CHAPTER I

INTRODUCTION

"In this world of change the explanation of facts sometimes lags far behind the actual development of facts; some phenomenon has changed, but the human mind has failed to respond to such change by preparing, in time, an adequate explanation of the new state of things, let alone of the change as such and its causes."


Background

Rapid advancements in theoretical and empirical techniques over the last decade have generated abundant interest in financial aspect of development both in academic and policy-oriented research. The role of finance in determining real sector activities was recognised quite early during the post World War II period. The interest in the financial aspects of economic growth stems from three major strands of literature. The first one relates to financial intermediation, which can be traced to Goldsmith (1969) and Gurley and Shaw (1955, 1957, and 1960). The second relates to financial repression and liberalisation (McKinnon and Shaw, 1973). Third relates to endogenous growth literature [Greenwood and Jovanovic (1990), Romer (1990), Bencivenga and Smith (1991), Roubini and Sala-i-Martin (1992)]. There are other dimensions as well such as, innovations, deregulation, diversification, reforms and policy [Tobin and Brainard, (1963), Spellman (1976), Mathieson (1979), Fama (1980), Horngren (1985), Gelb (1989)].

The development of the financial system as a whole plays a crucial role at the various stages of economic growth of any nation. A Financial System comprises financial institutions, instruments and markets. Financial institutions or financial intermediaries provide various types of services and their major function is to
mobilise savings and ensure efficient allocation of savings among various investment projects whereby the savers get attractive and assured returns. They also serve the needs of both lenders and borrowers and reconcile their divergent financial requirements. The financial institutions are also distinguished in terms of services provided by them. Banking institutions are unique as they provide payment facilities. Insurance institutions are also unique in one sense, as their services are contractual in nature. Term-lending institutions provide medium and long-term loans to various sectors of the economy. The non-bank financial intermediaries comprising a heterogeneous group of financial institutions, raise funds from the public either directly or indirectly, and lend to their members for a variety of purposes. Non-bank financial institutions can be broadly categorised into - (i) loan companies, (ii) investment companies, (iii) hire purchase companies, (iv) leasing companies, (v) mutual benefit companies, (vi) miscellaneous finance companies and (vii) housing finance companies. Other financial institutions provide specialised services such as, housing loan, consumer loans etc. In this process, financial intermediaries issue a variety of financial instruments, which take the form of currency deposits, shares, bonds, debentures, loans etc. Financial instruments serve as a means of exchange and trading of these instruments takes place in the financial markets. Financial markets provide an effective payment mechanism and credit delivery system and thereby facilitate transmission of funds from one sector of the economy to another. Brokers help the economic agents to borrow or lend in the organised markets to function in an efficient manner. They provide information to participants so that the lenders and borrowers and savers and investors strike a fair bargain. They also perform the vital task of putting actual lenders and borrowers in touch with each other. Thus, financial development connotes many qualitative changes viz., change
in the nature and functioning of the financial intermediaries, introduction of new
innovative instruments, and measures to develop the financial markets which may
be necessary due to various factors such as, technology, change in the market
preferences. With the emergence of new type of financial institutions or instruments
or markets, the structure of the financial system undergoes a rapid transformation
from a rudimentary to a modern one. Consequently, the interrelationships between
the financial sector and the real sector of the economy undergo a sea change,
which have a significant impact on policy, reforms and measures.

Problem Setting

From the above, it follows that a well-developed financial system is a
precondition for economic growth. The structure of the financial system becomes
important in determining the nature of growth. The Indian financial system structured
along traditional lines has made rapid strides in facilitating intermediation, innovation
of new instruments and institutions. The financial system is endowed with large
network of institutions and particularly, over the past two decades has witnessed
deregulation, liberalisation, diversification and innovation. The financial markets
have facilitated the mobilisation and transfer of financial resources for various social
and economic needs. The financial sector reforms have been undertaken in
sequence so as to further deepen and widen the system keeping in mind the
objectives of productivity and efficiency. With rapid advancement in technology, the
crucial need to integrate various financial markets across the country has been
recognised in order to signal monetary policy actions through the financial system.
A review of literature on the theoretical front, shows that the early contributions by Prebisch (1950), Hansen (1953), Nurkse (1953), Lewis (1954 a, b) and Kuznets (1955) demonstrate how financial stock accumulated could be utilised to stimulate real sector and less importance was given to savings and its efficient transformation to investment.

The traditional theoretical approach to monetary policy emphasised the medium of exchange function of money where there is no substitute for money. The concept of money did not go beyond coins, currency and demand deposits. Therefore, monetary policy was limited to the control of money supply, which also meant control of liquidity. Radcliffe Committee (1957) on the contrary emphasised the store value function of money that recognised its multifarious forms. The Committee also brought into the fore the role of financial intermediaries in bringing together the ultimate borrowers and ultimate lenders. The importance of financial assets other than money has also been recognised by considering a broader concept of overall liquidity which influences economic activity. The Committee addressed the question of whether money influenced economic activity directly or indirectly.

The original theoretical contributions on the linkages between financial development and economic growth suggest a significant positive relationship [Goldsmith (1969), Gurley and Shaw (1955), Patrick (1966), McKinnon and Shaw (1973)]. These economists recognised the role of financial intermediaries in economic growth. However, they differed in terms of transmission channels. The first four economists emphasised efficiency of investment. It was viewed that
financial intermediation can result in an increase in savings rate and thereby increase investment rate. This would, in turn, raise the volume of savings and investment. The channel of transmission was via the supply of credit through financial intermediaries that enabled increased investments and thereby facilitated higher economic growth. The crucial role of capital stock (accumulated through investments) in stimulating economic growth through financial intermediaries is highlighted. Thus, higher the intermediation level in the financial sector, higher is the saving mobilised and higher would be investments, which in turn will stimulate the real sector. Patrick (1966) viewed that in the early stages of the development a 'supply leading' phenomenon is likely to predominate as direct stimulus is required to mobilise savings to finance investment for growth. At a later stage the 'demand-following' phenomena would dominate.

On the other hand, McKinnon and Shaw (1973) stressed on financial liberalisation to achieve higher level of savings and thereby investments. The architects of financial repression assume that in a developing economy only commercial banks intermediate between savers and investors. It is also viewed that demand for savers and interest rate is positively related while the relation between loans and interest rates are negatively related. Under such conditions, the ceilings imposed on the interest rates are detrimental to economic growth and indicate the presence of financial repression. This leads to deterioration in the quality of investments. McKinnon and Shaw (1973), Galbis (1977) and Mathieson (1979) and Fry (1978, 1980a) concurred with the view that financial repression has a detrimental effect on economic growth. According to these economists, full liberalisation of financial markets in developing countries would contribute positively
to economic growth through increased interest rates. Initially, positive real interest rate stimulates level of savings and financial intermediation. This would increase the supply of credit to private sector and thereby enhance investments and growth. With rise in interest rates, quality of investments would improve, as low-yielding investment projects will be replaced by high-yielding projects. Thus, the main channel of transmission is the effect of real interest rates. The importance of suitability of a model that incorporates specific features of financial sector in developing countries along with financial liberalisation was recognised [McKinnon (1973)]. The increase in real interest rates raises holdings of savings in the banks and efficiency improves in the intermediation process with increase in individual's wealth with banks. It was strongly believed that financial liberalisation would have a positive outcome on the process of financial intermediation which would then contribute to higher investment and growth - called as the debt-intermediation view Shaw (1973). Besides, the institutionalisation of savings enable lowering of lending costs to investors due to efficient operations of specialised financial institutions.

The recent “endogenous growth models” investigate various channels through which financial intermediaries could improve allocation of capital and thereby accelerate economic growth. The emphasis again is on the efficiency of investment and not the volume. According to these economists, the financial intermediaries change the composition of savings in such a manner that enhances capital accumulation [Greenwood and Jovanovic (1990), Bencivenga and Smith (1991)]. In their framework, endogeneity of financial intermediation and growth is assumed [Greenwood and Jovanovic (1990)]. The financial intermediaries play an important role in collecting and analysing information so as to channel investible
funds to investment activities yielding highest returns. As this involves cost, they find a positive two-way causal relationship between economic growth and financial development. The process of growth stimulates greater participation in the financial markets thereby facilitating creation and expansion of financial intermediaries. Bencivenga and Smith (1991) consider uncertainty in the context of future liquidity needs. There is a choice between liquid asset and illiquid assets. In their model, even if aggregate savings are declining, economic growth increases on account of financial development, which has a passive effect on the efficiency of investment. Lucas (1988) contends that financial development naturally follows economic growth. King and Levine (1992) view that financial system can promote economic growth and provide theoretical exposition that links financial intermediation and economic growth. They observe that the influence of financial intermediaries on the level and rate of growth depends upon factors such as, capital accumulation process, investment in general human capital investments that enable production of variety of products, investments in firm specific human capital. Roubini and Sala-i-Martin (1992) recognises that financial intermediation is an important component of aggregate production function. They emphasised the role of government policy. Saint Paul (1992) shows that the financial markets affect technological choice. In the absence of financial markets, risk-averse individuals may prefer flexibility in technology rather than high productivity. Jappelli and Pagano (1994) argue that real interest rates cannot serve as the channel of transmission but are a poor indicator of financial intermediation and generally of financial development.

With regard to other aspects, Spellman (1976) finds that macroeconomic impact of financial innovation results in upward shift in the stock of demand for
wealth, due to increased asset liquidity. It also reduces the dispersions in real yield on account of improved investment allocations. The regulatory aspect of financial development in the context of effectiveness of monetary policy have been considered by Tobin and Brainard (1963), Diamond and Dybvig (1983), Fama (1980, 1983), Horngren (1985), and Romer (1985). It is viewed that in some of the developing economies, the regulatory measures are generally selective and are limited only to the banking financial intermediaries. The existence of other financial intermediaries, which are outside the central bank's control, sometimes offset the direct effects of regulation. Diamond and Dybvig (1983), in a seminal paper, consider financial intermediaries such as, banks, to create liquidity by providing risk-sharing arrangements to insure against random consumption needs of depositors. Ramakrishnan and Thakor (1984) develop a model that provides a rationale for the emergence of financial intermediaries, viz., their ability to reduce information production costs. Haubrich (1989), in an information-based banking model, using Diamond's (1984) delegated monitoring model is concerned with the consequences of entering into relationship between bank structure and policy. Haubrich's model is an improvement over single-period general equilibrium banking models of Diamond and Dybvig (1983), Diamond (1984), Bernanke and Gertler (1989).

Corsepius (1990) adopts a portfolio model based on demand theory and asserts that financial sector can play an important role in the mobilisation of domestic resources and assures their efficient use in the case of Peruvian economy. Selective reform induces changes in the level and structure of financial savings. Due to differences in maturities and reserve requirements, growth of various financial assets does not contribute the same kind of expansion in loanable funds. On the
contrary, Stern (1991) views that while the financial markets are helpful at the initial stage of economic development, they are not essential for growth. Ruminating on the performance of differently regulated financial institutions, Steinherr and Huveneers (1994) explore the question why regulatory approaches differ. Berthelemy and Varoudakis (1994) illustrate a case of multiple endogenous growth equilibria that is characterised by low or high real growth in accordance with the level of development of the financial sector. This results in threshold effect in economic growth and their omission would lead to specification errors in econometric estimation of growth equations. Johnston and Pazarbasioglu (1995) dealt with the role of financial reforms to promote growth. They find that financial reforms have structural effects and the financial variables and reforms are important determinants of growth. However, the impact of reforms depended on whether the country experienced financial crisis and the quality of reforms.


With regard to financial indicators, Goldsmith (1969) used financial ratios for the purpose of analysis and identified the ratio of total financial assets to National wealth as an important indicator of financial development. McKinnon and Shaw (1973) recognised the importance of ratio of financial investment to total assets of financial Institutions or total financial assets. Fry (1988) used ratio of broad money to nominal Gross Domestic Product (GDP) as a proxy for financial development. Gelb (1989) used real interest rates and monetary aggregates as an indicator of financial development. Ghani (1992) used ratio of total assets of the financial system to Gross Domestic Product. De Gregorio and Guidotti (1993) used ratio of bank credit to private sector to Gross Domestic Product. Morriset (1993) uses domestic credit by public sector. King and Levine (1993 a, b) adopted several indicators viz., ratio of M1 to GDP; ratio of liquid liabilities; ratio of quasi-liquid
liabilities and ratio of claims on the private sector by the Central Bank and deposit Money with banks to GDP to measure size. The relative importance of commercial banks and central banks was measured by ratio of central bank domestic assets to GDP; ratio of Deposit Money Banks Domestic Assets to GDP; and ratio of Deposit Money Banks Domestic Assets to Deposit Money Bank plus Central Bank Domestic Assets. The assets distribution was measured by the ratio of claims on the Non-Financial Private Sector by the Central banks and Deposit money Banks to total domestic credit. In order to measure empirical relationship between interest rates and growth, a repressed interest rates variable was used. The difference between the lending rate and the deposit rate was also used as another measure. Pill and Pradhan (1995) used broad money, narrow money, bank credit and real interest rates as indicators of financial development and for growth use per capita Gross Domestic Product as a proxy.

As regards to empirical results, Patrick (1966) and Goldsmith (1969) postulated a positive bivariate relationship between financial interrelations ratio and economic growth. Gupta (1984) found support to 'Supply Leading Hypothesis' (SLH) in the case of 14 developing countries. Jung (1986) and St. Hill (1992) found a moderate support for 'SLH' and a close support for Demand Following Hypothesis (DFH) for developed nations. DeGregorio and Guidotti (1993) found that the ratio of bank credit to private sector to GDP is significantly and positively related in the growth equation on a large cross-country sample but is negatively related while using panel data for Latin America. The main channel of transmission from financial development to growth is the efficiency of investment rather than its volume. King and Levine (1993 a, b) find that many financial performance indicators are
significantly correlated with growth. Empirical relationship between growth and measures of asset distribution remains significant even when the regressions simultaneously include measures of overall financial size. Later (1993c), they find that in the cross-country analysis, financial system indicators tend to be robustly correlated with growth only because they are highly correlated with the ratio of national investment to Gross Domestic Product while in the pooled cross-country time series analysis they are linked through both investment and efficiency channels. Ghani (1992) obtained significant positive coefficients for human capital measured by number of years of schooling and financial development. However, he obtained negative coefficient while using per capita real Gross Domestic Product.

Morisset (1993) found that the crowding out of private sector funds with financial liberalisation increasing demand for domestic credit by public sector does not result from a change in government's behaviour but from a shift in the portfolio of private agents. Pill and Pradhan (1995) find that financial deregulation affects financial variables changing their indicator properties and usefulness as intermediate targets. They also find that private sector credit aggregate is the preferred financial indicator during the period of ongoing financial liberalisation. Each indicator is affected differently depending upon the institutional background and the extent of deregulation. It is also found that in Asia where the financial liberalisation is strong, there is a weak evidence of preference to credit as a financial indicator. Contrary-wise, in Africa where financial liberalisation has failed to develop the financial system, the behaviour of financial indicators is erratic and there is no guide to economic activity.
From the above studies, it is learnt that the question of causality remains unresolved till date and as these have far-reaching policy implications that the subject in literature has time and again gained prominence. As it is yet to be established which proceeds first, some of the economists have simply assumed that financial development leads to economic growth. In reality, financial and real sector interacts during each stage of development and hence there is no one way relationship between the two. In the context of financial deregulation, liberalisation, innovations and reforms, the extant studies ignore factors such as, capital account convertibility, foreign capital flows, increasing role of private sector investments, role of government borrowing, increasing role of non-banks vis a vis competitiveness, ownership and efficiency of the banking system and the need for sequencing reforms for attaining macroeconomic stability.

With regard to the issue of empirical relationship between finance and growth, there has been a wide range of empirical research studies employing different models, a variety of variables and a wide range of econometric techniques. However, their results are variegated and contrast. Rummaging through the empirical literature showed that economic theory developed over the last three decades does not firmly affirm the causal relationship between financial development and economic growth.

On the empirical front, Chandavarkar (1992) observes that financial ratios do not figure even in the pioneering list of 'Great Ratios in Economics' of Klein or in the latest Simon's, 'The Great and almost Great Magnitude in Economics" which
include real risk-less rate of interest, rate of return on common stocks but leaves out significant ratios of monetisation and financial intermediation.

It is evident from the above analysis that the empirical studies have been either cross-country or country-specific oriented towards developed or developing countries. Secondly, depending upon the availability of data, the various econometric techniques have been applied. Thirdly, only in the recent studies, where data are available for long interval of time, latest econometric techniques have been applied. It has been felt by most of the researchers such as, Jung (1986), Gertler (1988), Ghani (1992), King and Levine (1993a) that a country specific study would be a promising area of research and would provide rich insights into the linkages between real and financial sectors. Gertler (1988) observed that research in macroeconomic theory has focussed its attention on exploring the possible links between financial system and aggregate economic behaviour. The growing interest in the topic stems from two reasons viz., new empirical research and progress in theory. Hermes (1994) explicitly contrasts different schools of thought with particular reference to their relevance to developing countries. From these two excellent surveys, it implies that emphasis was placed on importance of financial intermediation for economic growth. The analysis in most studies centered on the nature of causal relationship between financial development and economic growth. Lastly, with development of new econometric techniques, it was important to check their empirical validity.

In sum, numerous studies have dealt with various aspects of relationship between financial and real sector. At the grass-root, studies have tried to explore
whether financial deepening leads to improved growth and analysed the strength of this relationship. The other aspect is the identification of channels of transmission from financial intermediation to growth. While Goldsmith (1969) emphasized the efficiency of investment, the advocates of financial liberalisation emphasized in increasing saving and hence investment.

**Objectives of the Study**

Keeping in view the above limitations and gaps in the extant literature, the objectives of the present study are:

1. To review all aspects of financial development in India from 1950 to 1997 and identify structural breaks. Besides, the aim is also to historically trace the major changes that have taken place in the Indian financial sector;

2. to review and make a comparative analysis of performance of various groups of financial intermediaries in India and to identify trends and patterns in financial ratios over the years. Over the last four and half decades, new financial institutions have emerged having different functions and regulatory framework. Thus, the aim is to present an analytic study of the changing role of financial institutions in a developing country in the process of planned economic development. The study would cover the entire gamut of financial institutions with emphasis on financial assets;

3. to identify the determinants of indicators of linkages between financial development and economic growth;

4. to examine the causal linkages between financial sector indicators and real sector. In India, Investment as a financial asset is the driving force behind financial development. In the context of deregulation, liberalisation and financial reforms, private investment has become a crucial component of financial development. With
monetary policy aiming to ease liquidity conditions through a reduction in the statutory reserve requirements, more funds are now available to the private sector. In this context, the aim is to examine the crowding in effect of public investment on private investment, and

5. to suggest policy implications and future research agenda.

Methodology

Simple ratios, percentage methods and trend analysis have been adopted to identify the trends and patterns of various indicators of financial development. The method of Ordinary Least Squares (OLS) has been used to identify determinants of indicators of financial development. Multiple Cointegration analysis (the details of which, is presented in Chapter VI) has also been used to examine the relationship between the financial sector and real sector.

Annual time series data have been used with respect to all financial institutions. However, the break-up of annual data giving detailed information was not available in most of the financial institutions. Therefore, it was felt that the important macro financial trends need to be presented so as to explore whether the trends in the annual data correlated with the actual economic developments during the benchmark years at major turning points in the financial history of India. In India it has been found that the structural factors are more dominant than cyclical factors. On this basis, three major structural breaks in the financial sector have been identified. Therefore, the entire study period is classified into:
(i) **Pre-nationalization phase**: This phase begins from 1950-51 and ends in 1968-69. The first period marks the beginning of Planning in India and also the true initiation of financial development in India, with the establishment of various financial institutions, nationalisation of the Life Insurance business etc. It coincides with the completion of the first three five year plans, the annual plans and also the Pre-war period.

(ii) **Post-nationalisation phase**: This phase covers the period 1969-70 to 1985-86. The second period portrays the period aftermath of two wars, plan holiday, and the nationalisation of the major 14 commercial banks.

(iii) **Liberalisation and reform phase**: This phase starts from 1986-87 and ends in 1996-97. The third period marks the period during the post oil shock, beginning of liberalisation and deregulation, the era of reforms and post reform period.

**Time Domain and Data Sources**

The study covers the period 1950 to 1997 in order to trace historically institutional and other structural changes in the Indian economy. The main study attempts to describe the trends and empirically analyze the growth of financial intermediaries and highlight their critical role in the Indian financial system. As pointed out by Goldsmith (1958), one of the important aspects of the growth of financial intermediaries is the proportion of national wealth or assets administered by these institutions. Since they determine how capital expenditures are financed.
and shifts in the asset ownership takes place from the economist's point of view, "both are of importance in directing the flow of saving into investment and possibly even in influencing its size. They thus ultimately bear on the fundamental relationship between the country's financial organization and the rate and pattern of its economic growth" (Goldsmith, 1958). Therefore, this study focusses its attention on the asset-side of financial intermediaries. The data used in this study have been compiled from the available well known various publications such as, Economic Survey, Government of India, Reserve Bank of India, Report on Development Banking, Industrial Development Bank of India etc. For the present study, a wide range of financial institutions has been covered for the purpose of highlighting the changes in the institutional structure. These broadly include banking intermediaries, all India financial institutions, mutual funds institutions and non-banking financial institutions.

Limitations of the Study

As far as possible, original published data have been used. However, wherever there have been gaps, it has been filled in with estimates based on trend values. The data on assets are at nominal face values and their valuation aspect has not been considered. The data on assets of banking system have been compiled from various Reserve Bank of India publications. In the case of other institutions such as, Industrial Development Bank of India (IDBI), Industrial Financial Corporation of India (IFCI), Unit Trust of India (UTI), Life Insurance Corporation of India (LIC), General Insurance Corporation (GIC) etc., the data have been compiled from their respective publications and various other published sources. The data compiled does not eliminate inter-institutional flows as the asset of one institution is
a liability of another. In the present study, financial and investment companies are covered based on information and data available in the annual surveys of Reserve Bank of India. However, one of the limitations of these surveys is that the coverage of the companies varies in terms of number, size etc. and hence the data are strictly not comparable. It is also assumed that the accounting identity, viz., assets equal liabilities holds good for all financial intermediaries.

It is of interest to note that Goldsmith (1958) has omitted investment banking institutions including security brokers and dealers and financial companies on the ground that these institutions comprise mostly of either equity or funds supplied by other financial intermediaries, primarily commercial banks. Moreover, combined balance sheets were not readily available. The study omits non-financial companies as its focus is on financial institutions. Besides, it omits the unorganised sector due to lack of adequate data and it is assumed that assets of these omitted institutions are not likely to exceed at the most a maximum of 5 per cent of the assets of all financial institutions and their omission would not significantly affect the major trends with which the study is associated with.

With regard to the application of the ordinary least square method, it has simultaneous equation bias. The multiple cointegration method (Johansen, 1988) involves lot of time in formulating the dynamic model in terms of which the deterministic components viz., intercept, trends and dummy variables enter. The correct lag length for the vector autoregression needs to be set. Besides, all the available information has to be used while testing for the reduced rank and thus the number of cointegration vectors in the system. The issue of modelling the I(2)
system when there are $I(2)$ variables in the model arises and it becomes more complicated. The application of the standard Johansen procedure that caters to $I(1)$ and $I(0)$ variables will not provide the necessary stationary vectors. When $I(2)$ variables are present, it should be replaced with an $I(1)$ alternative through some form of differencing (Johansen, 1994)

**Scheme of the Study**

The present study consisting of six Chapters is schematised as follows:

Chapter I gives a brief introduction and discusses the major issues pertaining to our study. Besides, it deals with the objectives, methodology, limitations and scheme of the study.

Chapter II presents a survey of the literature pertaining to linkages between financial sector development and real sector in a chronological order.

A review of the structure of the financial system in India including the structural shifts and other aspects of financial development in India is presented in Chapter III.

In Chapter IV, a comparative analysis of different financial intermediaries in India in relation to their financial ratios and regulatory framework is discussed. Besides, the determinants of investment and credit are also examined in this Chapter.

Chapter V discusses the linkages between financial and real sectors in India.

The summary and concluding observations of the present study are presented in Chapter VI.