such as the Industrial Financial Corporation, the Industrial Development Bank of India, State Financial Corporation, the National Bank for Agriculture and Rural Development (NABARD), etc., derive most of their resources from the Reserve Bank. The policies of these financial intermediaries are enunciated with the approvals of the Reserve Bank; even the personnel of some of them are supplied by the Reserve Bank. More important than all the above-mentioned institutions, is the inter-bank call-money market, which is regarded as the core of the Indian money market. "*Although the magnitude of funds dealt in this market is not large in relation to the deposit resources of banks, perhaps this is the most sensitive sector of the money market.*" Then there are the treasury bills and bills of exchange, which absorb the surplus liquidity of the institutions in the organised sector.

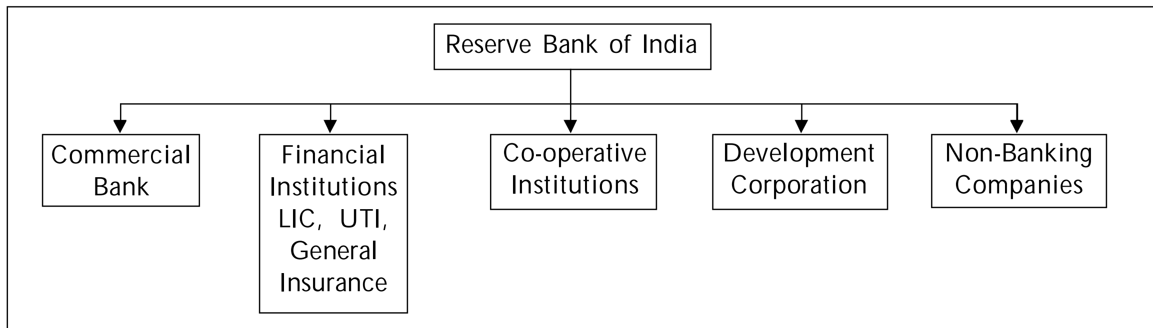


Figure 4.4: Institutions in the Organised Sector under the Control of the Reserve Bank of India

CHARACTERISTICS OF MONEY MARKET

The principle characteristics of money market are:

1. It is the market for short-term funds with maturity ranging from overnight to one year.
2. Provides an avenue for the central bank intervention in influencing both quantum and cost of liquidity in the financial system.
3. The central bank strives to align money market rates with the key policy rate.
4. Money market influences the effectiveness of monetary policy.

A major characteristic of the Indian money market each year is the pronounced swing from 'busy' to 'slack' times and *vice versa*.[8] The Reserve Bank provides accommodation to the commercial banks, especially during the busy season; and the treasury bills issued by the Reserve Bank provide an important outlet for the surplus funds of the commercial banks during the slack season. In the same way, other financial institutions, such as hire-purchase companies, insurance companies, etc., place their surplus funds with commercial banks or co-operative banks in short-term deposits; and they borrow from the commercial banks in case of need. The noteworthy feature is that one does not find a clear-cut demarcation of functions among the institutions comprising of the organised money market in India, as one finds, for example, among the financial institutions in the U.K., where the commercial banks, discount houses, acceptance houses, etc., perform a highly specialised set of functions, and their spheres of operations are well defined and co-ordinated. But in India, the Reserve Bank is not only the lender of the last resort, but provides capital to co-operative banks, refinance facilities for export and special accommodation to banks financing small industries. Commercial banks in India directly undertake the discounting of commercial bills. In the U.K., however, such bills are initially taken up by the discount houses. Therefore, in India, there is a considerable overlapping of functions among the institutions comprising the organised money market, which perhaps is the outcome of the peculiar circumstances under which they have developed.

8. *Tata Quarterly,* April/July, 1964, p. 43.

The Indian banking structure possesses a heterogeneous mass of indigenous banks, joint stock banks and co-operative banks as its base layers; the highly organised, developed and nationalised banks, State Bank as its middle layer; and a state-owned central bank, namely, the Reserve Bank of India, as its apex.[9]

The organised sector is principally composed of the commercial banks, the co-operative banks and the land mortgage banks. Considering the continental character of the country, the banking development is most inadequate for the needs of trade and industry, largely because of the hoarding habit among the people. J.S.G. Wilson remarks: "*The hoarding habit appears to provide an almost bottomless pit for the absorption of gold and silver.*"[10]

With a view to strengthening the organised money market in India, new institutions have been established and consolidated to either lend on long-term basis or regulate credit in a prescribed manner. The new institutions which have come up after independence are the Industrial Finance Corporation (1948); the National Industrial Development Corporation (1954); the Industrial Credit and Investment Corporation of India, Ltd. (1955); State Financial Corporations (1951); the National Small-scale Industries Corporations (1955); the Agricultural Refinance and Development Corporation; the Unit Trust of India (1964) and the Industrial Development Bank of India (1964), which incorporates the Refinance Corporation and the Industrial Reconstruction Corporation (1971).

FUNCTIONS OF MONEY MARKET

The money market performs three broad functions.

1. It provides an equilibrating mechanism for demand and supply of short-term funds.
2. It enables borrowers and lenders of short-term funds to fulfill their borrowing and investment requirements at an efficient market clearing price.
3. It provides an avenue for central bank (RBI) intervention in influencing both quantum and cost of liquidity in the financial system. Thus, efficient functioning of the money market is important for the effectiveness of monetary policy.

UNORGANISED SECTOR

As regards the agencies constituting the unorganised money market, it is necessary at the outset to clarify one important point regarding the nomenclature used to designate them. The term *unorganised money market* conveys the impression that indigenous agencies providing credit have neither any system nor any organisation among themselves, nor any definite procedure regulating their lending practices. In fact, these agencies have been functioning for ages in almost all parts of this country, and have a time-tested organisation. They follow well-set patterns, both as regards their lending policies and their interest rates. Their native origin is mainly responsible for some of their unique features, which have few parallels among similar agencies in Europe.

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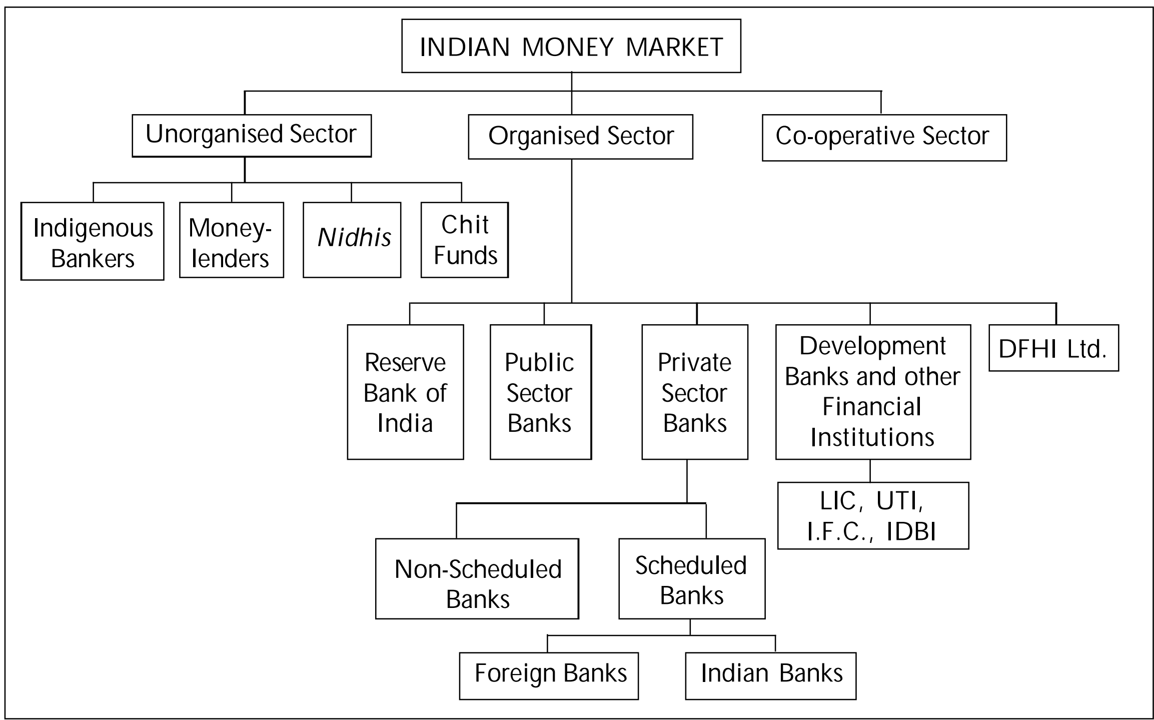
9. Ghosh, Alak: *Indian Economy*, 1963, p. 468.
10. *Op. cit.*, p. 151. Wilson also gives some of the reasons for the strength of the hoarding habit in India.

INDIGENOUS BANKING

The system of indigenous banking in India is of ancient growth and dates back to *Vedic* times, which may be taken to range between 2000 B.C. and 1400 B.C. Moneylending was regarded as an ancient practice. That it was practised even in the early Aryan days is evident from the references to moneylending as one of the four honest callings, the other three being tillage, trading and harvesting. The researches of Macdonnell and Keith provide the main source of information regarding moneylending during the *Vedic* and pre-*Vedic* periods. *Rina* (debt) is often mentioned in the *Rig* Veda and in late *Vedas*, and indicates a normal condition in the Vedic society. On the subject of interest, the available information is sketchy. That interest was charged may be inferred from the fact that the usurer (kusidin) is referred to in the *Shatapatha Brahmana* and the *Sutras*. However, little is known about the rate of interest prevailing in *Vedic* times or the terms and conditions on which loans were advanced. The available evidence shows that rather low rates were generally prevalent and usurious rates were frowned upon.

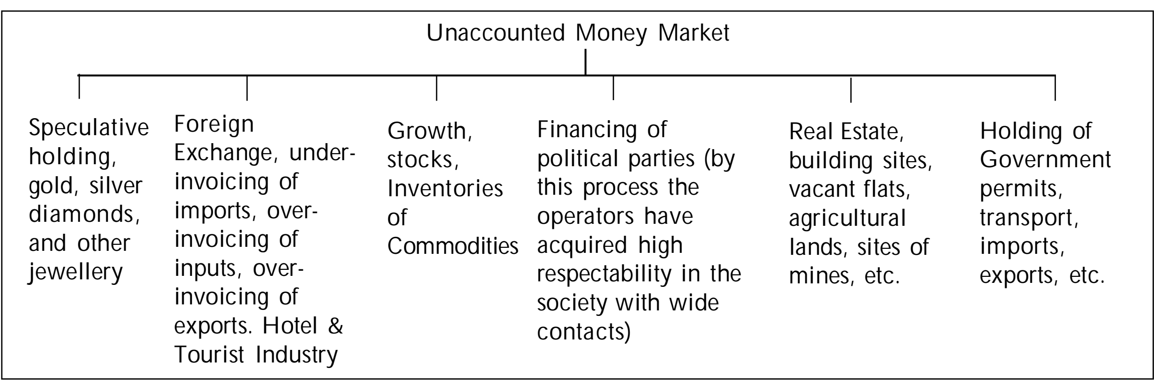


The money market in India is dominated by the unorganised sector. The only link that exists between the organised and unorganised sectors is through the commercial banks. Indigenous shroffs carry on their activities through the media of these commercial banks. In rural areas, they do so through co-operative credit societies. However, a number of credit societies are under the control of moneylenders. In fact, the Rural Credit Survey Report gives instances of moneylenders who are actively associated with co-operative credit agencies either as members or as office-bearers. Recently, more instances of their active interest have come to light. It seems that a growing number of spurious co-operative societies have been organised solely to enable these

moneylenders to take advantage of the concessions they offer. The indigenous bankers use banks as intermediate agencies of their transactions and yet remain outside the orbit of central bank control.

The unorganised market has of late been strengthened with the addition of unaccounted money, variously known as black money or unaccounted gains or untaxed assets. A conservative estimate places this amount at between ` 2,500 crore and ` 4,000 crore or more.

As a result of the income velocity of money, considerable savings will be accruing in the unaccounted income sector. These savings seek outlets which again escape from the tax-net and thus enlarges the unaccounted sector. In view of the plethora of liquid funds in the unaccounted sector and the high rates of return in the speculative holding of goods, the production circuit is severely disturbed. In an international context, there are high returns from in-smuggling and out-smuggling of goods, drugs and precious metals. These high-staked, high-return activities are invariably financed from the unaccounted money. Likewise, unaccounted money is also found in real estate and also a useful source of finance for the political process. In the process, the unaccounted sector has acquired respectability and at the same time, running a parallel money market with a continued drain to the exchequer and violation of foreign exchange laws. The operation of the unaccounted income (money) sector is illustrated as follows:



The unique aspect of unaccounted currency is that, except when hoarded, it never remains permanently concealed, not for a continuously long term. A large portion of it is in circulation and constantly changes its character. The impact of unaccounted money on the money market is very significant. With its growth in the country, a number of mushroom indigenous bankers have sprung up, who are quite different from the traditional bankers; and it has been reported that they lend money at very high rates of interest. The indigenous money market has itself become a lawless market, and the old conventions have very little relevance to it. The unaccounted money as part of the indigenous money market is invested in property, small-scale industries, smuggling, and trade. This fact has further limited the effective implementation of the monetary policy. Unaccounted money has further strengthened the indigenous market in India. However, with the devaluation of the Rupee, the effective use of unaccounted money is expected to decline somewhat, though its impact on the market will continue as before.

Since there is no direct link between the unorganised and organised money markets, it is essential to establish such a link. The link of commercial banks between the two markets is so weak that it is more advantageous to the unorganised market than to the organised sector.

IMPORTANCE OF THE MONEY MARKET

The money market is an integral part of Indian economy. A developed money market plays an important role and is highly indispensable for the rapid development of the economy. It helps the smooth functioning of the financial system in the following ways:

1. Development of trade and industry.
2. Smooth functioning of commercial banks.
3. Development of capital market.
4. Effective functioning of central bank.
5. Acts as a guide to formulating an effective monetary policy from time to time.
6. Helps in determining the interest rates.
7. Helps the Government to raise short-term funds at ease.
8. Strives to help the central bank to manage liquidity in the economy.

MONEY MARKET DEVELOPMENT

The development of the money market contributes to the efficiency of the financial sector by allowing financial institutions to transfer surplus funds to other financial institutions instead of directly financing inefficient borrowers or discouraging depositors; and by facilitating the management of bank liabilities through refinancing, thereby increasing the availability of long-term finance for investment. In addition, open-market operations could be conducted more effectively and their effects on banks' marginal cost of funds felt more rapidly. Specific policies to develop and strengthen money markets have been addressed in Fund programs of technical assistance. Such policies include strengthening broker-dealer services and their regulation, introducing money market instruments, reforming the central bank's discount window operations to support money market development consistent with monetary control, setting up auction systems in the primary market for money market financial instruments, and favourable tax treatment of interest income of financial assets.

Notwithstanding depressed conditions in the capital market in the last few years, significance of the capital market in meeting the financing requirements of the corporate has generally improved. Since the initiation of the reforms, the reliance of the corporate sector on the capital market for funds increased markedly. The resources raised by the private sector companies from the primary equity market rose sharply in the first half of the 1990s to touch a peak of ` 17,414 crore in 1994-95 (Chart 11.1). The resource mobilisation from the primary market, however, tapered off in the second half of the 1990s due to a variety of reasons such as tightening of disclosure norms and subdued secondary market. The ratio of resource mobilisation by the private sector to GDP almost trebled from an average of 0.4 per cent during the period 1970-1992 to 3.1 per cent of GDP during 2007-08.

In the secondary market, the move to an electronic trading system has resulted in transparency in trades, better price discovery and lower transaction costs. The efficiency of the market has improved through faster execution of trades. The operational efficiency of the stockmarket has also been strengthened through improvements in the clearing and settlement practices and the risk management process. Almost the entire delivery of securities now takes place in dematerialized form. There has been no instance of postponement or clubbing of settlements at two main stock exchanges (BSE and NSE) despite defaults by brokers. The cases of bad deliveries have become almost nil. The setting up of trade/ settlement guarantee funds in most of the exchanges has considerably reduced the settlement risk for investors. The corporate governance practices and disclosure norms have led to transparency in information flows, which, in turn, have improved the price discovery process.

FINANCIAL MARKET DEVELOPMENTS

The Reserve Bank, like other central banks, has taken a keen interest in the development of financial markets, especially the money, government securities and forex markets in view of their critical role in the transmission mechanism and implementation of monetary policy. The money market is the focal point in intervention by the Reserve Bank for equilibrating short-term liquidity flows, and on account of its linkages with the rest-of-the-world, the foreign exchange market. Similarly, the government securities market has become important for the entire debt market as it serves as a benchmark for pricing of market instruments.

The conscious efforts by the Reserve Bank to develop efficient, stable and healthy financial markets gained importance as they were repressed in several ways, in the past, by law, regulation and policies. Several factors, mainly administered interest rates, directed credit, weak banking structure, lack of proper accounting and risk management systems hindered market development in India until the 1990s. It was realised early in the reform process that mere easing of restrictions would not automatically help to create vibrant financial markets. Hence, the Reserve Bank initiated measures to facilitate the development of markets through necessary institutional changes and dynamic improvements in market microstructure. Over the years, several measures were taken by the Reserve Bank to address these issues and create a supportive environment for market development. The pace of the reform was contingent upon putting in place appropriate systems and procedures, technologies and market practices. The experience of India indicates that financial market development is a complex process and depends on several factors like sound financial institutions, a favourable legal framework, technological support and congenial policy environment.

In India, the Reserve Bank has followed a gradual and well-calibrated policy of market reform. The markets have now grown in size, depth and activity, paving the way for a flexible use of indirect monetary policy instruments by the monetary authority. There has also been greater co-ordination between the Government and the Reserve Bank, as also between the various regulators of financial markets, which has helped in orderly and smooth development of the financial markets in India. Though the various initiatives have resulted in developing deep, wide and liquid, money, government securities and foreign exchange markets, the reform process continues. In context of the integration of the Indian financial markets with global markets, the

Reserve Bank has been constantly refining the operating procedures and instruments as also various aspects of financial institutions, markets and financial infrastructure, consistent with international best practices to minimise the domino effect.

ROLE OF THE RESERVE BANK

The first thing to which the Reserve Bank of India has to assign top priority is the introduction of effective monetary management and the co-ordination of the money market with a view to bringing indigenous bankers within the fold of its central banking policy. Even before the Reserve Bank was established, the Central Banking Enquiry Committee considered it to be a matter of paramount importance. It had recommended the development of direct links between moneylenders and the Reserve Bank of India, in the same way in which it had established links with the joint-stock banks. "*Such indigenous bankers as are engaged in banking proper or are prepared to shed their business other than banking should be eligible to be placed on the approved list of the Reserve Bank in the same manner as joint-stock banks.*" Some of the Provincial Banking Enquiry Committees had also suggested that:

(*i*) Indigenous bankers should be linked with the central banking institutions;

(*ii*) They should be treated as member banks on the approved list of banks;

(*iii*) Commercial banks might discount their bills more easily; and

(*iv*) Indigenous bankers should be licensed.

The scheme suggested by the Central Banking Enquiry Committee was that the Reserve Bank should prescribe a standard which indigenous bankers must follow before they are given the concessions recommended. The maintenance of proper books of accounts in the recognised manner and the submission of these books to the Reserve Bank for inspection and audit were two of the important eligibility conditions.

Although commercial banks are expected to pay much greater attention than they did in the past to the needs of small borrowers of various types, it is unlikely that they will be able to displace indigenous bankers altogether. The Banking Commission does not think that such displacement is ever possible or practicable. A more useful course would be to adopt measures which would enable these agencies to work in conformity with the overall credit policy of the Reserve Bank.

The Reserve Bank of India is the central bank of the country. In order to exercise effective monetary management, the Bank has to introduce monetary discipline in the money markets. In this connection, its first and foremost task has been to consolidate commercial banking and extend banking facilities in the country. The apex bank stands committed today in this task. The mergers introduced by the Bank since 1970 should be strengthened and extended to more scheduled and non-scheduled banks, particularly to those that are sick. The branch expansion programme should be planned so as to meet the needs of the various regions. The State Bank and its associates should be merged, the nationalised banks should be reorganised into viable units, and the link between the State Bank and commercial banks should be codified. Again, the Reserve Bank should acquire powers to control the other financial institutions in the country which substantially influence the money market. A direct link between the unorganised and

organised money markets must be established. Co-operative banks should be brought within the full control of the Reserve Bank. Only then, the central bank will be able to implement its monetary policy more effectively.

The regional central banks thus established should be co-ordinated, guided and controlled by a Central Monetary Board, like the Federal Reserve Bank in the U.S.A. A leading banker observes: "*There may be, say, four or five autonomous regional reserve banks, co-ordinated by a Central Board, which will evolve policies and take important decisions, the execution being entrusted to the Regional Banks. Such decentralisation will bring the local management in closer and more intimate contact with the respective regions; this will facilitate not only better appreciation of the local problems and needs but also the development of the desired relationship between the regional reserve banks and commercial banks.*[11]

The financial system in India has become more market-oriented. There has been a significant increase in financial institutions market activities and exposures, as well as participation by non-financial corporations and households in the markets. The RBI closely monitors financial market developments considering their critical role, while simultaneously taking measures to further develop the various segments of the financial market under its purview, *viz.*, the money market, the Government securities market and the foreign exchange market. The RBI has set up a separate Financial Market Department (FMD) in July 2005, for exclusively monitoring the developments in the financial markets.

INTEGRATING FINANCIAL MARKETS

A segmented financial system complicates the conduct of monetary policy and adversely affects resource allocation and growth. To illustrate, suppose that interest rate ceilings are set at higher levels for non-bank financial institutions than for banks. A policy of credit restraint would then encourage the outflow of funds from the banking system. The income velocity (*i.e., ratio of GNP to money*) of broadmoney (currency and demand deposits plus savings and time deposits) may increase, while that of narrow money (currency and demand deposits), which is used as reserve asset of non-bank financial institutions, may fall. A redefinition of monetary and credit targets for purposes of financial management cannot sufficiently counteract the possible negative impact on the intermediation capability of a financial system that is segmented by excessive and inappropriate regulations. A long-term solution is to reform the domestic regulatory framework to eliminate the major causes of segmentation, such as inadequate licensing regulations, burden some reserve requirements and portfolio restrictions, unrealistic interest rate ceilings, and the operating inefficiencies of the regulated markets.

During the past two decades, financial markets around the world have become increasingly interconnected. Financial globalization has brought considerable benefits to national economies and to investors and savers, but it has also changed the structure of markets, creating new risks and challenges for market participants and policymakers.

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11. B. K. Dutt's Prof. Benoy Kumar Sarkar's Memorial Lectures (1960) at the Calcutta University, *Commerce*, October 15, 1960.

MONEY MARKET REFORMS

A major objective of reforms is to develop the money market, eliminate segmentation and smoothen the process of transmission, easing the liquidity management process and making resource allocation process more efficient.

Since the early 1990s, the RBI and the government have taken various measures to strengthen and improving depth and liquidity in the money market. The reforms also emphasised on improving the transparency and efficiency of the money market. The key reform measures undertaken are briefly presented below:

- A ceiling of 10 per cent on call money rates imposed by the Indian Banks Association was withdrawn in 1989.
- Initially, the participation in the call market was gradually widened by including non-banks, such as, financial institutions, non-banking finance companies, primary/satellite dealers, mutual funds, corporates (through primary dealers), etc. The process of transformation of call money market to a pure inter-bank market commenced effective May 2001.
- The 182-day treasury bills were introduced effective November 1986, followed subsequently by phasing out of on-tap treasury bills, introduction of auctioning system in 91 day treasury bills since January 1993, and introduction of 14-day and 364-day treasury bills. The system of *ad hoc* treasury bills (with a fixed 4.6 per cent interest rate since July 1974), which were issued by the Central Government to the Reserve Bank, was abolished effective April 1997. Currently only the 91-day and 364-day treasury bills exist.
- The Discount and Finance House of India (DFHI) was set up in April 1988, and was allowed to participate in the call/notice money market both as a borrower and lender commencing from July 1988.
- Several new financial instruments were introduced, such as inter-bank participation certificates (1988), certificates of deposit (June 1989), commercial paper (January 1990) and repos (December 1992).
- Derivative products like forward rate agreements and interest rate swaps were introduced in July 1999 to enable banks, FIs and PDs to hedge interest rate risks.
- A full-fledged Liquidity Adjustment Facility was introduced on June 5, 2000 with a view to modulating short-term liquidity under diverse market conditions.
- With a view to adopting the sound risk management procedures and eliminating counter-party risk, the Clearing Corporation of India Ltd., was set up on February 15, 2002. The CCIL acts as a central counter-party to all trades involving foreign exchange, government securities and other debt instruments routed through it and guarantees their settlement.
- The segment refinance facility for banks is gradually being phased out.
- Collateralised Borrowing and Lending Obligations (CBLO) was launched by CCIL in January, 2003.

- Institutionalisation of the Clearing Corporation of India Limited (CCIL) as a central counter party.
- Issuance norms have been modified to encourage wider participation while strengthening the transmission of policy signals.
- Upgradation of payment system technologies.

Recognising the importance of the money market, the Reserve Bank has been taking proactive measures to develop this segment. The abolition of *ad hoc* Treasure Bills and introduction of regular auctions of Treasury Bills paved the way for the emergence of a risk free rate, which has become a benchmark for pricing the other money market instruments. Concomitantly, with the increased market orientation of monetary policy along with greater global integration of domestic markets, the Reserve Bank's emphasis has been on setting prudential limits on borrowing and lending in the call money market, encouraging migration towards the collatralised segments and developing derivative instruments for hedging market risks. In line with the objective of widening and deepening the money market and imparting greater liquidity to the market for facilitating efficient price discovery, new instruments, such as collateralised lending and borrowing obligations (CBLO), have been introduced. Money market instruments such as market repo and CBLO have provided avenues for non-banks to manage their short-term liquidity mismatches and facilitated the transformation of the call money market into a pure inter-bank market. This has been complemented by the institutionalisation of the Clearing Corporation of India Limited (CCIL) as a central counterparty. Furthermore, issuance norms have been modified over time to encourage wider participation while strengthening the transmission of policy signals across the various market segments. The upgradation of payment system technologies has also enabled market participants to improve their asset liability management. All these measures have widened and deepened the money market in terms of instruments and participants, enhanced transparency and improved the signalling mechanism of monetary policy while ensuring financial stability. Various policy initiatives taken over time have enabled the development of a relatively deeper and more liquid money market in the country in comparison with pre-reform period.

CONCLUSION

Since the early 1990s, the money market has undergone a significant transformation in terms of instruments, participants and technological infrastructure. Various reform measures have resulted in a relatively deep, liquid and vibrant money market. The RBI's approach has been to foster balanced development of the money market, introduce new innovative instruments and make the existing instruments more flexible, reduce dependence of participants on uncollateralised exposures, facilitate price discovery in the short-end and upgrade the payment system infrastructure. The RBIs stratey has focused on instituting full-fledged liquidity adjustment facility, developing infrastructure, promoting transparency and initiating various measures pertaining to instruments for non-bank participants.

These measures have helped in containing volatality in the money market, improved significantly the depth and liquidity in the market, and also improved the signalling mechanism of monetary policy while ensuring financial stability. However, there is a need to develop the money market further, particularly in the context of a move towards fuller capital account convertibility.

SELF ASSESSMENT QUESTIONS

(1) What role does money market play in the development of an economy?

(2) Explain the structure of Indian money market with the help of chart.

(3) What are the sub-markets of the organised sector of Indian Money Market?

(4) What are the problems of the Indian Money Market?

(5) What reforms have been initiated by the Indian government to develop its money market?

(6) Discuss the role and function of DFHI.