Chapter - 1

Introduction

1.1 India’s Economic Development Strategy:

On the eve of India’s independence in 1947, Indian economy was underdeveloped and backward. British rule destroyed local industries and reduced it to the supplier of raw materials and the importer of almost all types of manufactured goods. The industries which were developed by the British, were to meet their colonial needs to maintain army, police and local administration, and export of raw materials and cheaper goods. Two hundred years of colonial rule plagued the country in all dimensions: poverty, illiteracy, poor health facilities, stagnant agriculture, underdeveloped industry and infrastructure. National freedom movement raised the expectations of the people regarding their economic emancipation. Political leaders started discussions on types of development strategy which will be most suited to the Indian conditions for faster development. Congress party established National Planning Committee in 1938 under the chairmanship of Sh. Jawaharlal Nehru to work out a comprehensive strategy of economic development in India. Industrialists of the country also proposed a development strategy in which the state and the public sector were called up on to play an important role. It was popularly known as Bombay Plan or Tata-Birla plan in 1944.

India under the leadership of Jawaharlal Nehru opted for planned economic development. It was widely accepted that for the industrial development of a country of India’s size, large amount of machinery and equipment were required. India could not afford to depend on imports as the required foreign exchange was not available. Therefore, basic and heavy industries were proposed to be established within the country. It was further realized that to establish basic and
heavy industries huge amount of investment resources and technology were required, for which adequate private capital was not forthcoming. Secondly, basic industries like Coal, Iron and steel, electricity generation plants and Cement etc. required a long gestation period to start production. These industries required large investment and were risky as adequate market demand may not be there in the initial stages of development. Therefore, it was decided by the government to establish basic and heavy industries in public sector. The Public sector was assigned a crucial role of developing industrial base of the economy as well as the basic infrastructure including road, rail, air transport, irrigation, education, health, etc. Planning Commission of India was established under the chairmanship of the Prime Minister in 1950. The first five year plan commenced in 1951. It was primarily formulated to overcome the problems created by partition of India with an emphasis on agriculture. Effective plan was the Second Five Year Plan (1956-61) which laid the foundation of industrialization in India with the establishment of heavy and basic industries in the public sector. Industrialization in India was governed by Industrial Policy Act, 1956 in which all industries were divided in to three schedules. As per Schedule A, some industries like Iron and Steel, Coal, Atomic Power, Defence, etc. were to be established exclusively in public sector. Schedule B included the industries which could be established in public as well as in private sector and Schedule C included industries which were exclusively for the private sector. Industrial Policy Act 1956 continued to guide India’s industrial development for the next 30 years with some minor modifications. This industrial policy led to emergence of quota-permit raj and consequently industrial development started stagnating. In 1980s economy started opening up to capital imports and extending licensed capacity for the private sector. In 1991, the economy was further opened up by further liberalizing economic policy and private capital was given more free hand. The process of globalization of Indian economy was encouraged by inviting foreign capital (Kumar, 2013), (Basu, 2007).
1.2 Financing Economic Development:

Role of finance and financial institutions in economic development needs no emphasis. Financial institutions provide various types of financial services to individuals as well as various stakeholders who may be involved in various economic activities. Commercial banks and Investment banks undertake such activities. Economic development activities require relatively longer time period to become economically viable e.g. repayment period of a road, irrigation project, iron & steel company, coal mining project, petroleum development, electricity generation hydro or thermal project, etc. is relatively longer. These projects are relatively risky in terms of investment. However, these projects are essential for economic development of a country. Commercial banks may not be forthcoming adequately to meet long term resource requirement of these sectors of the economy. To meet these financial requirements, Development Financial Institutions (DFIs) were established. Most of these institutions were established by the national governments or were promoted by the government.

Historically, France government was the first to establish ‘Societe Generale pour favorser l’Industrie National’ in the year 1822 for mobilizing resources for industrialization. Following success of this society, first investment bank was established in France in 1848 to finance railways in Europe. Development banks in other parts of the world emerged later. Experience of economic development in Europe shows that development banks had played significant role in the industrialization of these countries. National priorities of the government and private commercial banks may differ, in such a state of affairs, government sponsored development banks play a critical role in the development of critical areas of national significance.

When India became independent, economic development became top priority on the economic policy agenda of the central government. To meet requirement for financial resources, urgency for establishment of development financial institution was felt on a priority basis. Government of India established
‘Industrial Finance Corporation’ in 1948 through an Act of the Parliament. To meet financial needs of state governments for economic development, State Finance Corporations Act was passed in 1951 to empower state governments to establish their own financial institutions. To meet capital requirements of private sector, an institution, Industrial Credit and Investment Corporation of India (ICICI) was established in 1955. ICICI was organized as a privately owned corporation which was facilitated by the World Bank to promote private sector investment. To further strengthen capital markets, Life Insurance Corporation was established after nationalization of life insurance business in the country in 1956. Unit Trust of India (UTI) was established in India in 1964 to mobilize small savings of individual persons by selling its units ensuring safety, liquidity and profitability. To give major push to industrialization in the country, Reserve Bank of India established Industrial Development Bank of India (IDBI) as its subsidiary to co-ordinate the functioning of all the smaller financial institutions and supplementing their financial resources and incentivizing credit to projects of national significance. IDBI was restructured and taken out of the control of Reserve Bank of India in 1976. A number of specialized development financial institutions were established in due course of time (Srivastava, 1996).

1.3 Electricity in Development:

No activity is possible without use of energy. Nature provides energy to plants and animals in their natural habitat. Human beings transform what is provided by nature in to various forms of energy for their use in households, agriculture and industrial production. Traditional sources of energy were wood, agricultural waste and animal waste. Now, major sources of energy are: coal, petroleum and electricity. These energy resources are not evenly distributed over earth. Coal mines are located in certain pockets in a country. Distribution of petroleum resources is also very uneven in various countries in the world. Hydro power generation is location specific. Therefore, energy has to be transported over long distances. Development of energy resources requires heavy investment, it is
technology intensive and projects have long gestation period before production unit becomes commercially viable. Developments of energy resources need to be regulated by the government as most of the resources are exhaustible like coal and petroleum. Their production may damage environment and release harmful gases in the atmosphere and a major source of global warming. However, their use is basic to human existence and needs long term planning.

Electricity is one of the most versatile form of energy. It is used in households and other places for heating and lighting. It is used in agriculture and industry for operating the machines and other related uses. Major sources of electricity generation in India are hydro, coal, gas, and nuclear resources. Some renewable sources like wind, sun and agricultural waste are also to be experimented with. Commercially viable technologies are yet to be developed. Generation, transmission and distribution of electricity need large scale investment, and investment is of long gestation period. Construction of a generation plant may need three to ten years, and life of the plant may be 25 to 50 years or more. Returns have to be calculated over such a long period of time. Electricity has to be transmitted over long distances and its construction is capital intensive. The electricity distribution system also needs huge investments. Therefore, financing of such projects is a big challenge.

As stated earlier, India initiated a development strategy based on basic and heavy industries. A large number of industries are coming up in private sector also. All industries require electricity for their operations. Agriculture development requires water for irrigation for which electricity operated tube-wells were dug up. Services sector also created huge demand for electricity. Domestic source of energy were wood, coal and oil which are being replaced by electricity. All these activities have led to a huge increase in demand for electricity. In fact, to ensure adequate supply of electricity at affordable prices has become a great challenge for the government.
When India became independent in 1947, total installed generating capacity of electric power was 1362 MW. It was just not adequate. Government of India passed Electricity (Supply) Act, 1948 which provided for development of electricity generation, transmission and distribution in the public sector for which a number of public institutions were established. Under the Act, Central Electricity Authority was created to plan and co-ordinate power sector projects in the country and State Electricity Boards were created in the states. Later National Thermal Power Corporation (NTPC) and National Hydro Power Corporation (NHPC) were established in 1975 at the national level as initiative of states was not adequate. The Electricity (Supply) Act has been replaced by Electricity Act 2003 in which there has been provision for privatization of generation, transmission and distribution systems. Electricity Regulatory Commission Act 1998 had already provided for establishment of regulatory commissions at the central and state government levels.

A huge plan for electrification at a fast rate was visualized and implemented. In fact, electricity supply was one of the major sectors, which was accorded highest priority in terms of investment allocation under plan after plan. Due to concerted efforts by the central and state governments, total electricity generating capacity as on October 22, 2014, has been increased to 2,54,049 MW. This increase in generating capacity is very impressive by any standards. Still, supply has not matched demand in India, year after year. In fact, inadequate supply of electricity is one of the major constraints on accelerated industrialization of India. During 12th Five Year Plan period (2012-17), an additional generating capacity of 100,000 MW has been planned. By the end of FY 2022, an additional 1,80,000 MW will be required. Along with financial resources required for addition to generation capacity, an equivalent amount of financial resources may be needed to create adequate transmission and distribution network as investment ratio usually are in 2:1:1 ratio. To meet these targets, huge financial investment will be required which government cannot
mobilize from its own resources (Kaushik Basu ed.2007, and various Economic Surveys of India).

1.4 Power Finance Corporation:

In the initial phase of electrification in India, central and state governments depended on their own budgetary resources, various other sources of financing the plans and borrowings from commercial banks, development financial institutions, LIC and foreign development financing institutions like World Bank, etc. All these sources proved inadequate; therefore, it was decided to establish a development financial institution dedicated exclusively to the power sector.

Power Finance Corporation (PFC) was established in 1986 as a Financial Institution (FI) dedicated to power sector financing. Over time the Power Finance Corporation has emerged as the major financial institution for funding generation, transmission and distribution projects in India.

PFC has been committed to the overall development of power sector and its associated sectors. The corporation was notified as a Public Financial Institution in 1990 under the Companies Act, 1956. The corporation has been registered as a Non Banking Financial Company- Infrastructure Finance Company by the Reserve Bank of India. It has been conferred with the status of Nav Ratna PSU by the Government of India in 2007.

Mission of the Corporation is to excel as a pivotal developmental financial institution in the power sector committed to the integrated development of the power and associated sectors by channelising the resources and providing financial, technological and managerial services for ensuring the development of economic, reliable and efficient systems and institutions. CORPORATE VISION is to be the leading institutional partner for the power and allied infrastructure sectors in India and overseas across the value chain (pfc website).
Main objectives of the corporation are: to provide financial resources and encourage flow of investments to the power sector and its associated sectors; to work as a catalyst to bring about institutional improvements, in streamlining the functions of its clients in financial services, technical and managerial areas to ensure optimal utilization of available resources; to mobilize various types of resources viz. domestic as well as international sources at competitive rates; to strive for up-gradation of skills in the power sector for effective and efficient growth of the sector, and to maximize rate of return through efficient operations and introduction of innovative financial instruments and services for the power sector.

Main clients of PFC are: State Power Utilities (generation, transmission and distribution companies/corporations/erstwhile State Electricity Boards), Central Power Utilities, Joint Sector Power Utilities, Joint Power Utilities, Power Manufacturers, and Private Sector Power Utilities.

PFC provides different types of services like financial services, institutional development services and other services. The finances of the corporation are also disbursed through the different schemes under these services, apart from the services of the type of offering technical guidance.

The major finances provided by it are targeted towards State Electricity Boards (SEBs), State Generating Companies (SGCs) and Independent Power Producers (IPPs); and to develop 16 Ultra Mega Power Projects (UMPPs) for which PFC is the nodal agency. Generation Projects constituted around 83% of PFC’s loan book as on March 31, 2012, Distribution being 4%, Transmission 8% and others 6%. Typically tenure of loans for generation projects is around 15 years including 3-4 years of implementation and 6 months of moratorium. Government of India has nearly 74% equity shareholding in the company. Investment and Credit Rating Agency (ICRA), an equity research service has assigned the Fundamental grade ‘4’ and the valuation grade ‘A’ to PFC and this implies strong financial position of the corporation.
Financial health of such a development finance company is of great national significance. Therefore, we propose to examine its financial health and its contribution to the development of power sector in India.

1.5 Objectives of this study

1. To examine the technical and financial performance of India’s power sector and to assess financial resource requirement for its development

2. To study the management and organizational structure of the Power Finance Corporation

3. To examine the structure and sources of financial base of the PFC and its efficiency of use

4. To critically evaluate the financial performance of the Power Finance Corporation

5. To study credit policy of PFC for its various lending schemes for Electricity Generation, Transmission, and Distribution projects

6. To suggest some policy implications for future financing of power projects

1.6 Methodology:

Financial performance analysis of any public development financial institution does not go the same way as that in case of other commercial undertakings, private companies or corporations. The distinguishing features of financial institutions or loan granting corporations are the dependence on governments and external donors for resources at concessional rates, availability of large subsidy in comparison to non-public institutions, offering of narrow range of financial services and political pressure to lend to risky or less creditworthy borrowers with consequent default rates running high. These financial institutions have access to government resources generally at low cost; it results in less pressure to be operationally efficient, to strictly enforce loan recovery or to
mobilize funds. They generally serve as intermediaries between government and the units, utilities or manufacturers in power sector.

Moreover, owing to the orientation and nature of such financial institutions, it would be undesirable to evaluate their performance solely in terms of their profitability and efficiency. Given their wider social responsibilities and the use governments make of them in carrying out macroeconomic policies (which are likely to conflict with profitability and other operational concerns), it may be misleading to assess their performance solely or even mainly in terms of earnings performance. In private funding institutions, profitability may be a suitable criterion to judge efficiency and effectiveness.

The degree of earnings in such public financial institutions is the spread available from funding costs and lending rates, which in turn are influenced by the policies of the government. The capital requirement is met with from government and low cost funds from central bank. The lower costs are aimed at compensating higher costs and greater risks in lending.

Thus, assessment of their performance in terms of earnings may be reflective of government policy in certain respects. It also ignores the wider economic and social responsibilities of the banks. Therefore, prudent measures need to be selected to analyze the financial performance of any public financial institution. The measures selected and employed in respect of Power Finance Corporation are as follows:

1. **Funds Mobilization** (Proportions of funds from various sources)
2. **Quality of Lending** (Formal credit, risk concentration, portfolio classification, interest accrual and provision for loan losses)
3. **Capital adequacy analysis** (Capital as a percentage of total risk-weighted assets)
4. **Liquidity analysis** (Ability to meet debts as they fall due)
5. **Earnings performance analysis** (Generation of adequate returns on assets and equity)

**Quality of Lending:**

Average amount of loans disbursed = Amounts of loans disbursed / No. of loans disbursed

**Capital Adequacy:**

Capital Adequacy = Equity Capital / Risk Weighted Assets

**Earnings Performance Analysis:**

Return on Assets = Profit before Tax / Average Total Assets

Return on Equity = Profit after Tax / Share Capital plus Reserves

Interest Spread = (Interest + Fees on loans) * 100 / Total loans - Interest expense * 100 / Interest bearing liabilities

Net Interest Margin = (Interest Income - Interest Expense) * 100 / Average Total Assets

The major focus of such methods of performance evaluation would rest on examining the trend of financial parameters or variables or ratios over the time. Therefore, a time-series graphs or plots are generated for examining and explaining the variations and general trends of the behavior of suitable financial parameters. Further use of advanced econometric methods is limited due to financial figures being highly dependent and mostly derived from one another. They have a high auto-correlation and violate assumptions of non auto-regression. Also, the present study does not lay claim in making any forecast in terms of financial parameters, rather its focus is to explain and facilitate underlying phenomena concerned with the financial performance of PFC.
In this way, the methodology is based on descriptive statistical methods and secondary data is used for the purpose of analysis. Analytical observations are made, wherever required to offer explanation. The study needs to calculate various financial ratios derived from financial figures presented in the balance sheets of the corporation for different years. Ratio analysis is one of the important tools of financial analysis and throws light on the trend behavior of financial variable in more effective manner than other techniques like funds flow analysis or cash flow analysis.

**Important aspects of ratio analysis are:**

(a) Ratio analysis is a powerful analytical tool for measuring performance.

(b) Ratio analysis concentrates on inter-relationships among figures in financial statements.

(c) Ratio analysis helps analyze past performance & make future predictions.

(d) Ratio analysis is useful to shareholders & prospective investors (for investment), to bankers (to assess creditworthiness), to financial institutions (for project appraisal and to assess debt servicing capacity), to financial analysts (for making comparisons & recommendations), to credit rating agencies (for credit rating), to Government agencies (for review of performance) and to company management (for determining financial health and profitability).

**Factors affecting efficacy of Ratios are:** a norm or a target, previous ratios to assess trends, and inter-company comparisons.

**Limitations of Ratio Analysis:** Different companies use different financial bases and policies in their accounting statements making comparison difficult. Financial ratios cover only monetary aspects, Overuse of ratios can be dangerous as they are prone to manipulation. Ratios do not distinguish between changes in numerator or denominator, Ratios are interconnected hence they must not be seen in isolation.
In examining trends in ratios, there must be thorough examination for negative
trends and proper comparisons must be made. Inter-firm comparison is made
difficult due to use of different accounting policies. Standards for ratios are
different from industry to industry, therefore comparison is difficult. Past record
in terms of ratios is not indicator of future. There must be careful study in such
figures that have cause and effect relation. Accuracy of data is necessary to be
reliable. Ratios must be compared against a standard and not against past
performance when there is change in circumstances of company. Change in price
levels due to inflation distorts reliability of ratio analysis, and Ratio analyst must
have a thorough knowledge of methods of window dressing.

1.7 Data base & Period of Analysis:

Mostly secondary data has been collected from the following sources:

1. Annual Reports of the Power Finance Corporation
2. Operational Statistics of the Corporation
3. Ministry of Power and Reserve Bank of India documents
4. Centre for the Monitoring of Indian Economy (CMIE) data bases
5. Various websites of Government of India, RBI and PFC, etc.

Analysis of data for more than 20 years from 1991-92 to 2012-13 has been
undertaken in the study. The behavior of some of the key parameters is shown for
recent six years from 2007-08 to 2012-13.

1.8 Limitations of Methodology/Study:

The aforesaid methodology suffers from the following main limitations:

1. Financial parameters are not the sole outcome of firm's performance; they
   are at time dependent on the macro-economic environment and events.
   Therefore, to rely on them exclusively sometimes misses the point.
2. It is difficult to capture the regulatory aspects and their impact on financial performance, which is important as PFC is public financial institution.

3. There is lack of alternative benchmarks to compare the financial performance with other peer corporations, as PFC is the only one acting in this area with such objectives and operations.

4. The study is based on secondary data only. Primary data could not be collected from the officers of the PFC and the borrowers because of certain personal limitations.

1.9 Chaperisation Scheme: The study has been organized in to seven chapters.

The dissertation is divided into seven chapters. The first chapter documents the introduction and background of the study along with the objectives, methodology and limitations of such methodology. The second chapter surveys the literature and makes a relevant review of them. The third chapter provides details about power sector in India, its progress and the challenges that the power sector faces. The fourth chapter examines the development and functioning of Power Finance Corporation Ltd. and also discusses its management and organizational structure. The fifth chapter discusses the sources of financing and the credit policy of the corporation. The sixth chapter analyzes the performance of the corporation it terms of financial parameters and the contributions of power financing the power sector and execution of some of the Government of India’s power development programmes. The seventh chapter, which is the last chapter, provides summary of the study and draws conclusions for the future policies for financing of power sector in India.