

Leverage analysis on subsidiaries of ONGC

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Abstract

Leverage is used to describe the firm's ability to use fixed cost securities to increase the return to its owners. The current study has concentrated on analysing the financial operations of the two sample companies, Videsh Limited (OVL) and Mangalore Refinery and Petrochemicals Limited (MRPL) based on their liquidity, profitability and leverage positions over a decade. The study is based on secondary data collected from the financial reports published in the official websites of the two sample companies for a period of ten years from 2005-06 to 2014-15. The data have been analyzed using the financial and statistical tools namely Ratio Analysis, Mean, Standard Deviation, Coefficient of Variation and Correlation Analysis. It has been found that the operations of Mangalore Refinery and Petrochemicals Limited have to be reframed in order to assure sustainable business development and improved profit earnings in the future.

Keywords: Media, Viewership

Introduction

The oil and gas sector is one among the six core industries in India and plays a major role in decision making for all the other important sections of the economy.

The Government of India has adopted several policies to fulfill the increasing demand. The government has allowed 100 per cent foreign direct investment (FDI) in many segments of the sector, including natural gas, petroleum products, and refineries, among others.

Backed by new oil fields, domestic oil output is anticipated to grow to 1 Million Barrels Per Day (MBPD) by Financial Year 2016. With India's developing gas-fired power stations, consumption has grown by more than 160 per cent since 1995. Gas consumption is likely to expand at a Compounded Annual Growth Rate (CAGR) of 21 per cent during Financial Years starting from 2008 to 2017. Presently, domestic production accounts for more than three-quarters of the country's total gas consumption.

India increasingly relies on imported Liquefied Natural Gas (LNG) as the country was the fifth-largest LNG importer in 2013, accounting for 5.5 per cent of global imports. India's LNG imports are forecasted to increase at a CAGR of 33 per cent during 2012-17. However, net imports of Natural Gas fell from 13.14 Billion Cubic Metres (BCM) in 2012-13 to 13.03 BCM in 2013-14.

State-owned Oil and Natural Gas Corporation (ONGC) dominates the upstream segment viz., exploration and production, accounting for approximately 68 per cent of the country's total oil output during the Financial Year 2014.

Leveraging decision is important because it affects the financial performance of the firm. Thus, it is very much imperative that every successful industrial organization must pay adequate consideration to the vital question of leverage.

Hence, it has been considered imperative to study the performance of the two subsidiary companies by measuring their leverage and profitability positions.

Review of Literature

In her study on Leverage analysis and its impact on profitability of select steel companies traded in BSE, Kalpana V (2014) ^[1] has analysed the impact of leverage on earnings per share. The study has been conducted for a period of 10 years from 2003 to 2012. Secondary data have been collected and statistical tools namely mean, standard deviation, analysis of variation and correlation have been applied to analyse the same. It has been found from the study that there has been a negative correlation between DOL and EPS, DFL and EPS and DCL and EPS. The result of the study has shown that use of debt and fixed cost expenses has reduced the profitability of the companies. It has been suggested that in order to increase the earnings, the companies have to reduce the debt in the capital structure and fixed cost in the operation of the companies.

A case study on ONGC Videsh Limited has been conducted by Ravindra P S and Trinadha Roa (2014) ^[2] with the objective to analyse the financial and capital structure of the company. Secondary data collected for a period of 10 years starting from 2003 to 2013 and examined using trend analyses and ratio analyses. It has been found from the result of the study that the debt dependency was less in the company.

Khedkar EB (2015) ^[3] in his research study on Leverage Analysis and Profitability for Dr. Reddy's Laboratories has analysed and examined the financial performance and leverage of Dr. Reddy's laboratories. The relationship between leverage and profitability has also been found. The study has been conducted for a period of 5 yrs from 2010 to 2014. Tools namely, Leverages, EPS, ROI, Ratios and Correlation have been used to analyse the secondary data collected for study purpose. It has been found that the firm is not maintaining the optimum financial, operating and combined leverage. The result shows that the liquidity position is not satisfactory whereas, the firms overall efficiency is satisfactory.

Statement of the Problem

A company's leverage relates to how much debt it has on its balance sheet, and it is another measure of financial health that is a company with good financial health usually deals well with their finances, makes their payments on time and knows how to manage their money. Leverage position of the company indicates that the companies have sound long term solvency position to meet its long term obligation. The oil and gas industry is an essential industry without which it is not possible to lead life as they have become basic survival elements and their consumer category ranges from industry to household. The Oil and Natural Gas Corporation is capital intensive and uses more debt than equity and sees much larger increase in the income with increased sales than labour intensive companies. An economic slowdown will hurt a capital intensive company much more than a company not quite so capital intensive. A company is said to have favorable leverage only if its earnings are more than fixed costs and this would result in higher earning to its shareholders. Leverage is considered harmful if the income earned is less than the fixed costs arising from the use of these debts. In this context the present study is conducted to measure the leverage position of the subsidiaries of Oil and Natural Gas Corporation and its impact on profitability and liquidity.

Objectives of the Study

The study has been undertaken with the main objective of analyzing the leverage position of the Subsidiaries of ONGC companies and its impact on profitability and liquidity. To achieve this objective the following objects have been framed:

- To examine the liquidity and profitability of selected ONGC subsidiary companies.
- To measure financial leverage, operating leverage, and combined leverage.
- To analyze the impact of leverage on profitability and liquidity of the companies.

Research Methodology

The type of research design involved in the study is Analytical design. Analytical research is the process in which facts or information already available are analysed to make a critical evaluation of the same. A sample of the two subsidiary companies of ONGC viz., Videsh Limited (OVL) and Mangalore Refinery and Petrochemicals Limited (MRPL) has been selected for the purpose of the study. Ratio Analysis - Liquidity Ratio, Profitability Ratio, Capital Gearing Ratio and Leverage Ratio Descriptive statistical tools used in the study – Mean, Standard Deviation, Coefficient of Variation. *Inferential statistical tool* used in the study has been Correlation Analysis. Secondary data have been used in the study. Financial data have been obtained from the financial statements published on the official websites of the two sample companies.

Results and Discussions

The data have been analysed using the financial and statistical tools and the result of the same have been discussed as follows:

Objective 1: To examine the liquidity and profitability of selected ONGC subsidiary companies.

Table 1: Liquidity Ratios

	Current Ratio		Liquid Ratio		Absolute Liquid Ratio	
	OVL	MRPL	OVL	MRPL	OVL	MRPL
2005-06	7.27	1.43	1	0.83	0.22	0.001
2006-07	2.56	1.18	2.37	0.56	0.64	0.002
2007-08	2.23	1.17	2.10	0.61	0.90	0.002
2008-09	1.69	1.36	1.57	1.02	0.35	0.004
2009-10	1.68	1.06	1.54	0.72	0.37	0.003
2010-11	1.92	0.93	1.83	0.55	0.38	0.237
2011-12	1.63	0.98	1.55	0.44	0.20	0.162
2012-13	0.48	0.93	0.45	0.44	0.44	0.117
2013-14	0.40	1.06	0.38	0.69	0.03	0.462
2014-15	1.02	0.80	0.92	0.64	0.26	0.487
Mean	2.09	1.09	1.37	0.65	0.38	0.15
S.D	1.95	0.20	0.67	0.18	0.24	0.19
C.V %	93.41	18.18	48.68	27.32	64.45	129.30

Source: Secondary Data, Computed

It has been seen from the table 1 that the standard norm of current ratio is 2:1. The mean current ratio for Mangalore Refinery and Petrochemicals Limited has been 1.09 which implies that this company would face difficulty in meeting their current obligations. However, as far as Videsh is concerned, the current ratio is more than two and short term solvency position is good. But there has been an overall decline in the current ratio of the companies during the study period. The standard norm of liquid ratio is 1:1. The mean liquid ratio for Mangalore Refinery and Petrochemicals Limited has been 0.65 which implies that this company would face difficulty in meeting their current obligations. However, as far as Videsh

Limited is concerned, the liquid ratio is more than two and short term solvency position is good. But there has been an overall decline in the liquid ratio of the companies during the study period.

The acceptable norm for absolute liquid ratio is 50% or 0.5:1 or 1:2, i.e rupee 1 worth absolute liquid asset are considered adequate to pay rupee 2 worth current liabilities in all times as all the creditors are not expected to demand cash at the same time and then cash may also be realized from debtors and inventories. The liquidity of Videsh limited is high when compared to Mangalore Refinery and Petrochemicals Limited.

Table 2: Profitability Ratios

	Gross Profit Ratio		Operating Profit Ratio		Net Profit Ratio	
	OVL	MRPL	OVL	MRPL	OVL	MRPL
2005-06	85.01	4.58	22.27	4.741	27.11	1.49
2006-07	25.75	5.80	15.83	5.556	21.60	1.84
2007-08	27.17	6.95	15.83	6.307	20.53	3.91
2008-09	76.87	6.10	28.06	7.215	29.58	3.12
2009-10	73.56	6.87	24.99	4.757	26.13	3.49
2010-11	73.67	5.74	25.24	5.200	26.65	30.26
2011-12	66.95	3.65	21.56	3.000	22.86	16.90
2012-13	76.03	0.69	35.09	0.457	37.77	-11.52
2013-14	69.86	2.00	29.85	1.399	31.90	8.37
2014-15	78.26	2.18	13.30	3.63	17.01	-29.80
Mean	65.31	4.46	23.20	4.227	26.12	2.80
S.D	21.04	2.22	6.89	2.12	6.03	15.83
C.V %	32.22	49.75	29.68	50.24	23.10	564.48

Source: Secondary Data, Computed

It has been found from the table 2 that Gross profit Ratio has revealed that Videsh Limited has better gross profit whereas Mangalore Refinery and Petrochemicals Limited has been found to have a very low gross profit during the study period. The net profits are obtained after deducting income tax and, generally, non - operating incomes and expenses are excluded from the net profit for calculating this ratio. Thus, incomes such as interest on investment outside the business, profit on

sale of fixed assets, etc. are excluded. A comparison of net profit ratio over time or for different firms in the same industry is a good measure of profitability and it is found to be high for Videsh Limited when compared to Mangalore Refinery and Petrochemicals Limited.

Objective 2: To measure financial leverage, operating leverage, and combined leverage.

Table 3: Leverages

	Financial Leverage		Operating Leverage		Composite Leverage	
	OVL	MRPL	OVL	MRPL	OVL	MRPL
2005-06	0.94	1.30	4.82	12.91	4.55	16.78
2006-07	0.92	1.29	4.23	13.86	3.91	17.89
2007-08	1.27	1.30	3.23	16.51	4.09	21.50
2008-09	1.17	1.52	2.89	25.79	3.37	39.31
2009-10	1.04	1.98	3.62	31.49	3.77	62.50
2010-11	1.06	1.29	3.52	17.41	3.74	22.39
2011-12	1.04	1.49	4.22	27.42	4.39	40.73
2012-13	1.01	-0.96	2.63	-44.04	2.64	-137.77
2013-14	1.04	3.51	2.97	52.33	3.10	183.62
2014-15	0.96	-0.58	1.91	-49.93	1.84	-28.95
Mean	1.05	1.33	3.40	29.19	3.54	23.80
S.D	0.10	1.11	0.87	45.61	0.83	79.26
C.V %	9.95	83.22	25.45	296.04	23.44	333.05

Source: Secondary Data, Computed

It has been evident from the table 3 that Mangalore Refinery and Petrochemicals Limited would face high financial risk in meeting its fixed securities charges where it might even face difficulty in getting new lenders in future. On the other hand Videsh uses less amount of debt in financing their business needs as its financial leverage has been found to be stable. With a high degree of operating leverage Mangalore Refinery and Petrochemicals Limited has been facing heavy business risk which is unhealthy for the organization.

It has been found that despite high earnings during the initial period of study Mangalore Refinery and Petrochemicals Limited has faced decline in the latter years owing to its highly volatile business operations.

Objective 3: To analyze the impact of leverage on profitability and liquidity of the companies

Table 4: Impact of Financial Leverage, Operating Leverage and Composite Leverage on Liquidity Ratios

	Financial Leverage		Operating Leverage		Composite Leverage	
	OVL	MRPL	OVL	MRPL	OVL	MRPL
Current Ratio	-0.25	0.38	0.72	0.47	0.62	0.27
Liquid Ratio	0.29	0.34	0.41	0.32	0.54	0.36
Absolute Liquid Ratio	0.46	-0.001	0.02	-0.21	0.20	-0.23

Source: Secondary Data, Computed

It has been seen from the table 4 that there has been a low positive correlation identified for all the liquidity ratios when they have been related with financial leverage. Since, the correlation values range between -0.25 to 0.46 and -0.001 to 0.38 in absolute terms, low to moderate correlation has been traced between financial leverage and liquidity ratios for the two sample companies.

Operating leverage has positively correlated with all the liquidity ratios of Videsh Limited. When Mangalore Refinery and Petrochemicals Limited has been considered operating leverage has positively correlated with current ratio and liquid ratio whereas absolute liquid ratio has negative correlation. Hence, it has been concluded that the impact of operating leverage has been positive for Videsh Limited and in case of

Mangalore there has been a negative relationship found for the liquid ratio.

The correlation has shown that there exist a positive correlation between composite leverage and all the liquidity ratios for Videsh Limited. There has been a negative relationship between composite leverage and absolute liquid ratio and, positive correlation between composite leverage and current ratio and liquid ratio. Hence, it has been found that in absolute terms for Videsh Limited there has been a low to high correlation between composite leverage and liquidity ratios and when Mangalore has been considered there has been a negative correlation for absolute liquid ratio and low correlation for the other two liquidity ratios.

Table 5: Impact of Financial Leverage, Operating Leverage and Composite Leverage on Profitability Ratios

	Financial Leverage		Operating Leverage		Composite Leverage	
	OVL	MRPL	OVL	MRPL	OVL	MRPL
Gross Profit Ratio	-0.28	0.37	-0.18	0.51	-0.30	0.27
Operating Profit Ratio	0.05	0.17	-0.12	0.30	-0.11	0.30
Net Profit Ratio	-0.01	0.61	-0.08	0.74	-0.10	0.46

Source: Secondary Data, Computed

Table 5 has shown that financial leverage has negatively correlated with gross profit ratio and net profit ratio of Videsh Limited and operating profit ratio has a low positive correlation with financial leverage. For Mangalore Refinery and Petrochemicals Limited there has been low positive correlation identified for gross profit and operating ratio whereas financial leverage has a high positive correlation with net profit ratio. Hence, it has been concluded that there has been a low correlation between financial leverage and profitability ratios for Videsh Limited and, the impact of financial leverage on profitability ratios has been positive for Mangalore.

There has been a negative correlation between operating leverage and all the profitability ratios for Videsh Limited. In Mangalore there has been a high correlation between operating leverage and net profit ratio, moderate correlation between operating leverage and gross profit ratio and, a low correlation of 0.30 has been found for operating leverage and operating profit ratio. Therefore, it has been found that in absolute terms a negative correlation has been identified for Videsh Limited and low to high correlation has been noted for Mangalore when the operating leverage has been compared with profitability ratios.

There has been a negative correlation between composite leverage and all the profitability ratios for Videsh Limited. In Mangalore Refinery and Petrochemicals Limited there has been a low correlation when composite leverage has been compared with net profit ratio, operating profit ratio and gross profit ratio. Therefore, It has been found that in absolute terms a negative correlation has been identified for Videsh Limited and low correlation has been noted for Mangalore Refinery and Petrochemicals Limited when the composite leverage has been compared with profitability ratios.

Conclusion

Oil and Natural Gas Industry has played a vital role in the economic development of the country as it contributes a major share of revenue. Despite the fluctuations in the price of the products there has been a continuous demand as their products are basic amenities without which it is difficult to survive in this modern era. ONGC is a public sector organization that

caters to the requirements of the customers, both industries and domestic. On analysing the two subsidiaries of ONGC viz., Videsh Limited and Mangalore Refinery and Petrochemicals Limited for a period of ten years, it has been found that Videsh Limited has earned an adequate profit whereas Mangalore Refinery and Petrochemicals Limited has incurred loss during 2014-2015 and 2012-2013. Videsh Limited has been well performing when liquidity, profitability and leverage positions have been examined. In case of Mangalore Refinery and Petrochemicals Limited, liquidity has been inadequate and capital gearing has been high which may contribute to low profit earning capacity in the future. Hence, the operations of Mangalore Refinery and Petrochemicals Limited has to be reframed in order to assure sustainable business development and improved profit earnings in the future.

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