

An analysis of the efficacy of financial system on corporate investment in India; A draft analytical methodology

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Abstract

The role of financial system in economic development is imperative. It is the life blood of any modern economy. Financial system diffuses finance into the entire body of the economy making possible the coherent synergy between allocation of resources and optimum level investment. But the financial system in India was somewhat tethered by way of pre-emption of resources and administered interest rate before 1991. The objective of financial sector reforms as part of the structural adjustment program was to enable the financial system to act as an essential conduit for augmenting investment. In this circumstance, an attempt was made to analyze the impact of capital market reforms on corporate investment behaviour in India. Here we present the methodology of the study conducted for the period 1983-2003 by dividing the temporal dimensions into the pre-reform (1983-1991) and post-reform (1992-2003) periods.

Keywords: capital market reforms, corporate investment, research design, pre-form investment, post-reform investment, investment behaviour, financing pattern

Introduction

An immature financial system is in itself an obstacle to economic progress^[1]. The efficacy of the financial system determines an efficient dispersion of saving among investment opportunities and thereby the rate of growth of output in an economy. The basic task of the financial system is to stimulate savings and its efficient allocation. The financial system of the rudimentary economy makes no attempt to stimulate private savings either by offering different kinds of financial products or by allowing an explicit rate of interest on financial assets. As a result, the propensity to save and the rate of growth of capital will be relatively low in such economies.

In the course of economic development, countries experienced more rapid growth in financial assets than national product. In US, it was only about one-half of the national wealth in 1880's, increased to 4.5 in 1967. In Japan, the ratio of financial assets to real wealth rose from 10 percent in 1885 to over 150 percent in the latter half of 1960's. In Soviet Union, the ratio moved up from 10 percent in 1928 to 35 percent during the same period. In still more developed countries during the second half of 1960's, it was 80-100 percent in France and W. Germany, over 200 percent in Switzerland and 215 percent in UK^[2].

In India, the development of financial system can be described in three different phases - (i) phase of transition: 1950-60, (ii) phase of expansion and diversification: 1970-1985, and (iii) phase of liberalization since 1980s. Financial strengthening, geographical expansion, financial efficiency and product diversification has taken place in the first two phases. As a result, public banks accounted for about 88% of all bank branches and provided 85% of all bank credits^[3]. A particularly important aspect of Indian financial market policies during this period was the use of credit controls in the form of pre-emption of bank resources,

directed credit and administered interest rates. The Cash Reserve Ratio (CRR) in the 1960s and 70s was around 5%, grew up to its legal upper limit of 15% in 1991. The Statutory Liquidity Ratio (SLR) rose from 25% in 1970 to 38.5% in 1991, just below the upper limit of 40%. Of the remaining resources, there were directed credit like priority sector lending, export credit, food credit, and other informal and formal pre-emptions. According to some estimates, "close to 75% of the total loan capacity of the Indian banking industry was in some way or another under control of the government"^[4]. As a result, Indian corporate sector was confronted with the problems of access to external finance and higher costs of finance which with deleterious impact on investment.

The studies and empirical evidence on financial sector reform and its impacts on resource allocation in India by Athey and Laumas^[5] (1994), Huisman and Hermes^[6] (1997), Ansari^[7], Joseph, Nitsure and Sabnavis (2002)^[8], Athukorala and Sen^[9] (2002), Seema Saggur^[10] (2005) were somewhat mixed and inconclusive in nature. In this background we make an attempt to analyse the impacts of capital market reforms on the investment behaviour of the private corporate sector in India.

The Research Problem

The private corporate sector has been playing an important role in the industrial development of India since independence. At the same time the financial sector which acts as facilitator for growth was overregulated. Credit control and administrative interest rate were the two most important regulations which had its impact on the availability of finance at a reasonable rate. So also, capital market was overregulated. Before the eighties, the most important component of gross resource mobilization by the Indian private corporate sector was corporate savings. Its

reliance on external sources was limited. It was observed that internal savings constituted 64.2 percent on the average in gross resources mobilized by the corporate sector in India during the period 1962-63 to 1975-76^[11].

It is in this background that the Government of India adopted radical changes in financial sector policies as part of the Structural Adjustment Programme and economic reforms. This was to enable the financial system to act as an essential conduit for optimum allocation of resources. This can have much impact upon the corporate investment and financing pattern in the post liberalization period. In this context a study on the corporate investment and financing pattern assumes significance.

Objectives

The specific objectives of the study are;

1. Examine the corporate investment and financing pattern at the aggregate level
2. Analyse the Corporate investment behaviour at the firm level
3. To analyse the Corporate financing pattern at the firm level

Hypothesis

Since 1990s, the Government of India liberalized the capital market as part of extensive liberalization programmes. This was to stimulate economic growth as the measures can augment savings and investment. Such policies on the one hand will lead to more efficiency and profitability of the corporate sector and on the other it will lead to more investment as cost of external capital is expected to decline and become more accessible. In this context, we have formulated the hypothesis that the capital market reforms in India since the early 1990s have not;

1. Increased efficiency and profitability of the corporate sector,
2. led to the decline in cost and availability of capital,
3. Promoted investment in the corporate sector.

Research Design

The study was built upon sound literature reviews which are classified into theoretical, specific and general titles based on the research and empirical works published in reputed books, journals, working papers, government and non-government reports and data sources. Aggregate and firm level analysis was pursued separately for analysing investment behaviour and financing pattern of the corporate sector. The temporal dimensions include overall (1983-2003), pre-reform (1983-1991) and post-reform (1992-2003) periods. The group characteristics based on industry groups and size groups were observed. The Industry-wise classification is based on the company classification of Bombay Stock Exchange (BSE). This is to avoid changes in the allocation of companies among different industry groups as the principal commodity changes over the period 1983-2003. The RBI pattern was followed for the size-wise grouping. The data of National Accounts Statistics (NAS), Reserve Bank of India (RBI), a uniform set of 150 Non-Government Non-Financial Companies selected from the Bombay Stock Exchange Official Directory (BSEOD) and the published data of the annual accounts of companies were used. In addition to the above sources, data of the Department of Company Affairs, Central Statistical Office (CSO), National Stock Exchange (NSE), MOSPI web site

and Securities and Exchange Board of India (SEBI) were also taken.

Aggregate Level Analysis

The study was focused to quantify the changes in the pattern of investment and financing of the private corporate sector in the light of capital market reforms since 1991. Data from National Accounts Statistics for measuring capital formation, specifically, Gross Capital Formation (GCF), Gross Fixed Capital Formation (GFCF), Net Capital Formation (NCF) and asset ratios in the public, private corporate and household sectors at the overall, pre-reform and post-reform periods at the current and constant prices were observed for analysing investment at the aggregate level. RBI data in respect of large Non-Government Non-Financial (NGNF) public limited companies (each with paid-up capital of Rs. 1 Crore and above) for varied sets of samples (ranging from 500 to 997) over the period 1983 to 2003 were used for studying financing pattern. Internal Finance, External Finance, Equity Capital, Debt Capital and Others were obtained from the combined balance sheet data of the companies published in the RBI Bulletin various issues.

Firm Level Analysis

To study the firm level investment behaviour, a uniform set of 150 Non-Government Non-Financial (NGNF) Public Limited Companies incorporated before 1980 was identified. These companies were selected from a total of 1605 such companies in a random basis from the Prowess data base. The catalogue of these companies was synchronized with a current list to avoid the changes in its name, merger and acquisitions. The balance sheet and profit and loss account data of these companies were obtained from Bombay Stock Exchange Official Directory (BSEOD). The BSEOD data for the period 1983-1999 for most of the companies and the annual accounts of companies published thereafter have been brought together to obtain the data base of the same set of 150 NGNF Public Limited Companies for the period 1983-2003. The data of Total Net Assets (TNA), Current Assets (CA), Net Fixed Assets (NFA), Other Assets (OA) and Plant and Machinery (P&M) were taken into account. Asset ratios at the Firm level overall, pre-reform and post-reform periods and the same for 10 industry groups and 5 size groups were computed.

Firm level financing pattern was analysed by computing financial ratios at the overall, pre-reform and post-reform periods and also for 10 industry groups and 5 size groups.

Tools of Analysis

For the purpose apart from working out the compound growth rate, Financial Management Ratios, Liquidity Ratios, Capital Structure Ratios, Activity Ratios and Profitability Ratios were computed. Weighted averages for debt and equity capital and step-wise multiple regression methods were used for estimating the behaviour of corporate investment in the pre and post-reform periods of the financial sector in India.

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