Assignment Number 7

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a. Find the LTD-to-Equity Ratio, Interest-Bearing-Liabilities-to-Equity Ratio and the TD-to-Equity Ratio for the past five years (for your company).

For Berger Paints India Limited

- The Long Term Debt comprises all the Secured and Unsecured Loans which last more than one financial year.
- Interest Bearing Liabilities are the sum total of all the Long term and Short term loans which carry an interest bearing component with them.
- Total Debt is the sum total of Long term debt, Short term Debt, Current Liabilities and Provisions.
- Equity is the sum total of Share Capital, Reserves and Surpluses and Miscellaneous Equity items such as ESOPs.

Year	**2011**	**2010**	**2009**	**2008**	**2007**
Share Capital	692145	692145	637745	637745	637745
Reserves and Surpluses	6529184	5570134	3514640	2855342	2120714
Share Warrant	0	0	99000	0	0
ESOP	8809	0	0	0	0
Equity	**7230138**	**6262279**	**4251385**	**3493087**	**2758459**
Secured Loan: Loans from banks - Cash Credit	785314	244130	780017	998391	860288
Unsecured Loans: Fixed Deposits	323	488	565	795	879
Long term Debt	**785637**	**244618**	**780582**	**999186**	**861167**
Acceptances	523005	260008	505176	522075	475456
Sundry Creditors	2431325	1950025	1184169	1122046	1032125
Provisions	440063	525852	277430	232334	151282
Current Liabilities and provisions	**3394393**	**2735885**	**1966775**	**1876455**	**1658863**
Unsecured Loans - Short Term Debt	**0**	**0**	**0**	**210001**	**291951**
Other Liabilities	488525	440917	417766	428103	466448

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Total Debt	**11898693**	**9683699**	**7416508**	**7006832**	**6036888**
Interest Bearing Liability	**785637**	**244618**	**780582**	**1209187**	**1153118**

The three ratio calculations are given as below. The detailed calculations are given in the Excel Sheet attached with the document.

	2011	2010	2009	2008	2007
LTD : Equity	0.108661	0.039062	0.183607	0.286047	0.312191
Interest Bearing Liabilities : Equity	0.108661	0.039062	0.183607	0.346166	0.41803
Total Debt:Equity	1.645708	1.546354	1.744492	2.005914	2.1885

b. Make a mention of the surrogate debt items you may have missed in the above (like leasing, etc.)

The Company's leasing arrangements are in the nature of operating leases which are not non-cancellable. These are usually renewed periodically by mutual consent. The rentals payable against these arrangements appear under the head Rent in one of the Schedules of the Balance Sheet. The values

c. How do the above ratios in (a) compare with the industry average (do clearly mention the list of companies included in the industry average computation for the above three ratios). Please clarify on the items being included/ excluded (if needed – you can think of including an excel sheet of these computations).

The competitors considered for analysis are Asian Paints, Kansai Nerolac Paints and Shalimar Paints. All these are players in the Paints industry. Stand Alone annual reports have been taken for calculation.

Shalimar Paints

	2011	2010	2009	2008	2007
LTD : Equity	0.005586	0.006135	0.008442	0.011087	0.157432
Interest Bearing Liabilities : Equity	1.091975	1.061788	1.457406	1.485938	1.681551
Total Debt : Equity	3.60175	3.482033	3.504221	4.007842	4.110169

Kansai Nerolac

	2011	2010	2009	2008	2007
LTD : Equity	0	0	0	0	0

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Interest Bearing Liabilities : Equity	0.008852	0.01479	0.021774	0.030555	0.045121
Total Debt : Equity	0.008852	0.01479	0.021774	0.030555	0.045121

Asian Paints

	2011	2010	2009	2008	2007
LTD : Equity	0.031635	0.043835	0.058211	0.065213	0.079736
Interest Bearing Liabilities : Equity	0.060324	0.066741	0.101392	0.122649	0.112824
Total Debt : Equity	2.017658	2.078936	2.085292	2.2621	2.112515

Berger Paints

	2011	2010	2009	2008	2007
LTD : Equity	0.108661	0.039062	0.183607	0.286047	0.312191
Interest Bearing Liabilities : Equity	0.108661	0.039062	0.183607	0.346166	0.41803
Total Debt : Equity	1.645708	1.546354	1.744492	2.005914	2.1885

Given below are the industry averages for the 4 companies and the comparison between Berger Paints and the Industry average figures for the three ratios being computed

Industry Average	**2011**	**2010**	**2009**	**2008**	**2007**
Average LTD : Equity	**0.036471**	**0.022258**	**0.062565**	**0.090587**	**0.13734**
Average Interest Bearing Liabilities : Equity	**0.317453**	**0.295595**	**0.441045**	**0.496327**	**0.564382**
Average Total Debt : Equity	**1.818492**	**1.780528**	**1.838945**	**2.076603**	**2.114076**

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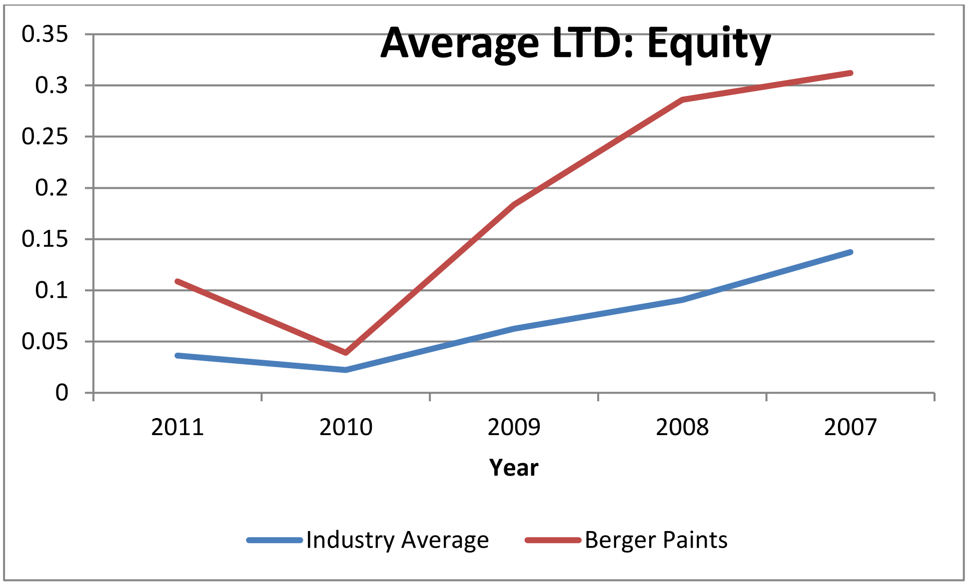

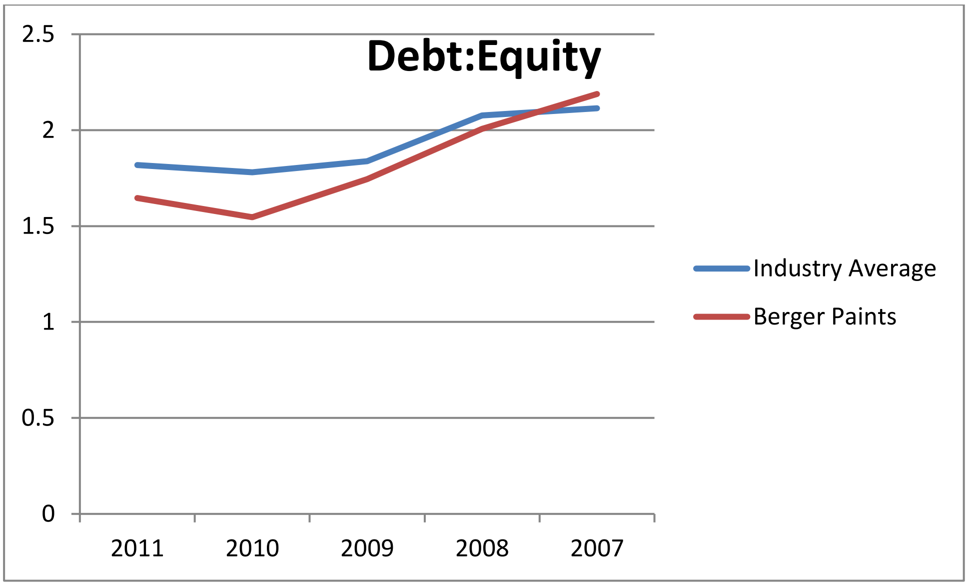

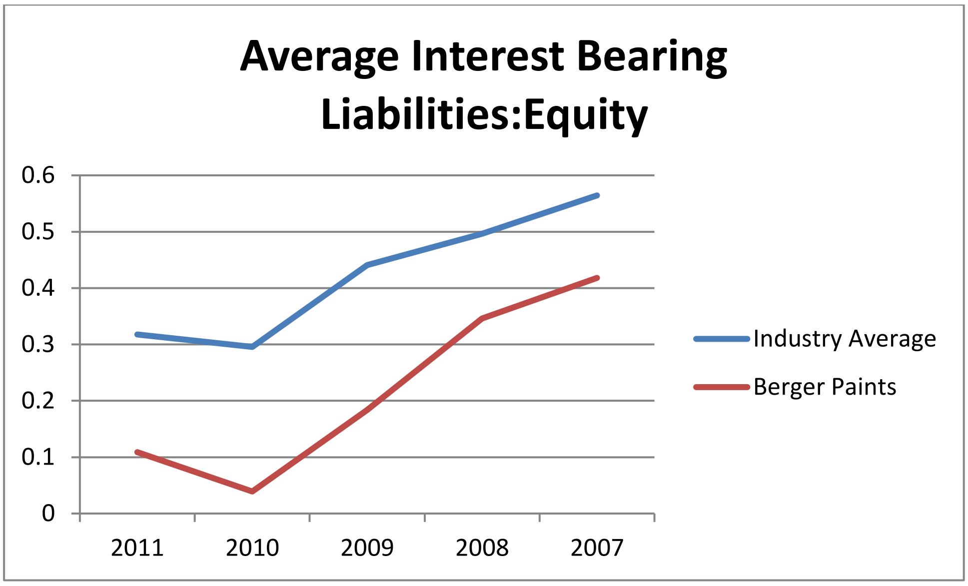

d. **List down the key reasons for your industry has such high or low debt-to-equity ratios (using the factors discussed in the class). You might like to link this to your earlier submissions on DOL, DFL, Gearing, and such issues**

And

e. **List down the key reasons for your company having such debt-to-equity ratios vis-à-vis the industry averages (using the factors discussed in the class). You might like to link this to your earlier submissions on DOL, DFL, Gearing, and such issues.**

Some of the salient features of the Financing Methods of Berger Paints vis-à-vis the Industry are given below. This analysis is driven by past activities in the Industry and for the player in question.

- Berger Paints has a Debt Equity Ratio ranging from 1.6 to 2.1. These values oscillate around the industry accepted standard of 2:1. The company being in the manufacturing sector is suitably debt financed.
- Taking a cue from the Cash flows of the past few years, there was a Share Issue in 2009 and Long term loans have been taken regularly for financing different.
- Berger Paints has expanded operations in several countries for which it has raised money through Debt and Equity financing. For Example, the 2009 issue was to expand operations in Bangladesh, where it now has a 65% market share
- Over the past 5 years, if we compare the Debt-Equity ratios of Berger Paints with the Industry Average, it has been very close to the Industry accepted values. Since there are very limited major players in the market, who have captured more than 90 percent of the total paints market in India, this is a reflection of the general financial soundness that the main few players enjoy, and the similarity in their means of operation

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- Berger Paints has the same value for LTD: Equity and Interest Bearing Liabilities: Equity Ratio, as all loans taken are long term and Interest bearing.
- Some of the measures are also to lure investors. As per the pecking order theory of financing, the preferred means of financing is Long term debt, as it signals financial soundness.
- The DFL of Berger Paints as calculated earlier is 1.05 which hints at extremely low interest bearing debt financing. This is further ratified by the very low Interest Bearing Liability: Equity Ratio of 0.1 in 2011.
- These DFL values are common across the Industry. The Indian Paint industry is very comfortable with respect to Debt taken the D:E ratios are generally low.
- Asian Paints is an exception as being the market leader, it requires heavy debt occasionally, to find its large projects
- The Loan Term Debt to Equity Ratio for Berger Paints is higher for 2007 than 2011, because of loans taken for financing in its earlier stages. Berger Paints has come of age in the past 2-3 years only, with the top line and bottom line expanding considerably.
- The Beta value for the company is also as low as .6 which shows that the company is not very keen on risk. This is ratified by the low Debt to Equity Ratios as well.
- The low Interest carrying liabilities also corresponds to high Gearing which we had calculated in the previous assignment

f. If possible – please relate the above to the contribution by Modigilani & Miller.

As per the Modigilani and Miller theorem

$$k_e = k_0 + \frac{D}{E}(k_0 - k_d)$$

Where D/E is the debt equity ratio, k_e, is the cost of Capital. With the current D/E ratio, the cost of capital would be in a comfortable range, and the operations would be risk averse. If the Debt is increased by a significant amount though, then the Cost of Equity would become very high and increase the risk exposure of the company.

References

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http://en.wikipedia.org/wiki/Modigliani%E2%80%93Miller_theorem

http://www.moneycontrol.com/financials/asianpaints/balance-sheet/AP31

http://reportjunction.com/Reports/Shalimar-Paints-Limited-S0253.htm