Roll Number: B11008

ALSTOM PROJECTS INDIA LIMITED

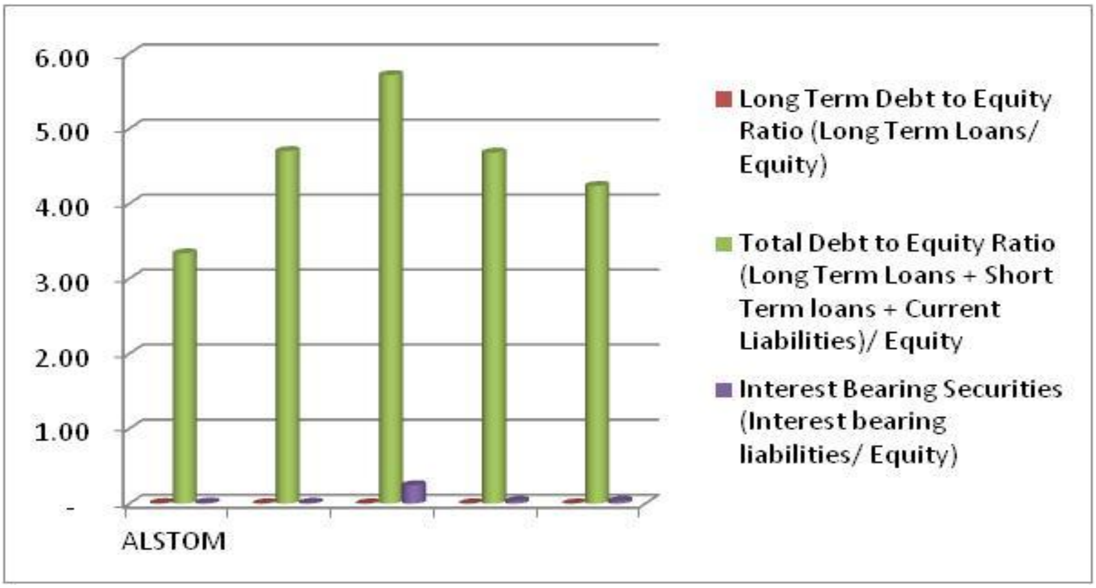
PEER: AREVA T&D INDIA LIMITED

Assignment No. 7: Capital Structure

a) The LTD-to-Equity Ratio, Interest-Bearing-Liabilities-to-Equity Ratio and the TD-to-Equity Ratio for the past five years

ALSTOM

Particulars	March 2007	March 2008	March 2009	March 2010	March 2011
Long Term Debt to Equity Ratio	0.01	0.00	0.00	0.00	0.00
Interest Bearing Liabilities to Equity Ratio	0.01	0.01	0.25	0.03	0.04
Total Debt to Equity Ratio	3.34	4.70	5.71	4.68	4.24



b) Make a mention of the surrogate debt items you may have missed in the above

Surrogate debt items in the case of the company are of the following nature:-

Leasing Commitments:-

a. **Operating Lease payments**
   The company has lease payments amounting to Rs 37.46 crores which have been recognised in the balance sheet as an expense. The lease agreements

have been entered into by the company for the leasing of vehicles and premises. These are surrogate debt items in the balance sheet since in the advent of no rental premises being available the company would have built the premises by taking loans. The company also has certain non cancellable lease payments supposed to be paid in the future years for the operating leases which are held by the company as on March 31, 2011. The amounts are not presented anywhere in the calculation of the liabilities ratios but are potential debts for the company in the future years. The same can also be shown as the following:-

Particulars	**Total minimum lease payments outstanding as at 31 March 2011 (Rs in 000's)**
Due within one year (Short Term)	325,355
Due later than one year and not later than five years	1,169,351
Due later than five years	348,942
Total	**1,843,648**

b. Finance Leases

The company has finance leases that have been taken by it for the financing of the leasehold improvements by the company. The minimum lease payments of the company for the same are amounting to Rs 3.69 crores while in the liabilities only an amount of Rs 1.5 crores, the outstanding principal value, has been included.

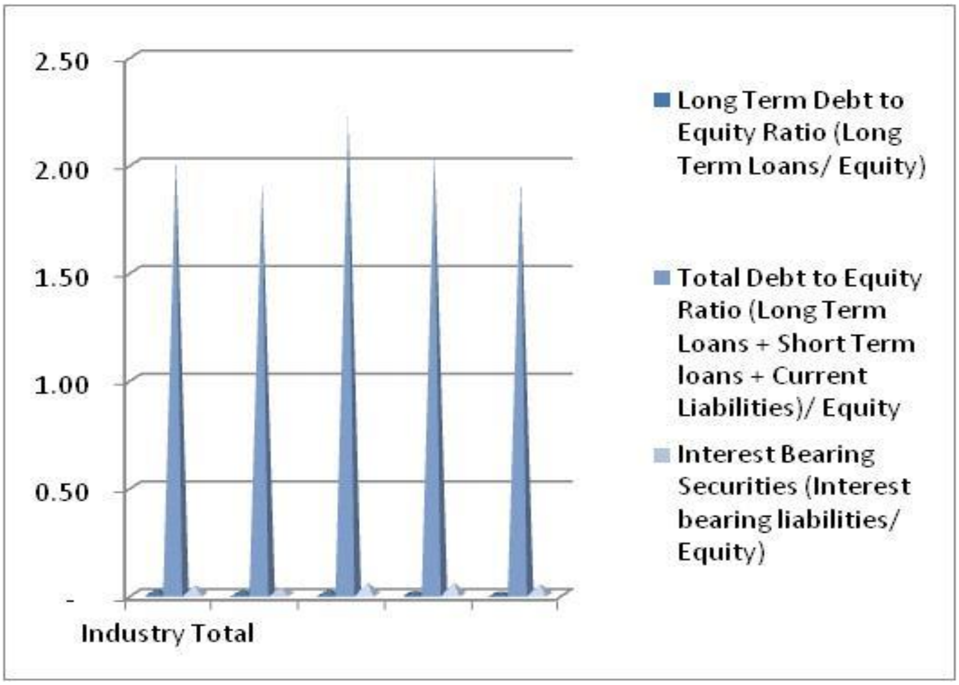
c) Comparison of the above ratios with the industry

ALSTOM

Particulars	**March 2007**	**March 2008**	**March 2009**	**March 2010**	**March 2011**
Long Term Debt to Equity Ratio	0.01	0.00	0.00	0.00	0.00
Interest Bearing Liabilities to Equity Ratio	0.01	0.01	0.25	0.03	0.04
Total Debt to Equity Ratio	3.34	4.70	5.71	4.68	4.24

Industry Average

Particulars	**March 2007**	**March 2008**	**March 2009**	**March 2010**	**March 2011**
Long Term Debt to Equity Ratio	0.03	0.01	0.02	0.02	0.01
Interest Bearing Liabilities to Equity Ratio	0.05	0.03	0.06	0.06	0.05
Total Debt to Equity Ratio	2.03	1.92	2.22	2.05	1.93



List of companies included in the Industry Average

a) Bharat Heavy Electricals Limited
b) Crompton Greaves Ltd
c) Kirloskar Electric Company Ltd
d) Areva T&D India Ltd
e) OTIS Elevator Company (India) Ltd
f) Alstom Projects (India) Ltd

Industry Data.xlsx

For the items included and the calculation refer sheet

The Long Term debt to equity and interest bearing liabilities to equity ratios for ALSTOM are lower than the ratios for the industry due to the conservative nature of the company in terms of adding any further risks onto the company's balance sheet.

The company has a high total debt to equity ratio due to the high amount of current liabilities of the company which is due to the working of the company with a negligible and at certain times negative working capital. This can be due to the high credit rating of the company in the market due to which the company is able to extract a higher credit period from the suppliers. The ratios of the industry are also high as compared to the other ratios due to the nature of the industry where the major financing in any project is done on the basis of the credit financing received from the suppliers and the advances that are received from the customers to complete the project.

d) Reasons for the low debt to equity ratios of the Industry

The major reasons for the low debt to equity ratio as per the factors discussed in the class are as follows:-

a) **Profitability**
The sector is a highly profitable sector with the industry clocking a return of 34.68% [1], hence the equity holders' manager does not want any debt service costs to reduce the profit and wants the complete return to accrue to the equity holders and work towards increasing the value for the equity holders.

b) **Owner's Inclinations**
Since the owners in the sector are primarily the government in the case of BHEL and foreign companies in the case of others, the demand of the loans for the sector is pretty low due to the fact that the industry, by its nature, is a capital intensive industry which leaves the companies operating with a high operating risk (DOL) which increases the overall risk (DTL) of the business to break even. Hence, the equity manager tries to reduce the overall risk by keeping the financial risk (DFL) low.

Secondly, since the payback period in the sector is quite high the investment is in itself risky into the business which makes debt financing unimpressive in such a scenario.

c) **Regulations**
The sector is a regulated sector with the major contracts being released from the government and government companies which are regulated and strictly controlled by the government. This makes the sector very lucrative for the lenders to provide and invest money in. But in the current scenario, due to the financial instability in the market, the owner's managers do not want to finance the companies from debt to be secured of the volatile money market.

d) **Uniqueness**
The companies in the sector are not unique in their operation as compared to the other companies and cannot demand a premium on the products, moreover they are regulated to not charge any premium which makes the returns from the business projects not to be very high, but considering the current state and the payback of the infrastructure companies, the equity holders should keep a low debt to equity ratio.

e) **Capital Intensiveness**
The sector is a capital intensive sector leading to a high degree of operating leverage which makes the owner manager take less of debt to reduce the overall risk of the business (DTL).

[1] http://www.capitaline.com/user/framepage.asp?id=1 **Industry >> Analytical Ratios >> Aggregate Key Fin Ratios**

e) Reasons for the low debt to equity ratios of the Company

a) Profitability

The company is a highly profitable company with the return on capital being 47.61% [2], hence the equity holders' manager does not want any debt service costs to reduce the profit and wants the complete return to accrue to the equity holders to increase the value for the equity share holders.

b) Owner's Inclinations

The Company is a subsidiary of a foreign company hence, the demand of the loans for the sector is pretty low due to the fact that the industry, by its nature, is a capital intensive industry which leaves the company operating with a high operating risk (DOL) of 3 which increases the overall risk (DTL) of the business to break even. Hence, the equity manager tries to reduce the overall risk by keeping the financial risk (DFL) low at 1.

The company also might not want any high monitoring and debt control costs which will come once the debt is taken which makes them keep a no debt environment.

c) Regulations

The sector is a regulated sector with the major contracts being released from the government and government companies. This makes the sector very lucrative for the lenders to provide and invest money. But in the current scenario, due to the financial instability in the market, the owner's managers do not want to finance the companies from debt to be secured of the volatile money market.

d) Uniqueness

The company is not unique in their operation as compared to the other companies in the heavy electrical sector but in the railway transportation sector, where the company is currently making investments, the company can demand a premium on the products wherein the Company will not want any debt servicing costs. Moreover considering the current state and the payback of the infrastructure companies, the equity holders' manager should keep a low debt to equity ratio.

e) Capital Intensiveness

The company is a capital intensive venture leading to a high degree of operating leverage which makes the owner manager unlikely to take less of debt to maintain a low debt to equity ratio to reduce the overall risk of the business (DTL).

High Growth -------> Lower Debt to Equity Ratio

The business is a high growth business with the increased concentration of the government towards both the electricity and railway sectors leading to high growth rates. In such a scenario the equity holder's manager likes to maintain a low debt to equity ratio as is seen in the case of ALSTOM

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[2] http://www.capitaline.com/user/framepage.asp?id=1 Finance >> Ratios >> Key Financial Ratios

f) Relation of the above findings to the Modigliani and Miller theory

The result of the Modigliani and Miller theory, in linkage of the capital structure decisions in the form of debt equity ratio, in a tax scenario, to the value of the firm, states that a levered firm, with a high debt to equity ratio, in a taxable scenario, will have a higher value than the unlevered firm without any debt.

But the same convention cannot be applied to the industry in which ALSTOM is working since the inclusion of debt in such an industry will lead to a lesser increase in the value of firm due to the tax benefit than the fall in value of the company due to the following consequences:-

a) Increase in the required return of equity holders due to increase in the overall risk of the company:- The return expected by the equity holders will increase as a consequence of the increase in the debt to equity ratio in the case of the infrastructure industry leading to a fall in the overall value of the firm.
b) High service costs of debt :- The debt will have high debt service cost in a high risk scenario which will lead to lower returns in the market, subsequently leading to lower returns and lower valuation of the Company.