

A STUDY ON THE PATTERN OF CAPITAL STRUCTURE OF SELECT INDIAN COMPANIES

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Abstract

Capital structure decisions are of utmost importance for any company big or small and at the same time they are the biggest dilemma of the financial manager. Capital structure of every company is unique in itself and is an outcome of multiple determining factors like liquidity position, financial leverage, profitability, growth opportunities, cost of debt, taxes, size and nature of firm etc. Many theories have been suggested in the area of capital structure like the net income theory, net operating income theory, Modigliani miller theory wherein each of the theories under their own set of assumptions and limitations have tried to explain the existence or non-existence of relationship between the capital structure, value of the firm and its overall cost of capital.

In real life business scenario, there exists many quantifiable as well as non-quantifiable factors determining the optimum capital structure of a company and along with them exists many subjective and operational issues because of which firms have a capital structure highly varied from their theoretically optimum capital structure. Thus, capital structure is a very intriguing area of research and a lot of empirical research work is left to be done in this area in the Indian context.

In the current work the nifty 50 companies have been taken as the sample and data has been taken over the 10 years period 2004-05 to 2013-14 in an attempt to study the two components of the capital structure of a firm i.e. equity and debt. Making use of the total debt to equity ratio of the companies over the 10 years period an attempt has been made to find out the pattern of capital structure that has been followed by these blue-chip companies. Companies have also been categorized industry/sector wise so that a meaningful picture of the pattern of capital structure can be presented company wise, industry/sector wise and of all 50 companies as a whole.

Such a study helps in understanding the pattern of capital structure in first place so that it paves the way for further research in the area in terms of understanding the important factors which have led to the pattern of capital structure these companies had during the aforesaid period and also to critically appraise the financial pattern of these companies so that we can have deeper insights in the area of capital structure in the Indian context.

Index terms: Capital Structure, Total Debt to Equity Ratio, NIFTY, Financial Risk, Sectors

1. Introduction

Capital Structure refers to the amount of debt and/or equity employed by a firm to fund its operations and finance its assets. The structure is typically expressed as a debt-to-equity or debt-to-capital ratio.

Debt and equity capital are used to fund a business' operations, capital expenditures, acquisitions, and other investments. There are trade-offs firms have to make when they decide whether to raise debt or equity and managers will balance the two try and find the optimal capital structure.

2. Theoretical Framework

Optimal capital structure

The optimal capital structure of a firm is often defined as the proportion of debt and equity that result in the lowest weighted average cost of capital (WACC) for the firm. This technical definition is not always used in practice, and firms often have a strategic or philosophical view of what the structure should be.

In order to optimize the structure, a firm will decide if it needs more debt or equity and can issue whichever it requires. The new capital that's issued may be used to invest in new assets or may be used to repurchase debt/equity that's currently outstanding as a form of recapitalization. One needs to remember always that there exists an inverse relationship between the weighted average cost of capital and value of a firm. Therefore, in order to ensure higher valuations every company needs to keep its WACC under check which can be done by having an optimal capital structure.

Capital structure by sector/industry

Capital structures can vary significantly by industry. Cyclical industries like mining are often not suitable for debt, as their cash flow profiles can be unpredictable and there is too much uncertainty about their ability to repay the debt.

Other industries like banking and insurance use huge amounts of leverage and as their business models require large amounts of debt.

Total Debt to Equity Ratio

The debt-to-equity (D/E) ratio is calculated by dividing a company's total liabilities by its shareholder equity. These numbers are available on the balance sheet of a company's financial statements.

The ratio is used to evaluate a company's financial leverage. The D/E ratio is an important metric used in corporate finance. It is a measure of the degree to which a company is financing its operations through debt versus wholly owned funds. More specifically, it reflects the ability of shareholder equity to cover all outstanding debts in the event of a business downturn.

Formula used: Total Debt/Total Equity OR Net Worth

Given that the debt-to-equity ratio measures a company's debt relative to the value of its net assets, it is most often used to gauge the extent to which a company is taking on debt as a means of leveraging its assets. A high debt/equity ratio is often associated with high risk; it means that a company has been aggressive in financing its growth with debt.

If a lot of debt is used to finance growth, a company could potentially generate more earnings than it would have without that financing. If leverage increases earnings by a greater amount than the debt's cost (interest), then shareholders should expect to benefit. However, if the cost of debt financing outweighs the increased income generated, share values may decline. The cost of debt can vary with market conditions. Thus, unprofitable borrowing may not be apparent at first.

Changes in long-term debt and assets tend to have the greatest impact on the D/E ratio because they tend to be larger accounts compared to short-term debt and short-term assets. If investors want to evaluate a company's short-term leverage and its ability to meet debt obligations that must be paid over a year or less, other ratios will be used.

For example, an investor who needs to compare a company's short-term liquidity or solvency will use the cash ratio (cash & marketable securities ÷ short-term liabilities = cash ratio) or the current ratio (short-term assets ÷ short-term liabilities = current ratio) instead of a long-term measure of leverage like the D/E ratio.

3. Objective of the Study

1. To find out which companies among the sampled companies have had high and low debt equity ratio
2. To find out the general trend among companies in usage of the source of financing their operations
3. To get insights into the sector wise pattern of capital structure
4. To pave the way for further critical study of the pattern of capital structure

5. Research Methodology

In this study a sample of 50 companies which are included in NIFTY have been taken (as on 31st March 2014). The period of the study is of 10 years from financial year 2004-05 to 2013-14. The Total Debt to Equity Ratio data has been collected from the website moneycontrol.com has been used for each of the companies during the 10 years analysis period as a tool for understanding the pattern of capital structure in these companies. Companies have also been divided into different sectors as per the bifurcation done by NSE so as to get insights into the pattern of capital structure of companies individually and of the sector as a whole. Making use of various EDP tools meaningful inferences and findings have been made regarding the pattern of capital structure of the sampled companies.

6. Limitations of the Study

1. The number of companies in each sector is not equal. Thus, in few sectors averages calculated are more meaningful as they have more companies included as compared to those sectors in which the number of companies included are low.

2. In case of companies belonging to cement sector for the period 2004-05 to 2009-10 the financial data available was for calendar year and not for financial year.

7. Findings

1. The maximum Average Total Debt to Equity Ratio during the period of study is that of Punjab National Bank (15.15) – Table 1
2. Infosys & NMDC have been zero debt companies during the period of study – Table 1
3. Average Total Debt to Equity Ratio of all the NIFTY 50 companies is 2.43 – Table 1
4. Ten Companies have an Average Total Debt to Equity Ratio higher than the overall average of 2.43 – Table 1
5. During 2004-05 maximum companies (12) had their highest Total Debt to Equity Ratio during the period of study followed by 8 companies during 2006-07 – Table 2
6. During 2013-14 maximum companies (20) had their lowest Total Debt to Equity Ratio during the period of study – Table 2
7. A general trend of reducing Total Debt to Equity Ratio can be observed during the period of study – Table 2
8. In the Automobile Sector out of 5 companies highest Average Total Debt to Equity Ratio is that of Tata Motors and lowest is that of Maruti Suzuki India Ltd. Sector average ratio is 0.32 - Table 3 & Graph 1
9. In the Banking Sector out of 8 companies highest Average Total Debt to Equity Ratio is that of Punjab National Bank and lowest is that of Kotak Mahindra Bank. Sector average ratio is 11.84 - Table 4 & Graph 2
10. In the Capital Goods & Engineering Sector out of 2 companies L&T has a higher Average Total Debt to Equity Ratio - Table 5 & Graph 3
11. In the Cement & Cement Products Sector out of 4 companies highest Average Total Debt to Equity Ratio is that of UltraTech Cements Ltd. and lowest is that of Ambuja Cements Ltd. Sector average ratio is 0.32 - Table 6 & Graph 4
12. In the Computer Software Sector out of 5 companies highest Average Total Debt to Equity Ratio is that of WIPRO Ltd. and lowest is that of Infosys Ltd. Sector average ratio is 0.09 - Table 7 & Graph 5
13. In the Financial Services Sector out of 2 companies HDFC Ltd. Has a higher Average Total Debt to Equity Ratio - Table 8 & Graph 6
14. In the FMCG Sector out of 3 companies highest Average Total Debt to Equity Ratio is that of United Spirits Ltd. and lowest is that of ITC Ltd. Sector average ratio is 0.36 - Table 9 & Graph 7
15. In the Metals Sector out of 3 companies highest Average Total Debt to Equity Ratio is that of Jindal Steel and lowest is that of HINDALCO Ltd. Sector average ratio is 0.79 - Table 10 & Graph 8
16. In the Mining Sector out of 3 companies highest Average Total Debt to Equity Ratio is that of Sesa Sterlite Ltd. and lowest is that of NMDC Ltd. Sector average ratio is 0.10 - Table 11 & Graph 9
17. In the Oil & Gas Exploration/Production out of 3 companies highest Average Total Debt to Equity Ratio is that of GAIL (India) Ltd. and lowest is that of Cairn India Ltd. Sector average ratio is 0.11 - Table 12 & Graph 10
18. In the Pharmaceuticals Sector out of 4 companies highest Average Total Debt to Equity Ratio is that of LUPIN Ltd. and lowest is that of Cipla Ltd. Sector average ratio is 0.31 - Table 13 & Graph 11
19. In the Power Sector out of 3 companies highest Average Total Debt to Equity Ratio is that of Power Grid and lowest is that of NTPC Ltd. Sector average ratio is 1.04 - Table 14 & Graph 12
20. In the Refineries Sector out of 2 companies BPCL has a higher Average Total Debt to Equity Ratio - Table 15 & Graph 13
21. DLF Ltd (Construction Sector) has a high ratio of 2.23, Bharti Airtel has a ratio of 0.39 and Asian Paints has a low ratio of 0.07 – Table 16 & Graph 14
22. Banking Sector has the highest Sector Average Total Debt to Equity Ratio at 11.84 followed by Financial Services Sector at 5.16. - Table 17 & Graph 15
23. Computer – Software Sector has the lowest Sector Average Total Debt to Equity Ratio at 0.09 and marginally higher than it are Mining Sector & Oil & Gas Exploration/Production Sector at 0.10 & 0.11 respectively.

8. Conclusions

1. The Banking & Financial Services Sector companies are making use of maximum debt in their capital structure owing to the nature of their business and are thus have a high degree of financial risk involved.
2. Power, Refineries & Metals Sector also have a reasonably high ratio and thus higher financial risk
3. Remaining Sectors have a ratio on the lower side with the least ratios seen in Computer – Software, Mining & Oil & Gas Exploration/Production Sector and are thus least risky in terms of the financial risk involved.
4. The Total Debt to Equity Ratio varies among the sectors as well as among the Companies belonging to the same sector.
5. Thus, it is very difficult to formulate an optimum capital structure for an individual company or for a sector as a whole because wide variation is their in the ratio between debt and equity the companies are using.
6. It is an area of further research to critically analyse the varied pattern in capital structure of the companies so as to find out the reasons for the same.

Table 1 - Year Wise & Average Total Debt to Equity Ratio of Nifty 50 companies (Period: 2004-05 to 2013-14)
 1. Arranged in Descending Order of Average Total Debt/Equity ratio

Sr. No	Security Name	2013-14	2012-13	2011-12	2010-11	2009-10	2008-09	2007-08	2006-07	2005-06	2004-05	Average Total Debt/Equity ratio
1	Punjab National Bank	14.48	13.80	15.81	17.19	16.55	16.30	15.94	13.98	13.93	13.49	15.15
2	Bank of Baroda	16.83	15.65	14.87	15.57	16.84	15.43	14.12	14.57	12.55	14.74	15.12
3	State Bank of India	13.34	13.87	13.94	16.21	13.75	13.73	12.02	15.18	14.86	16.04	14.30
4	IndusInd Bank Ltd.	8.71	8.57	11.29	10.43	14.61	16.77	18.14	17.26	17.94	16.55	14.03
5	Axis Bank Ltd.	8.67	8.96	11.14	11.34	9.88	12.49	10.63	18.81	14.83	13.83	12.06
6	HDFC Bank Ltd.	9.36	9.09	9.04	8.79	8.38	9.67	9.15	11.05	11.39	9.21	9.51
7	ICICI Bank Ltd.	6.65	6.57	6.55	6.08	5.74	5.73	6.62	11.42	9.03	10.34	7.47
8	Kotak Mahindra Bank Ltd.	5.86	7.55	6.91	6.00	6.61	5.52	5.99	9.69	9.46	6.98	7.06
9	Housing Development Finance Corporation Ltd.	4.03	4.38	5.05	4.78	6.35	6.38	5.79	10.30	10.46	9.44	6.70
10	IDFC Ltd.	3.14	2.98	3.06	2.78	3.89	3.91	4.09	5.17	3.68	3.47	3.62
11	DLF Ltd.	0.58	0.76	0.83	0.97	0.99	0.78	0.74	10.37	4.67	1.65	2.23
12	Power Grid Corporation of India Ltd.	2.31	2.48	2.16	1.81	2.18	2.10	1.62	1.77	1.51	1.56	1.95
13	Jindal Steel & Power Ltd.	1.74	1.58	1.33	1.32	1.24	0.92	1.03	1.40	1.49	1.13	1.32
14	Bharat Petroleum Corporation Ltd.	1.03	1.42	1.42	1.17	1.70	1.75	1.29	1.05	0.92	0.61	1.24
15	United Spirits Ltd.	1.22	0.53	0.59	0.59	0.73	0.62	0.58	1.10	1.79	2.00	0.98
16	Tata Motors Ltd.	0.76	0.75	0.56	0.73	1.12	1.06	0.80	0.59	0.53	0.61	0.75
17	UltraTech Cement Ltd.	0.28	0.29	0.30	0.25	0.35	0.59	0.65	0.95	1.40	1.44	0.65
18	Tata Power Co. Ltd.	0.67	0.78	0.64	0.60	0.56	0.60	0.38	0.61	0.50	0.56	0.59
19	Lupin Ltd.	0.02	0.11	0.27	0.31	0.36	0.69	0.73	0.97	1.42	0.88	0.58
20	Tata Steel Ltd.	0.39	0.43	0.41	0.53	0.68	1.11	0.83	0.69	0.26	0.39	0.57
21	NTPC Ltd.	0.73	0.66	0.63	0.59	0.59	0.59	0.50	0.50	0.45	0.41	0.57
22	Hindalco Industries Ltd.	0.72	0.72	0.46	0.30	0.23	0.35	0.48	0.59	0.51	0.50	0.49
23	Reliance Industries Ltd.	0.43	0.30	0.36	0.43	0.49	0.65	0.46	0.45	0.48	0.50	0.46
24	Mahindra & Mahindra Ltd.	0.22	0.22	0.27	0.23	0.37	0.77	0.60	0.46	0.31	0.53	0.40
25	Bharti Airtel Ltd.	0.13	0.24	0.29	0.23	0.14	0.28	0.33	0.47	0.65	1.10	0.39
26	Larsen & Toubro Ltd.	0.28	0.27	0.33	0.29	0.37	0.53	0.38	0.36	0.32	0.56	0.37
27	Sun Pharmaceutical Industries Ltd.	0.33	0.01	0.01	0.01	0.01	0.00	0.00	0.44	1.19	1.64	0.37

28	Bajaj Auto Ltd.	0.0 1	0.0 1	0.0 2	0.0 6	0.4 6	0.8 4	0.8 4	0.2 9	0.3 1	0.00	0.28
29	Grasim Industries Ltd.	0.1 0	0.1 2	0.0 7	0.0 7	0.1 5	0.3 6	0.3 9	0.4 7	0.4 0	0.46	0.26
30	ACC Ltd.	0.0 0	0.0 1	0.0 7	0.0 8	0.0 9	0.1 0	0.0 7	0.2 5	0.5 0	0.88	0.21
31	Sesa Sterlite Ltd.	1.0 0	0.3 5	0.2 8	0.0 8	0.2 7	0.0 0	0.0 0	0.0 0	0.0 1	0.02	0.20
32	Dr. Reddy's Laboratories Ltd.	0.2 9	0.2 0	0.2 3	0.2 4	0.1 0	0.1 2	0.1 0	0.0 8	0.4 1	0.13	0.19
33	Wipro Ltd.	0.1 5	0.1 7	0.2 2	0.2 2	0.3 1	0.4 0	0.3 3	0.0 3	0.0 1	0.01	0.19
34	GAIL (India) Ltd.	0.3 5	0.3 5	0.2 3	0.1 0	0.0 9	0.0 8	0.1 0	0.1 2	0.1 9	0.23	0.18
35	Ambuja Cements Ltd.	0.0 0	0.0 0	0.0 1	0.0 1	0.0 3	0.0 5	0.0 7	0.2 5	0.5 2	0.63	0.16
36	Tech Mahindra Ltd.	0.0 0	0.2 6	0.3 3	0.3 5	0.4 8	0.0 0	0.0 8	0.0 6	0.0 0	0.00	0.16
37	Oil & Natural Gas Corporation Ltd.	0.0 0	0.0 0	0.0 4	0.0 0	0.1 9	0.2 0	0.1 8	0.2 4	0.2 4	0.21	0.13
38	Hero MotoCorp Ltd.	0.0 0	0.0 6	0.2 4	0.5 0	0.0 2	0.0 2	0.0 4	0.0 7	0.0 9	0.14	0.12
39	Cipla Ltd.	0.0 9	0.1 1	0.0 0	0.0 7	0.0 0	0.2 2	0.1 5	0.0 4	0.2 4	0.13	0.11
40	Hindustan Unilever Ltd.	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.2 0	0.0 6	0.0 3	0.0 2	0.70	0.10
41	Coal India Ltd.	0.0 0	0.0 4	0.0 6	0.0 7	0.0 9	0.1 2	0.1 1	0.1 3	0.1 7	0.22	0.10
42	HCL Technologies Ltd.	0.0 0	0.0 6	0.1 1	0.1 4	0.2 8	0.1 5	0.0 1	0.0 1	0.0 1	0.03	0.08
43	Asian Paints Ltd.	0.0 1	0.0 2	0.0 7	0.0 3	0.0 4	0.0 6	0.0 8	0.1 4	0.1 2	0.11	0.07
44	Maruti Suzuki India Ltd.	0.0 8	0.0 7	0.0 7	0.0 1	0.0 7	0.0 7	0.1 1	0.0 9	0.0 1	0.07	0.07
45	Bharat Heavy Electricals Ltd.	0.0 8	0.0 5	0.0 0	0.0 1	0.0 1	0.0 1	0.0 1	0.0 1	0.0 8	0.09	0.03
46	I T C Ltd.	0.0 0	0.0 0	0.0 0	0.0 1	0.0 1	0.0 1	0.0 2	0.0 2	0.0 1	0.03	0.01
47	Cairn India Ltd.	0.0 0	0.0 0	0.0 0	0.0 4	0.0 4	0.0 0	0.0 0	0.0 0	0.0 0	0.00	0.01
48	Tata Consultancy Services Ltd.	0.0 0	0.0 1	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.0 1	0.0 1	0.04	0.01
49	Infosys Ltd.	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.00	0.00
50	NMDC Ltd.	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.0 0	0.00	0.00
											Overall Average	2.43

Source: www.moneycontrol.com**Table 2 - Highest & Lowest Total Debt to Equity Ratio of Nifty 50 companies (Period: 2004-05 to 2013-14)**

Sr. No	Security Name	2013-14	2012-13	2011-12	2010-11	2009-10	2008-09	2007-08	2006-07	2005-06	2004-05
1	ACC Ltd.	0.00	0.01	0.07	0.08	0.09	0.10	0.07	0.25	0.50	0.88
2	Ambuja Cements Ltd.	0.00	0.00	0.01	0.01	0.03	0.05	0.07	0.25	0.52	0.63
3	Asian Paints Ltd.	0.01	0.02	0.07	0.03	0.04	0.06	0.08	0.14	0.12	0.11
4	Axis Bank Ltd.	8.67	8.96	11.14	11.34	9.88	12.49	10.63	18.81	14.83	13.83
5	Bajaj Auto Ltd.	0.01	0.01	0.02	0.06	0.46	0.84	0.84	0.29	0.31	0.00

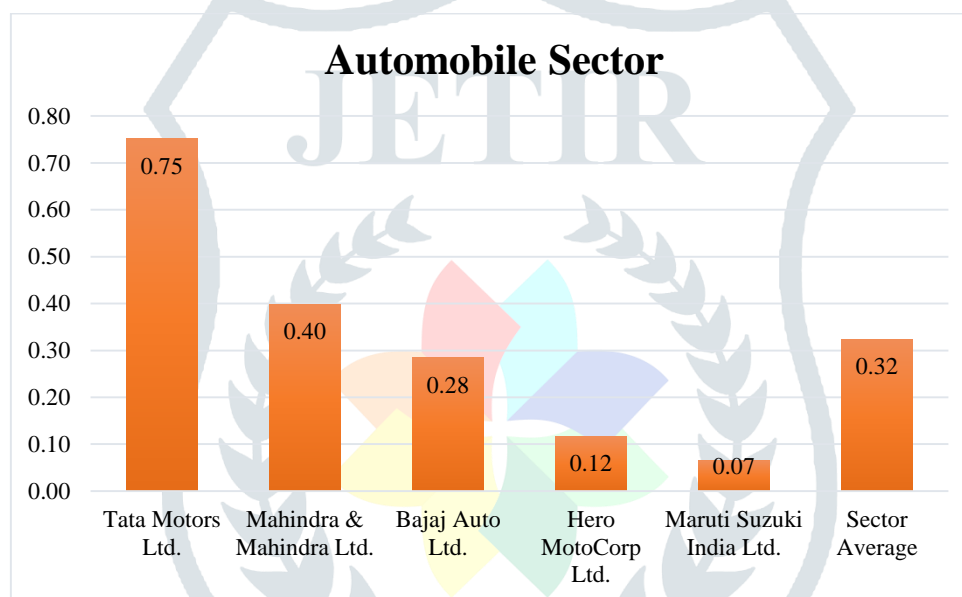
6	Bank of Baroda	16.83	15.65	14.87	15.57	16.84	15.43	14.12	14.57	12.55	14.74
7	Bharat Heavy Electricals Ltd.	0.08	0.05	0.00	0.01	0.01	0.01	0.01	0.01	0.08	0.09
8	Bharat Petroleum Corporation Ltd.	1.03	1.42	1.42	1.17	1.70	1.75	1.29	1.05	0.92	0.61
9	Bharti Airtel Ltd.	0.13	0.24	0.29	0.23	0.14	0.28	0.33	0.47	0.65	1.10
10	Cairn India Ltd.	0.00	0.00	0.00	0.04	0.04	0.00	0.00	0.00	0.00	0.00
11	Cipla Ltd.	0.09	0.11	0.00	0.07	0.00	0.22	0.15	0.04	0.24	0.13
12	Coal India Ltd.	0.00	0.04	0.06	0.07	0.09	0.12	0.11	0.13	0.17	0.22
13	DLF Ltd.	0.58	0.76	0.83	0.97	0.99	0.78	0.74	10.37	4.67	1.65
14	Dr. Reddy's Laboratories Ltd.	0.29	0.20	0.23	0.24	0.10	0.12	0.10	0.08	0.41	0.13
15	GAIL (India) Ltd.	0.35	0.35	0.23	0.10	0.09	0.08	0.10	0.12	0.19	0.23
16	Grasim Industries Ltd.	0.10	0.12	0.07	0.07	0.15	0.36	0.39	0.47	0.40	0.46
17	HCL Technologies Ltd.	0.00	0.06	0.11	0.14	0.28	0.15	0.01	0.01	0.01	0.03
18	HDFC Bank Ltd.	9.36	9.09	9.04	8.79	8.38	9.67	9.15	11.05	11.39	9.21
19	Hero MotoCorp Ltd.	0.00	0.06	0.24	0.50	0.02	0.02	0.04	0.07	0.09	0.14
20	Hindalco Industries Ltd.	0.72	0.72	0.46	0.30	0.23	0.35	0.48	0.59	0.51	0.50
21	Hindustan Unilever Ltd.	0.00	0.00	0.00	0.00	0.00	0.20	0.06	0.03	0.02	0.70
22	Housing Development Finance Corporation Ltd.	4.03	4.38	5.05	4.78	6.35	6.38	5.79	10.30	10.46	9.44
23	I T C Ltd.	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.01	0.03
24	ICICI Bank Ltd.	6.65	6.57	6.55	6.08	5.74	5.73	6.62	11.42	9.03	10.34
25	IDFC Ltd.	3.14	2.98	3.06	2.78	3.89	3.91	4.09	5.17	3.68	3.47
26	IndusInd Bank Ltd.	8.71	8.57	11.29	10.43	14.61	16.77	18.14	17.26	17.94	16.55
27	Infosys Ltd.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	Jindal Steel & Power Ltd.	1.74	1.58	1.33	1.32	1.24	0.92	1.03	1.40	1.49	1.13
29	Kotak Mahindra Bank Ltd.	5.86	7.55	6.91	6.00	6.61	5.52	5.99	9.69	9.46	6.98
30	Larsen & Toubro Ltd.	0.28	0.27	0.33	0.29	0.37	0.53	0.38	0.36	0.32	0.56
31	Lupin Ltd.	0.02	0.11	0.27	0.31	0.36	0.69	0.73	0.97	1.42	0.88
32	Mahindra & Mahindra Ltd.	0.22	0.22	0.27	0.23	0.37	0.77	0.60	0.46	0.31	0.53
33	Maruti Suzuki India Ltd.	0.08	0.07	0.07	0.01	0.07	0.07	0.11	0.09	0.01	0.07
34	NMDC Ltd.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	NTPC Ltd.	0.73	0.66	0.63	0.59	0.59	0.59	0.50	0.50	0.45	0.41
36	Oil & Natural Gas Corporation Ltd.	0.00	0.00	0.04	0.00	0.19	0.20	0.18	0.24	0.24	0.21
37	Power Grid Corporation of India Ltd.	2.31	2.48	2.16	1.81	2.18	2.10	1.62	1.77	1.51	1.56
38	Punjab National Bank	14.48	13.80	15.81	17.19	16.55	16.30	15.94	13.98	13.93	13.49
39	Reliance Industries Ltd.	0.43	0.30	0.36	0.43	0.49	0.65	0.46	0.45	0.48	0.50
40	Sesa Sterlite Ltd.	1.00	0.35	0.28	0.08	0.27	0.00	0.00	0.00	0.01	0.02
41	State Bank of India	13.34	13.87	13.94	16.21	13.75	13.73	12.02	15.18	14.86	16.04
42	Sun Pharmaceutical Industries Ltd.	0.33	0.01	0.01	0.01	0.01	0.00	0.02	0.44	1.19	1.64
43	Tata Consultancy Services Ltd.	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.04
44	Tata Motors Ltd.	0.76	0.75	0.56	0.73	1.12	1.06	0.80	0.59	0.53	0.61
45	Tata Power Co. Ltd.	0.67	0.78	0.64	0.60	0.56	0.60	0.38	0.61	0.50	0.56
46	Tata Steel Ltd.	0.39	0.43	0.41	0.53	0.68	1.11	0.83	0.69	0.26	0.39
47	Tech Mahindra Ltd.	0.00	0.26	0.33	0.35	0.48	0.00	0.08	0.06	0.00	0.00
48	UltraTech Cement Ltd.	0.28	0.29	0.30	0.25	0.35	0.59	0.65	0.90	1.40	1.44
49	United Spirits Ltd.	1.22	0.53	0.59	0.59	0.73	0.62	0.58	1.10	1.79	2.00
50	Wipro Ltd.	0.15	0.17	0.22	0.22	0.31	0.40	0.33	0.03	0.01	0.01

Source: www.moneycontrol.com

Table 3 – Automobile Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)

Arranged in Descending Order of Average Total Debt/Equity Ratio

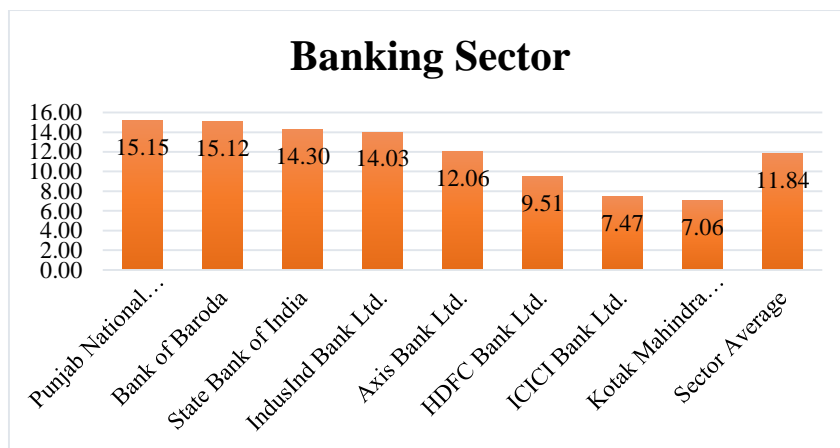
Sr. No	Security Name	Average Total Debt/Equity ratio
1	Tata Motors Ltd.	0.75
2	Mahindra & Mahindra Ltd.	0.40
3	Bajaj Auto Ltd.	0.28
4	Hero Moto Corp Ltd.	0.12
5	Maruti Suzuki India Ltd.	0.07
	Sector Average	0.32

Source: www.moneycontrol.com**Graph 1 – Automobile Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)**Source: www.moneycontrol.com**Table 4 – Banking Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)**

Arranged in Descending Order of Average Total Debt/Equity ratio

Sr. No	Security Name	Average Total Debt/Equity ratio
1	Punjab National Bank	15.15
2	Bank of Baroda	15.12
3	State Bank of India	14.30
4	IndusInd Bank Ltd.	14.03
5	Axis Bank Ltd.	12.06
6	HDFC Bank Ltd.	9.51
7	ICICI Bank Ltd.	7.47
8	Kotak Mahindra Bank Ltd.	7.06
	Sector Average	11.84

Source: www.moneycontrol.com**Graph 2 – Banking Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)**



Source: www.moneycontrol.com

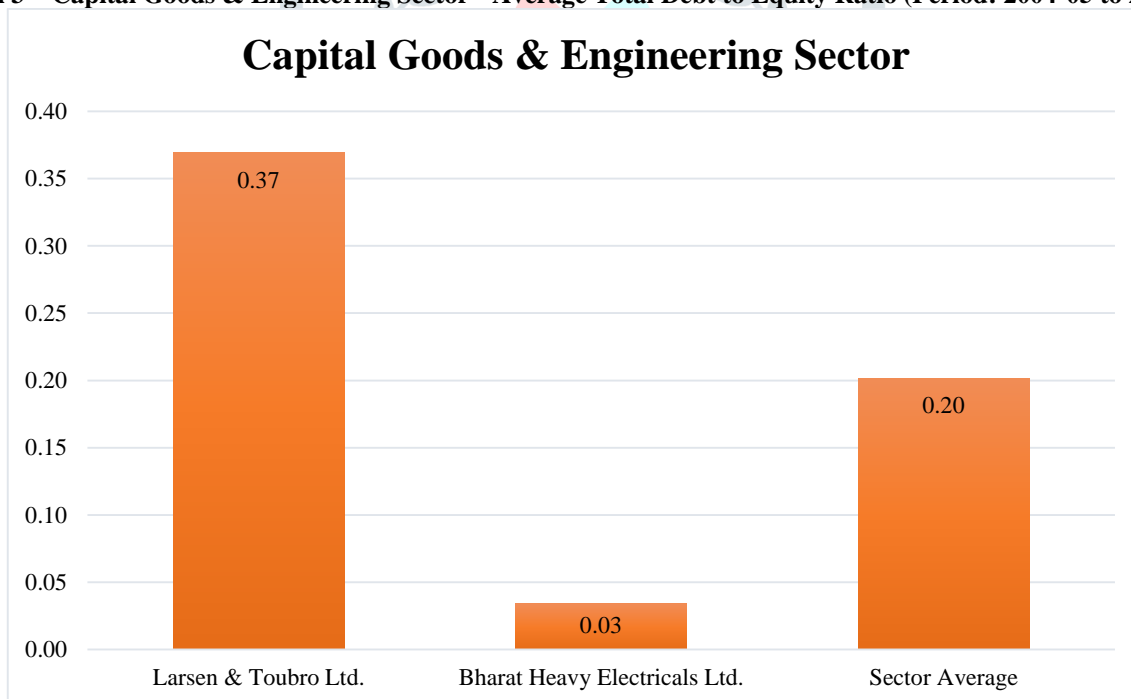
Table 5 – Capital Goods & Engineering Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)

Arranged in Descending Order of Average Total Debt/Equity ratio

Sr. No	Security Name	Average Total Debt/Equity ratio
1	Larsen & Toubro Ltd.	0.37
2	Bharat Heavy Electricals Ltd.	0.03
	Sector Average	0.20

Source: www.moneycontrol.com

Graph 3 – Capital Goods & Engineering Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)



Source: www.moneycontrol.com

Table 6 – Cement & Cement Products Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)

Arranged in Descending Order of Average Total Debt/Equity ratio

Sr. No	Security Name	Average Total Debt/Equity ratio
1	UltraTech Cement Ltd.	0.65
2	Grasim Industries Ltd.	0.26
3	ACC Ltd.	0.21
4	Ambuja Cements Ltd.	0.16

Sector Average	0.32
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Source: www.moneycontrol.com

Graph 4 – Cement & Cement Products Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)

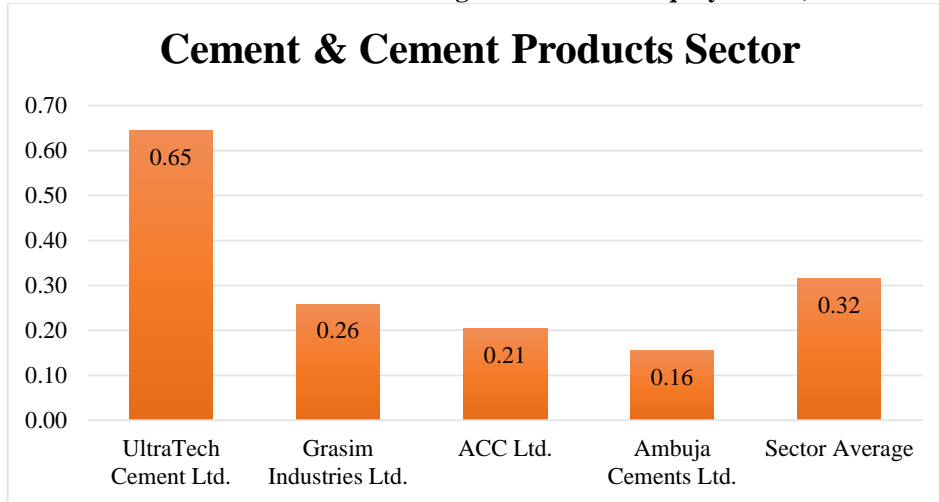
Source: www.moneycontrol.com

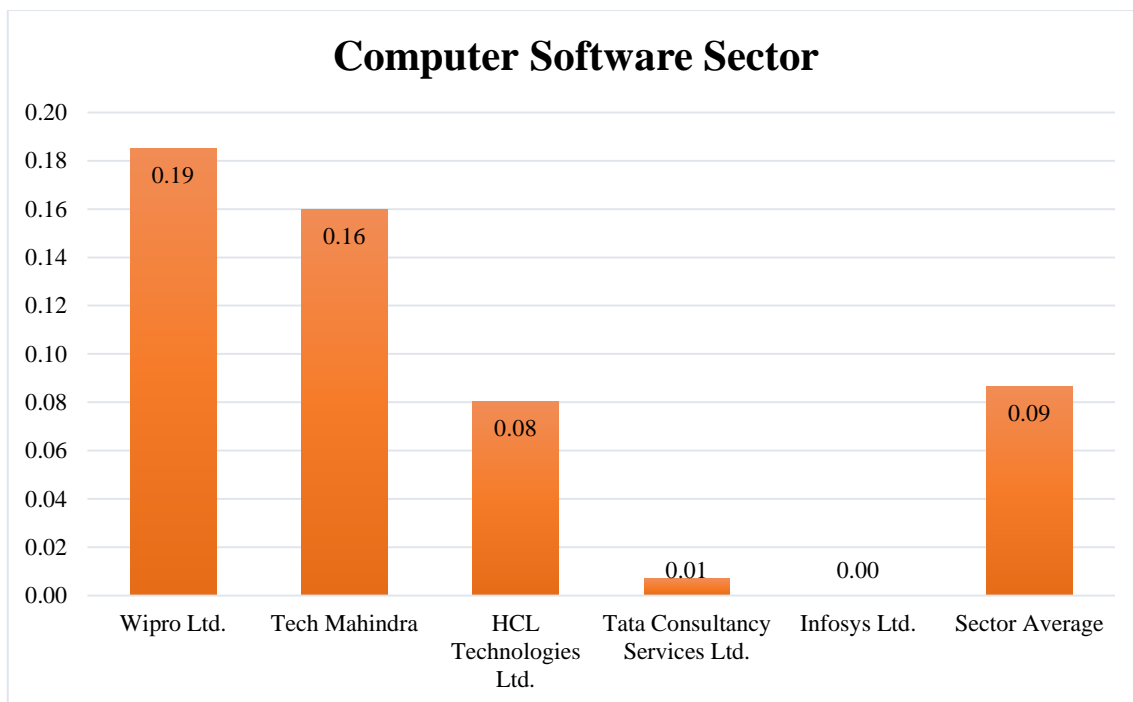
Table 7 – Computer Software Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)

Arranged in Descending Order of Average Total Debt/Equity ratio

Sr. No	Security Name	Average Total Debt/Equity ratio
1	Wipro Ltd.	0.19
2	Tech Mahindra Ltd.	0.16
3	HCL Technologies Ltd.	0.08
4	Tata Consultancy Services Ltd.	0.01
5	Infosys Ltd.	0.00
	Sector Average	0.09

Source: www.moneycontrol.com

Graph 5 – Computer Software Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)



Source: www.moneycontrol.com

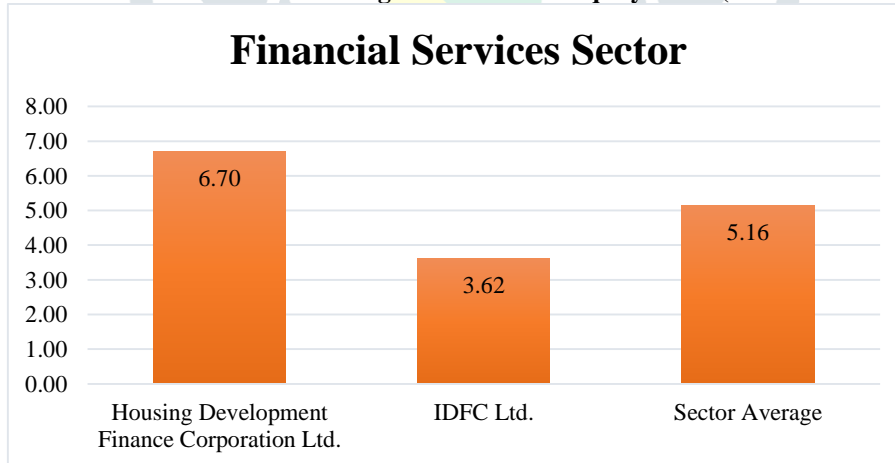
Table 8 – Financial Services Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)

Arranged in Descending Order of Average Total Debt/Equity ratio

Sr. No	Security Name	Average Total Debt/Equity ratio
1	Housing Development Finance Corporation Ltd.	6.70
2	IDFC Ltd.	3.62
	Sector Average	5.16

Source: www.moneycontrol.com

Graph 6 – Financial Services Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)



Source: www.moneycontrol.com

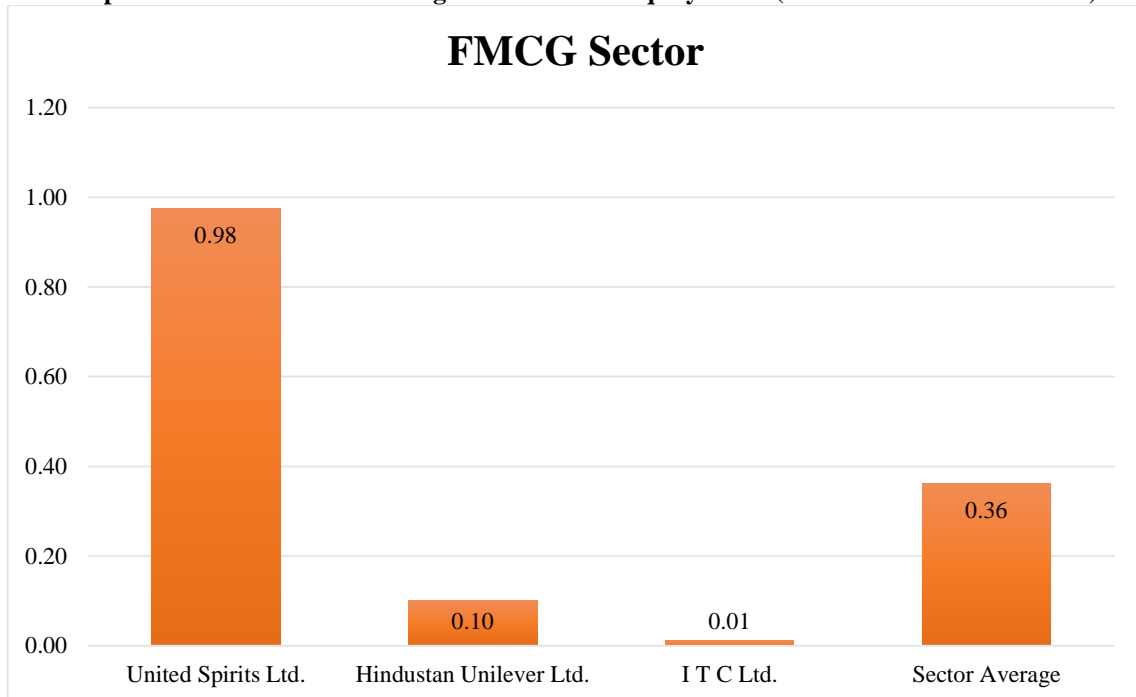
Table 9 – FMCG Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)

Arranged in Descending Order of Average Total Debt/Equity ratio

Sr. No	Security Name	Average Total Debt/Equity ratio
1	United Spirits Ltd.	0.98
2	Hindustan Unilever Ltd.	0.10
3	I T C Ltd.	0.01
	Sector Average	0.36

Source: www.moneycontrol.com

Graph 7 – FMCG Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)

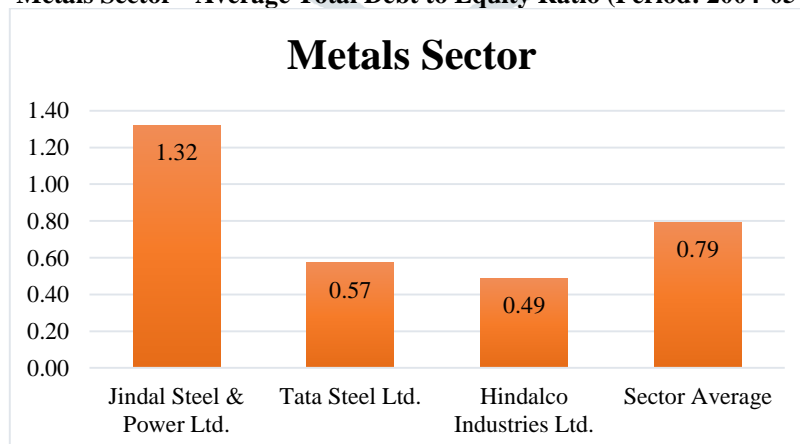
Source: www.moneycontrol.com

**Table 10 – Metals Sector - Average Total Debt to Equity Ratio
(Period: 2004-05 to 2013-14)
Arranged in Descending Order of Average Total Debt/Equity ratio**

Sr. No	Security Name	Average Total Debt/Equity ratio
1	Jindal Steel & Power Ltd.	1.32
2	Tata Steel Ltd.	0.57
3	Hindalco Industries Ltd.	0.49
	Sector Average	0.79

Source: www.moneycontrol.com

Graph 8 – Metals Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)

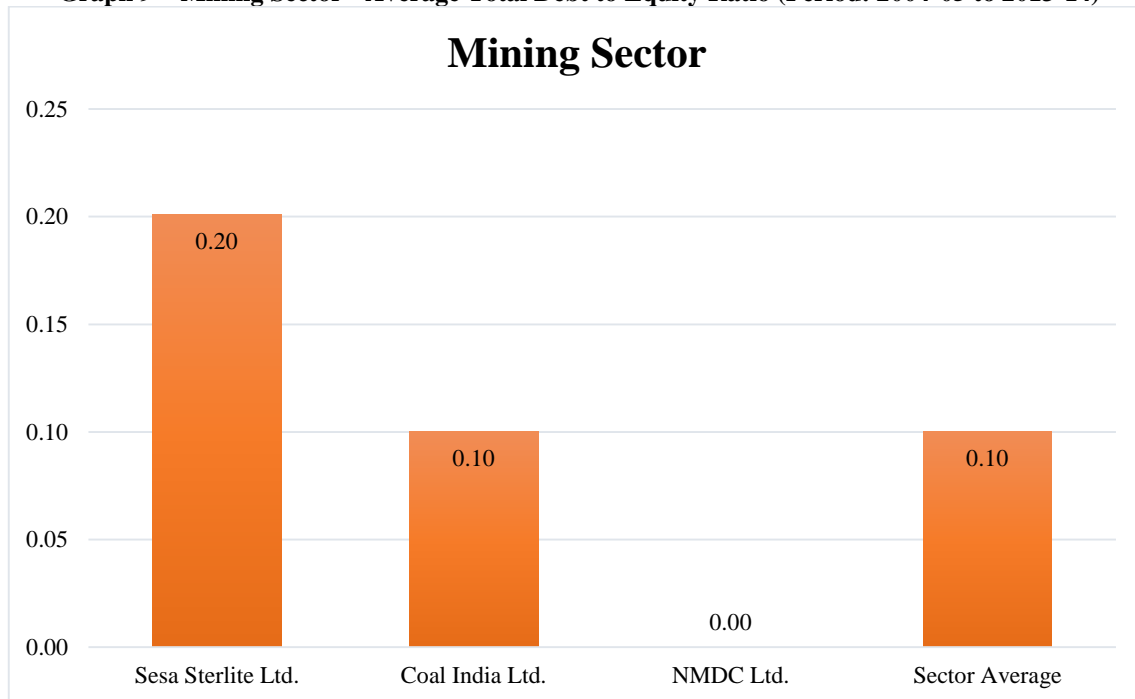
Source: www.moneycontrol.com

**Table 11 – Mining Sector - Average Total Debt to Equity Ratio
(Period: 2004-05 to 2013-14)
Arranged in Descending Order of Average Total Debt/Equity ratio**

Sr. No	Security Name	Average Total Debt/Equity ratio
1	Sesa Sterlite Ltd.	0.20
2	Coal India Ltd.	0.10
3	NMDC Ltd.	0.00
	Sector Average	0.10

Source: www.moneycontrol.com

Graph 9 – Mining Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)



Source: www.moneycontrol.com

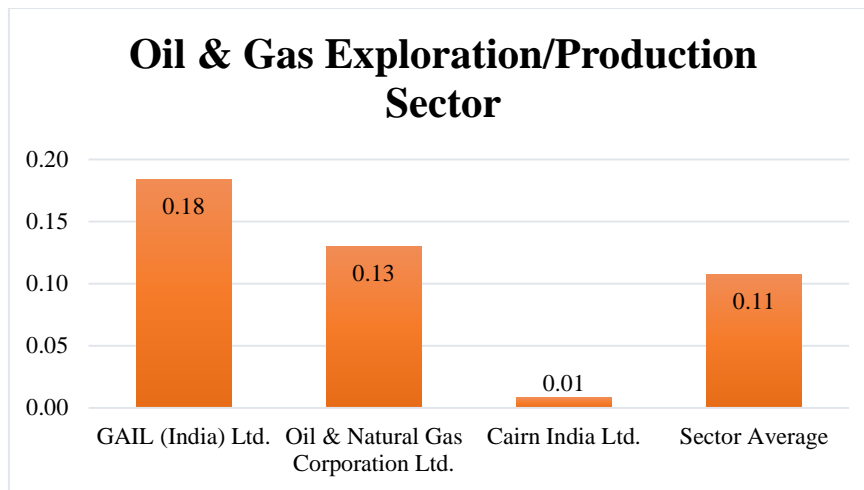
Table 12 – Oil & Gas Exploration/Production Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)

Arranged in Descending Order of Average Total Debt/Equity ratio

Sr. No	Security Name	Average Total Debt/Equity ratio
1	GAIL (India) Ltd.	0.18
2	Oil & Natural Gas Corporation Ltd.	0.13
3	Cairn India Ltd.	0.01
	Sector Average	0.11

Source: www.moneycontrol.com

Graph 10 – Oil & Gas Exploration/Production Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)



Source: www.moneycontrol.com

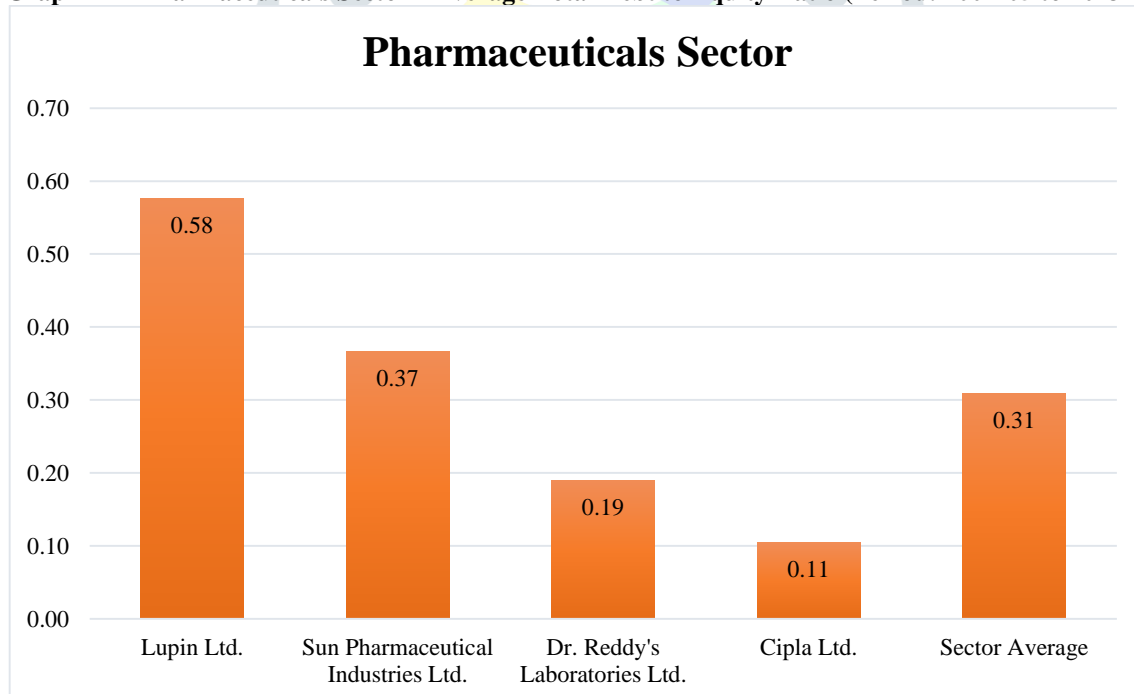
Table 13 – Pharmaceuticals Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)

Arranged in Descending Order of Average Total Debt/Equity ratio

Sr. No	Security Name	Average Total Debt/Equity ratio
1	Lupin Ltd.	0.58
2	Sun Pharmaceutical Industries Ltd.	0.37
3	Dr. Reddy's Laboratories Ltd.	0.19
4	Cipla Ltd.	0.11
	Sector Average	0.31

Source: www.moneycontrol.com

Graph 11 – Pharmaceuticals Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)



Source: www.moneycontrol.com

Table 14 – Power Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)

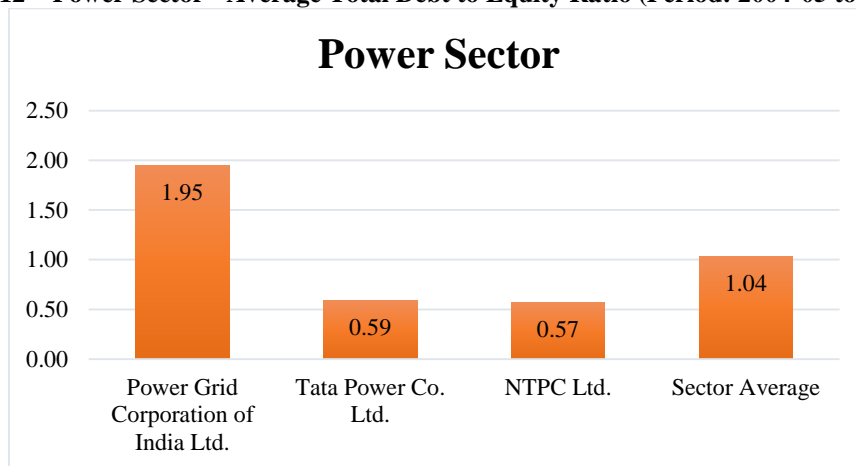
Arranged in Descending Order of Average Total Debt/Equity ratio

Sr. No	Security Name	Average Total Debt/Equity ratio
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1	Power Grid Corporation of India Ltd.	1.95
2	Tata Power Co. Ltd.	0.59
3	NTPC Ltd.	0.57
	Sector Average	1.04

Source: www.moneycontrol.com

Graph 12 – Power Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)



Source: www.moneycontrol.com

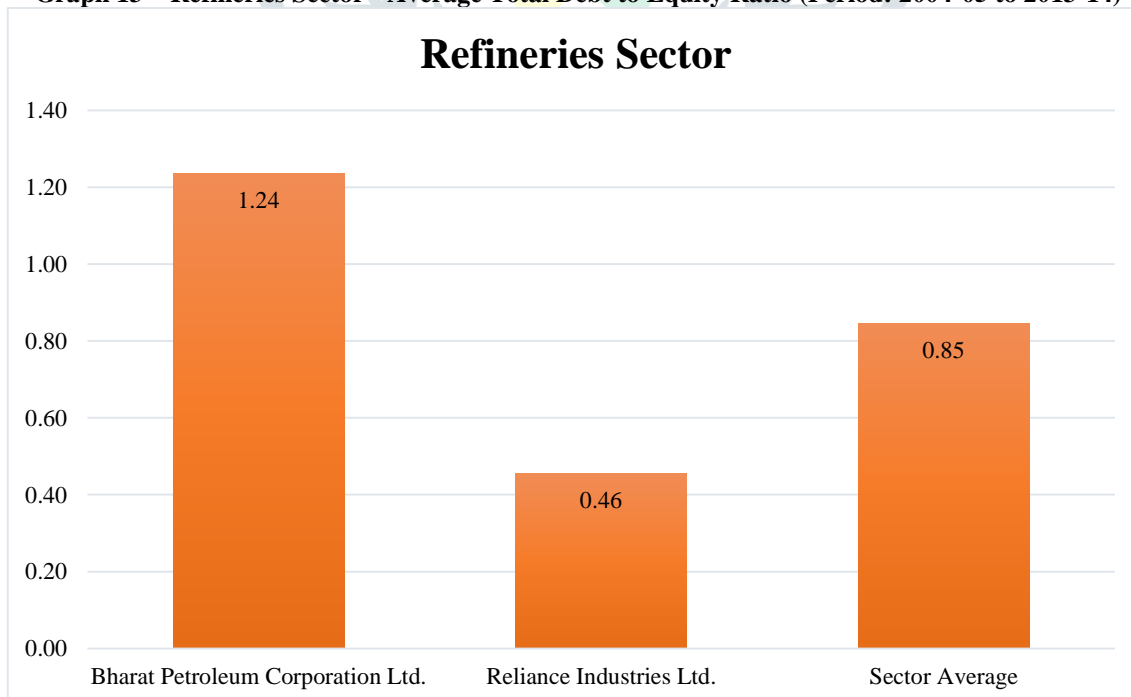
Table 15 – Refineries Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)

Arranged in Descending Order of Average Total Debt/Equity ratio

Sr. No	Security Name	Average Total Debt/Equity ratio
1	Bharat Petroleum Corporation Ltd.	1.24
2	Reliance Industries Ltd.	0.46
	Sector Average	0.85

Source: www.moneycontrol.com

Graph 13 – Refineries Sector - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)



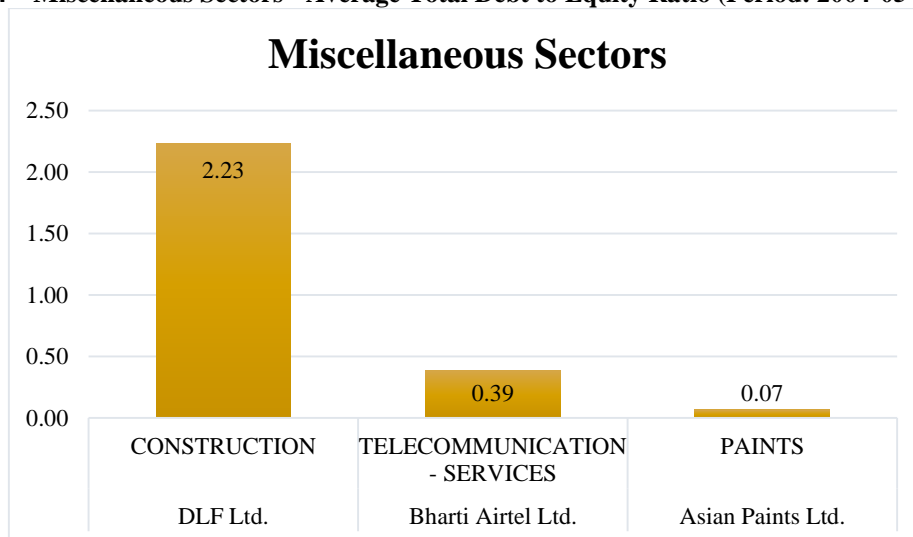
Source: www.moneycontrol.com

**Table 16 – Miscellaneous Sectors - Average Total Debt to Equity Ratio
(Period: 2004-05 to 2013-14)
Arranged in Descending Order of Average Total Debt/Equity ratio**

Sr. No	Security Name	Sector/Industry	Average Total Debt/Equity ratio
1	DLF Ltd.	CONSTRUCTION	2.23
2	Bharti Airtel Ltd.	TELECOMMUNICATION - SERVICES	0.39
3	Asian Paints Ltd.	PAINTS	0.07

Source: www.moneycontrol.com

Graph 14 – Miscellaneous Sectors - Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)



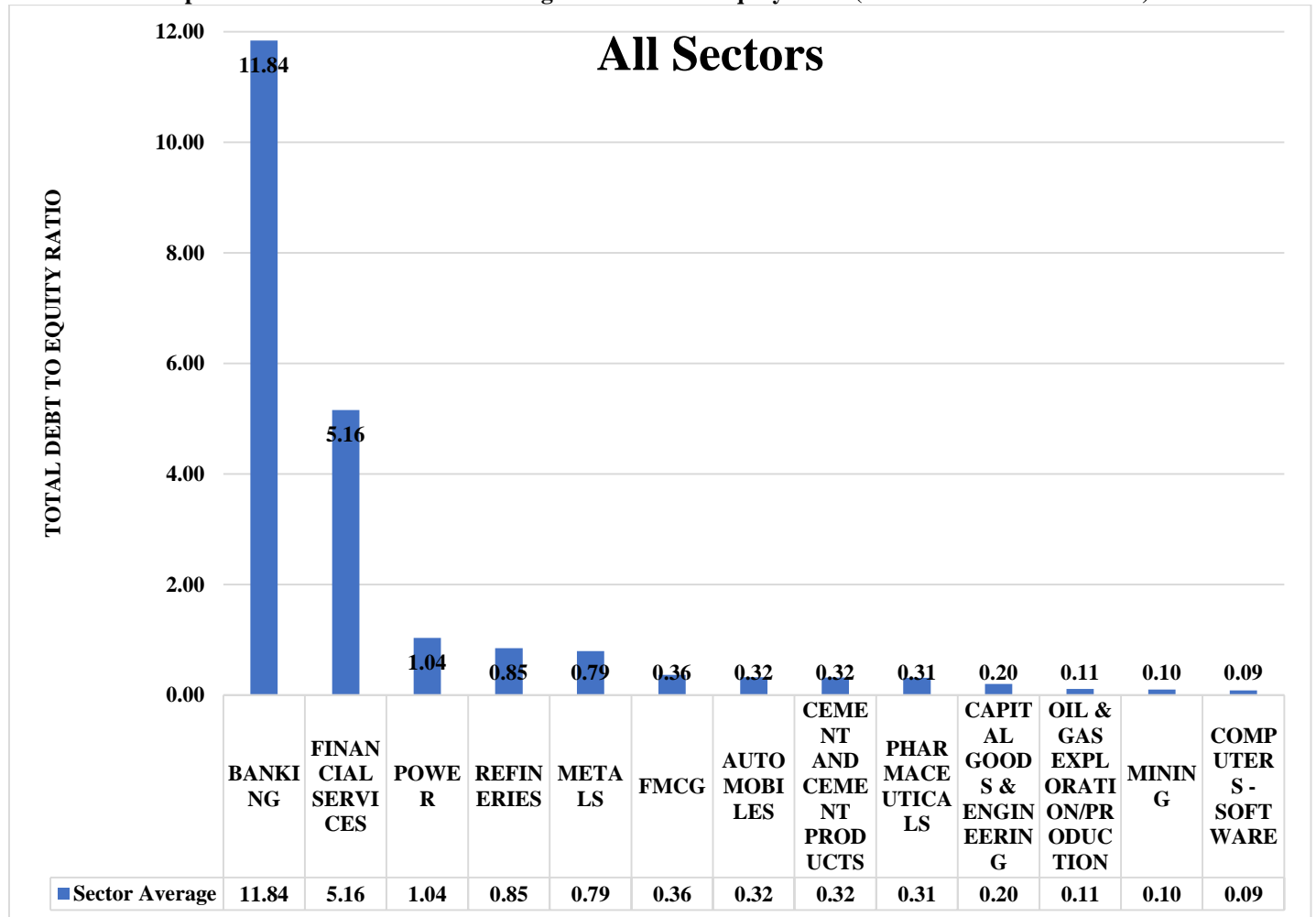
Source: www.moneycontrol.com

**Table 17 – All Sectors – Sector Average Total Debt to Equity Ratio
(Period: 2004-05 to 2013-14)
Arranged in Descending Order of Sector Average Total Debt/Equity ratio**

Sector/Industry	Sector Average
Banking	11.84
Financial Services	5.16
Power	1.04
Refineries	0.85
Metals	0.79
FMCG	0.36
Automobiles	0.32
Cement and Cement Products	0.32
Pharmaceuticals	0.31
Capital Goods & Engineering	0.20
Oil & Gas Exploration/Production	0.11
Mining	0.10
Computers - Software	0.09

Source: www.moneycontrol.com

Graph 15 – All Sectors – Sector Average Total Debt to Equity Ratio (Period: 2004-05 to 2013-14)



Source: www.moneycontrol.com

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