CAPITAL STRUCTURE : A SECTORAL CASE STUDY OF INDIAN CORPORATE (PERIOD- 2004-06)

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ABSTRACT

Since the objective of financial management is to maximize shareholder wealth, the key issue in the capital structure decision is: What is the relationship between capital structure and firm value? Alternatively, what is the relationship between capital structure and cost of capital? Remember that valuation and cost of capital are inversely related. Given a certain level of earnings, the value of firm is maximized when cost of capital is minimized and vice versa.

There are different views on how capital structure influences value. Some argue that there is no relationship whatsoever between capital structure and firm value; others believe that financial leverage (i.e. the use of debt capital) has a positive effect on firm value up to a point and negative effect thereafter; still other contend that, other things being equal, greater the leverage, greater the value of the firm.

Key Words: Capital structure, value of firm, leverage, growth & sectors.

Introduction

The term "Capital Structure" refers to the relationship between the various long-term forms of financing such as debenture, preference share capital and equity share capital. Financing the firm's assets is a very crucial problem in every business and as a general rule there should be a proper mix of debt and equity capital in financing the firm's assets. The use of long-term fixed interest bearing debt and preference share capital along with equity shares is called financial leverage or trading on equity. The long-term fixed interest bearing debt is employed by a firm to earn more from the use of these sources than their cost so a In other words, we can also say that, the choice of a firm's capital structure is a marketing problem. It is essentially concerned with how the firm decides to divide its cash flows into two broad components, a fixed component that is earmarked to meet the obligation towards debt capital and a residual component that belongs to equity shareholders.

Since the objective of financial management is to maximize shareholder wealth, the key issue in the capital structure decision is: What is the relationship between capital structure and firm value ? Alternatively, what is the relationship between capital structure and cost of capital? Remember that valuation and cost of capital are inversely related. Given a certain level of earnings, the value of firm is maximized when cost of capital is minimized and vice versa.

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SIGNIFICANCE OF OPTIMAL CAPITAL STRUCTURE:

The optimum capital structure may be defined as "that capital structure or combination of debt and equity that leads to the maximum value of firm." Optimum capital structure 'maximizes the value of the company and hence the wealth of its owners' and minimizes the company's cost of capital' (Solomon, Ezra, the theory of financial management). Thus, every firm should aim at achieving the optimum capital structure and then to maintain it.

The following considerations should be kept in mind while maximizing the value of the firm in achieving the goal of optimum capital structure:

(i) If the return on investment is higher than the fixed cost of funds, the company should prefer to raise funds having a fixed cost, such as debenture, loans and preference share capital. It will increase earning per share and market value of the firm. Thus, a company should, make maximum possible use of leverage.

(ii) When debt is used as a source of finance, the firm saves a considerable amount in payment of tax as interest is allowed as a deductible expense in computation of tax. Hence, the effective cost of debt is reduced, called tax leverage. A company should, therefore, take advantage of tax leverage.

(iii) The firm should avoid undue financial risk, attached with the use of increased debt financing. If the shareholders perceive high risk

in using further debt-capital, it will reduce the market price of shares.

(iv) The capital structure should be flexible.

Importance of optimal capital structure is in manifold. It is a form of financial Holy Grail. If we could establish rules for capital structuring which optimize firm value at all times then we would have collected our Nobel prizes, established a successful hedge fund (which would not have gone bust) and we would be sitting on the beach by now. To answer this question first, let us cite the example of GEC/ Marconi.

Market consensus is that this company failed to maximize shareholder value for years by being under-leveraged and then, in a frenzy of activity designed to address the "lazy balance sheet", rapidly became over-leveraged and so destroyed even more value. Either extreme can be painful for shareholders and potentially career-destroying for management. Hence, the quest for the holy grail of financial management: a balanced, optimal capital structure. To increase the return on owner's equity. It is true that capital structure cannot affect the total earnings of a firm but it can affect the share of earnings available for equity shareholders.

Objective of the Study: -

The basic objective of the study is as follows:

1) To know that which sector prefer more raising money from debts and which sector prefers more raising money by issuing shares.

Methodology of the Study: -

In the study five sectors were selected representating all the sectors of the economy including manufacturing and service. Five companies from each sector were then selected and their capital structure was studied in detail for a sample period of 3 years starting from the year 2004-06. Thus the study covers 25 companies of different sectors representating the overall Indian corporate sector. Finally applying various EDP methods the conclusion was drawn in the form of findings of the study.

Limitation of the Study: -

The basic limitations of the study are as follows:

1) It is assumed that there are five companies prevailed under one sector and therefore the policy regarding capital structure may differ from one company to another, which puts an effect on there respective sector.
2) The balance sheet and profit & loss account been taken from

Automotive Sector: -

One of the major industrial sectors in India is the automotive sector. In the recent past, the focus has ostensibly been on capital goods and engineering industries including auto industry. The high growth in automobile production continued during the year. The Government unveiled an "Automotive Mission Plan-2016" to make India a global hub of automobiles and auto components. Sontosh Mohan Dev, Minister of Heavy Industries and Public Enterprises handed over the document to the Society of Indian Automobile Manufacturers (SIAM) in New Delhi on 7th September 2006. The industry and other stakeholders were asked to consider the document at the earliest and give their valuable suggestions so that the Automotive Mission Plan can be formulated as early as possible. The vision aims at "India emerging as the destination of choice in Asia for the design and manufacture of automobiles and automotive components. The output of India's automotive sector will be US$145 billion, contributing to more than 10% of India's Gross Domestic Products (GDP) and providing additional employment to 25 million persons by 2016". The Government would play a key enabling role in facilitating infrastructure creation, promote country's capabilities, create a favourable and predictable business environment, attract investments and facilitate R & D. On the other hand, the role of industry would primarily be in designing and manufacturing products of world class quality standard, cost competitiveness, improving productivity of both labour and capital, achieving scale and R&D capabilities and showcasing India's products in potential markets. The Automotive Mission Plan is a goal for both Government and Industry.

One of the greatest challenges before the auto industry today is increasing labour productivity. Besides, the investment in R&D in the auto sector is not commensurate with its growth potential. In order to facilitate the R&D in this sector, the Ministry took an initiative to sponsor the "Indo-German Symposium on Alternative Drives and Fuels" on September 9, 2006. The Government also proposed to support those companies which would achieve substantial reduction in energy consumption and at the same time look for use of alternative fuels including hybrids.

FMCG Sector: -

Fast Moving Consumer Goods (FMCG), also known

as Consumer Packaged Goods (CPG), are products that have a quick turnover, and relatively low cost. Consumers generally put less thought into the purchase of FMCG than they do for other products. Although the absolute profit made on FMCG products is comparatively small, they are generally sold in large numbers. Hence profit in FMCG goods generally scales with the number of goods sold, rather than the profit made per item.

The FMCG product category generally includes a wide range of frequently purchased consumer products including toiletries, soaps, cosmetics, teeth cleaning products, shaving products and detergents, as well as other non-durables such as glassware, bulbs, batteries, paper products and plastic goods. FMCG may also include pharmaceuticals, consumer electronics, packaged food products and drinks, although these are often categorized separately. FMCG products can be thought of in contrast with consumer durables, which are generally replaced less than once a year (e.g. kitchen appliances).

The Indian FMCG sector is the fourth largest sector in the economy with a total market size in excess of US$ 13.1 billion. It has a strong MNC presence and is characterized by a well-established distribution network, intense competition between the organized and unorganized segments and low operational cost. Availability of key raw materials, cheaper labour costs and presence across the entire value chain gives India a competitive advantage. The FMCG market is set to treble from US$ 11.6 billion in 2003 to US$ 33.4 billion in 2015. Penetration level as well as per capita consumption in most product categories like jams, toothpaste, skin care, hair wash etc in India is low indicating the untapped market potential. Burgeoning Indian population, particularly the middle class and the rural segments, presents an opportunity to makers of branded products to convert consumers to branded products. Growth is also likely to come from consumer 'upgrading' in the matured product categories. With 200 million people expected to shift to processed and packaged food by 2010, India needs around US$ 28 billion of investment in the food-processing industry.

Pharma Sector: -

The Indian Pharmaceutical Industry today is in the front rank of India's science-based industries with wide ranging capabilities in the complex field of drug manufacture and technology. A highly organized sector, the Indian Pharma Industry is estimated to be worth $ 4.5 billion, growing at about 8 to 9 percent annually. It ranks very high in the third world, in terms of technology, quality and range of medicines manufactured. From simple headache pills to sophisticated antibiotics and complex cardiac compounds, almost every type of medicine is now made indigenously. Playing a key role in promoting and sustaining development in the vital field of medicines, Indian Pharma Industry boasts of quality producers and many units approved by regulatory authorities in USA and UK. International companies associated with this sector have stimulated, assisted and spearheaded this dynamic development in the past 53 years and helped to put India on the pharmaceutical map of the world.

The Indian Pharmaceutical sector is highly fragmented with more than 20,000 registered units. It has expanded drastically in the last two decades. The leading 250 pharmaceutical companies control 70% of the market with market leader holding nearly 7% of the market share. It is an extremely fragmented market with severe price competition and government price control.

The pharmaceutical industry in India meets around 70% of the country's demand for bulk drugs, drug intermediates, pharmaceutical formulations, chemicals, tablets, capsules, orals and injectibles. There are about 250 large units and about 8000 Small Scale Units, which form the core of the pharmaceutical industry in India (including 5 Central Public Sector Units). These units produce the complete range of pharmaceutical formulations, i.e., medicines ready for consumption by patients and about 350 bulk drugs, i.e., chemicals having therapeutic value and used for production of pharmaceutical formulations.

Following the de-licensing of the pharmaceutical industry, industrial licensing for most of the drugs and pharmaceutical products has been done away with. Manufacturers are free to produce any drug duly approved by the Drug Control Authority. Technologically strong and totally self-reliant, the pharmaceutical industry in India has low costs of production, low R&D costs, innovative scientific manpower, strength of national laboratories and an increasing balance of trade. The Pharmaceutical Industry, with its rich scientific talents and research capabilities, supported by Intellectual Property Protection regime is well set to take on the international market.

Refineries Sector: -

The Indian Petroleum industry is one of the oldest in the world, with oil being struck at Makum near Margherita in Assam in 1867 nine years after Col.

Drake's discovery in Titusville. The industry has come a long way since then. For nearly fifty years after independence, the oil sector in India has seen the growth of giant national oil companies in a sheltered environment. A process of transition of the sector has begun since the mid nineties, from a state of complete protection to the phase of open competition. The move was inevitable if India had to attract funds and technology from abroad into our petroleum sector. The sector in recent years has been characterized by rising consumption of oil products, declining crude production and low reserve accretion. India remains one of the least-explored countries in the world, with a well density among the lowest in the world. With demand for 100 million tonne, India is the fourth largest oil consumption zone in Asia, even though on a per capita basis the consumption is a mere 0.1 tonne, the lowest in the region- This makes the prospects of the Indian Oil industry even more exciting.

The years since independence have, however, seen the rapid growth of the upstream and downstream oil sectors. There has been optimal use of resources for exploration activities and increasing refining capacity as well as the creation of a vast marketing infrastructure and a pool of highly trained and skilled manpower. Indigenous crude production has risen to 35 million tonnes per year, an addition of fourteen refineries, an installed capacity of 69 million tonnes per year and a network of 5000 km of pipelines. But with the consumption of hydrocarbons said to increase manifold in the coming decades (155mmtpa by the end of the 10th plan) the liberalization, deregulation and reforms in the petroleum sector is essential for the health and overall growth of our economy.'With more than a billion people, a structural demographic shift resulting in exploding consumption expenditure, full deregulation of a 100 m tonne market growing at twice world averages, India represents one of the most exciting oil markets in the world today' - CLSA Asia Pacific

As the Indian Economy breaks the shackles of a hindu rate of growth to grow at a pace of 8% and above, the single biggest beneficiary should be the oil & energy sector. Oil and energy are most happening sectors of the Indian economy today. PSU Oil Companies were in the limelight over the past two years for a variety of reasons- first, the companies, then the huge surge in profits, and recently, the drama over sale of government's stake through public offer.

Consider the following:

Automobile sale have surged this year. Car sales are up by nearly 30%, heavy & medium commercial vehicle sales have climbed an even more steep 40%, consumption of diesel and LPG are on a steep rise. That should be pretty good news for the industry, which is counting on surging sales and economic boom to absorb the huge refining capacity that has built up in the country. The interesting story is that oil product consumption has started picking up in line with the economic boom, though with a certain lag. Going forward, we should see much larger pick-up in sales of oil products in line with the GDP growth rate, feel analysts.

High consumption has meant high profit margins for oil companies, particularly refining majors like Hindustan Petroleum Corporation (HPCL), Bharat Petroleum Corporation (BPCL), Indian Oil Corporation (IOC) and a host of other smaller refining companies. Refining margins are now ruling at their highest levels over the past decade. According to analysts tracking the sector, refining margins are now at $8 per barrel, one of the highest levels in many years. And these margins have stayed high despite a rise in prices of crude oil. For integrated refining & marketing companies, like HPCL, BPCL and IOC, the gains are even more substantial and their numbers may look very impressive.

However, sentiment for the sector would be significantly impacted by the performance of the biggest oil company in the country- ONGC .The company is by far the biggest player in the oil exploration & production sector and has a presence in the refining sector through its arm- MRPL. As crude prices have held firm in the global markets over the past months, the company should show good performance for the year. The company should benefit from a surge in demand in this region.

Software Sector: -

On June 24, 2004, the US presidential candidate John Kerry in his speech in San Jose urged that the Bangalore phenomena should be replicated and the entire USA need to be networked. Even though his observation may be far from ground reality but the fact remains, that Bangalore commands international brand equity. Bangalore is house to the bulk of knowledge-based industries and attracts the best talent world over. Recently, Vietnam and other ASEAN countries have shown interest in the development of IT clusters similar to Bangalore citing that if a small city could do so than it could

also be possible for a small nation. Singapore has made conscious efforts to develop itself as a knowledge nation. In the Indian context, people recognize Bangalore's contribution to exports, its development as a high-end knowledge industry but some policy planners feel that ICT is not enough to address development issues even though its contribution to exports and GDP is high. Thus, it is extremely important to examine the output and outcome of ICT sector in the economic and social development context. It is also important to examine why developed nations may be interested in becoming completely networked and why they spend approximately 2-6 per cent of the GDP to become networked. In this context, it is important to explore the benefits that these nations derive along with any empirical evidence relevant to these countries or specific to India that may support these claims. IT spending as a per cent of GDP in the case of Australia, China, South Korea, Japan, United States and United Kingdom ranges between5.3 to 6.5 per cent; why would these progressive, cost and growth conscious countries spend lavishly to get networked.

Debt – Equity Ratio of Various Sectors: (see the Graph -1 at the end of the sheet)

1) Automotive Sector: - (See the Graph – 1.1 & Table – 1 at the end of the sheet)
2) FMCG Sector:- (See the Graph – 1.2 & Table – 2 at the end of the sheet)
3) Pharma Sector: - (See the Graph – 1.3 & Table – 3 at the end of the sheet)
4) Refineries Sector: (See the Graph – 1.4 & Table – 4 at the end of the sheet)
5) Software Sector: (See the Graph – 1.5 & Table – 5 at the end of the sheet)

Findings of the Study:

1) Most of the companies prefer raising capital by issuing equity share rather then debt capital.
2) Debt – Equity ratio of refinery sector was much more stable as compare to other sectors. Refinery Sector Debt – Equity ratio was 40:60.
3) Software Sector has raised least amount with the help of debt capital and the reasons behind this is it is the most risky sector and because of that most of the software companies prefer raising money by issuing equity shares.

4) Automotive Sector:

Tata motors raises highest amount of debt capital as compare to other companies of this sector. The Debt - Equity ratio of tata motors is 7:13.

5) FMCG Sector:

HLL raises highest amount of debt capital as compare to other companies of this sector. The Debt - Equity ratio of HLL is 2:3.

6) Pharma Sector:

Sun Pharma raises highest amount of debt capital as compare to other companies of this sector. The Debt - Equity ratio of Sun Pharma is 4:3.5.

7) Refineries Sector:

IOCL raises highest amount of debt capital as compare to other companies of this sector. The Debt - Equity ratio of IOCL is 3:4.

8) Software Sector:

The Highest Debt – Equity ratio in software sector was HCL Technologies.

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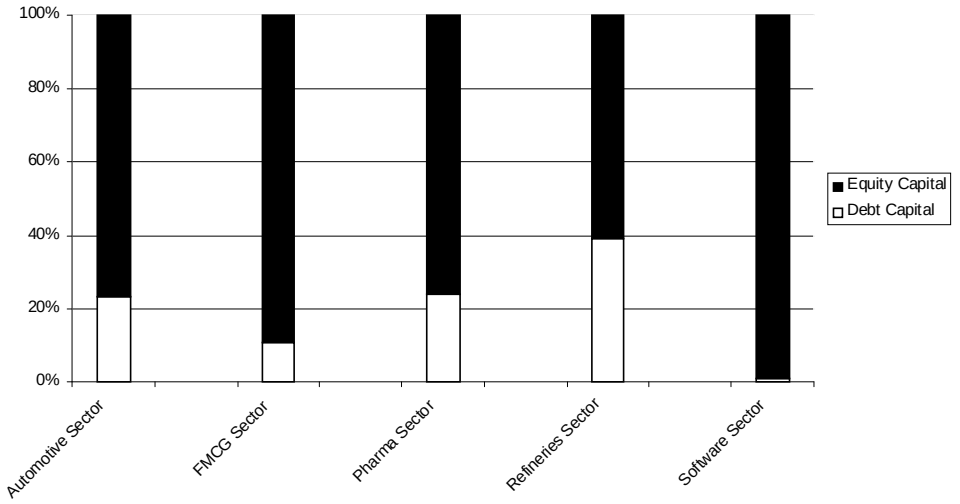
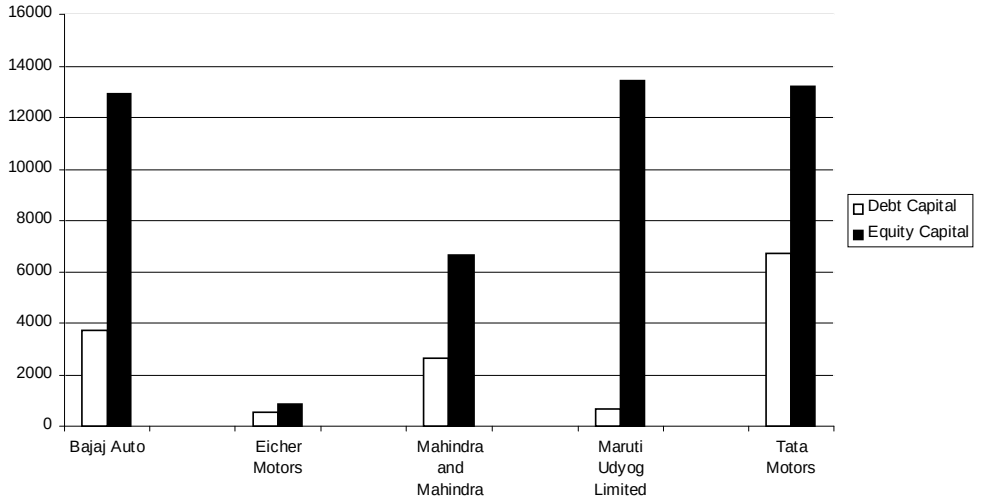
Graph - 1



Automotive Sector: Table – 1
In Rs. Crores

Particulars	Debt Capital	Equity Capital
Bajaj Auto	3699.86	12902.24
Eicher Motors	511.5	872.79
Mahindra and Mahindra	2665.81	6627.9
Maruti Udyog Limited	691.2	13422.6
Tata Motors	6692.03	13211.84

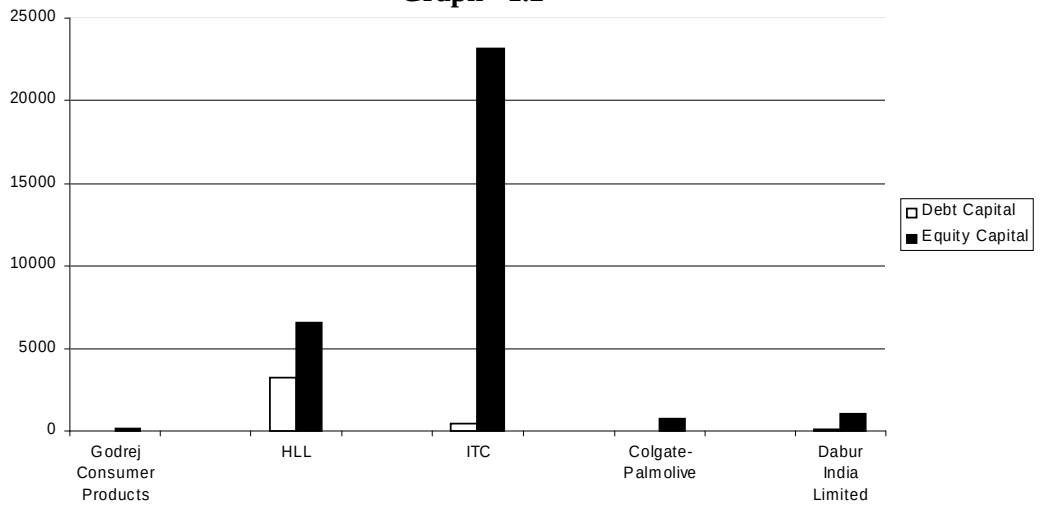
Graph - 1.1



FMCG Sector: Table - 2
In Rs. Crores

Particulars	Debt Capital	Equity Capital
Godrej Consumer Products	35.22	168.36
HLL	3232.37	6535.04
ITC	485.94	23186.03
Colgate-Palmolive	10.51	765.15
Dabur India Limited	109.01	1054.59

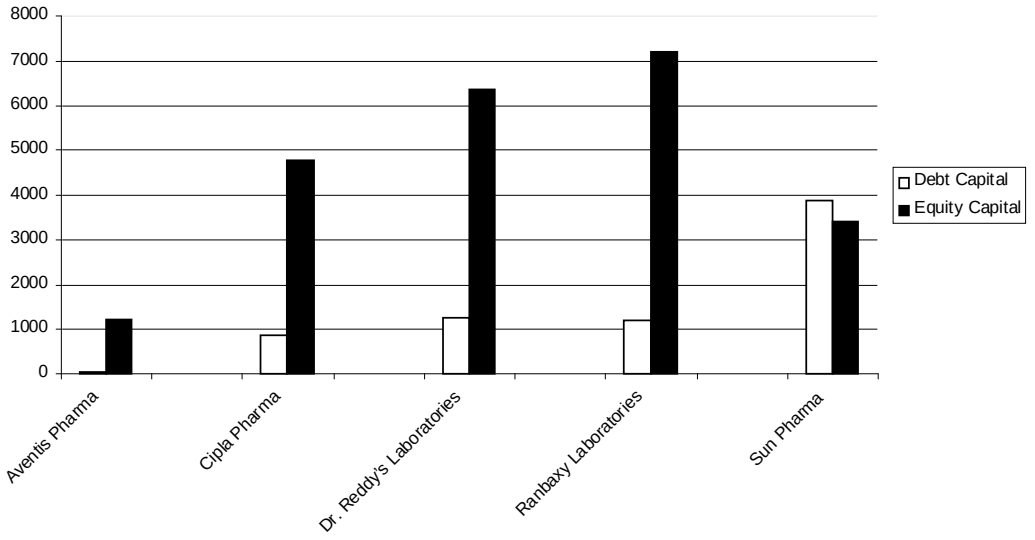
Graph - 1.2



Pharma Sector: Table – 3
(In Rs. Crores)

Particulars	Debt Capital	Equity Capital
Aventis Pharma	15.24	1213.52
Cipla Pharma	870.69	4771.39
Dr. Reddy's Laboratories	1255.33	6383.24
Ranbaxy Laboratories	1199.92	7203.48
Sun Pharma	3890.97	3411.69

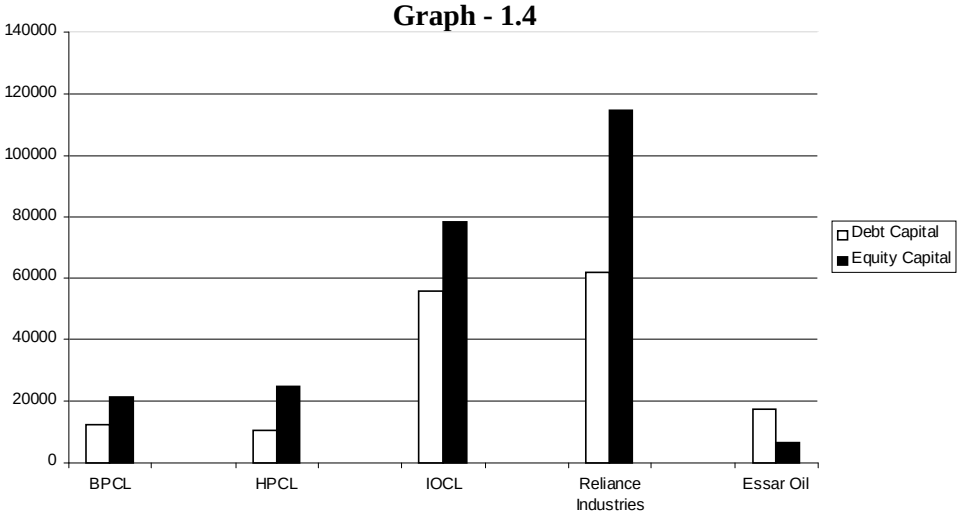
Graph - 1.3



Refineries Sector: Table – 4
(In Rs. Crores)

Particulars	Debt Capital	Equity Capital
BPCL	12236.74	21316.03
HPCL	10549.98	24919.4
IOCL	55903.11	78334.44
Reliance Industries	61594.86	114546.43
Essar Oil	17276.56	6585.95

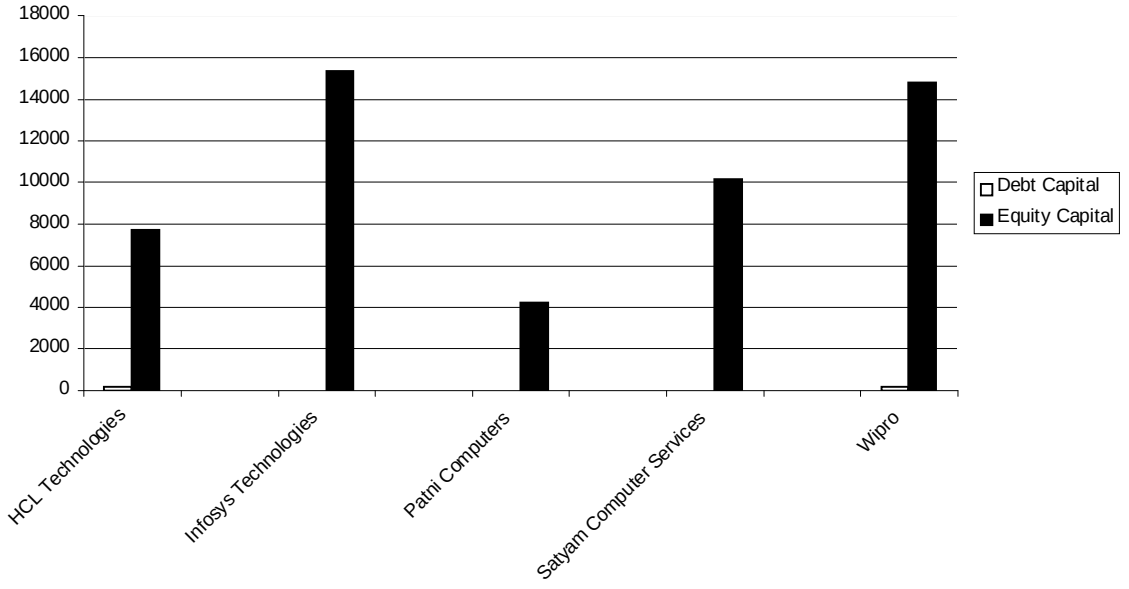
Graph - 1.4



Software Sector: Table – 5
(In Rs. Crores)

Particulars	Debt Capital	Equity Capital
HCL Technologies	208.3	7727.03
Infosys Technologies	0	15392.43
Patni Computers	8.5	4228.88
Satyam Computer Services	29.74	10131.42
Wipro	212.94	14820.48

Graph 1.5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16000
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HCL Technologies
Infosys Technologies
Patni Computers
Satyam Computer Services
Wipro
Debt Capital
Equity Capital