
IMPACT OF FINANCIAL LEVERAGE ON PROFITABILITY IN CASE OF ONGC LTD

CA Haresh Kothari

*Former Director & Professor, and
Head-Centre of Excellence for GST
Symbiosis University of Applied Sciences, Indore*

Abstract

Financial Management basically deals with raising of financial resources and its proper allocation in order to maximize shareholders wealth. For a successful running of an organization fixed and current assets play a crucial role as organization generally invests in these options. A firm's working capital consists of its investments in short-term assets like cash and bank balance, inventories, receivable and short term investments. Therefore, the working capital management mainly refers to the management of all these individual current assets. In this research paper an attempt has been made to study the components of financial leverage and the possible implications of financial leverage on profitability of ONGC Limited. The paper also attempts to analyse the correlation between liquidity, profitability and return on investments of ONGC. The study is based on secondary data collected from annual reports of ONGC for the period 2013-14 to 2017-18. In this paper there is an application of correlation and regression analysis to identify the significant impact of financial leverage on the profitability. Financial leverage is essential as it might have a direct impact on profitability and liquidity.

Keywords : Financial Leverage, Liquidity, ONGC, Profitability

INTRODUCTION

Financial leverage is a measure of how much firms use equity and debt to finance its assets. A company can finance its investments by debt and equity. The company may also use preference capital. The rate of interest on debt is fixed irrespective of the company's rate of return on assets. The financial leverage employed by a company is intended to earn more on the fixed charges funds than their costs. As debt increases, financial leverage increases. It has been seen in different studies that financial leverage has effect on corporate performance of quoted pharmaceutical companies in Nigeria. The primary motive of a company in using financial leverage is to magnify the shareholders' return under favourable economic conditions. The role of financial leverage in magnifying the return of the shareholders' is based on the assumptions that the fixed-charges funds (such as the loan from financial institutions and other sources or debentures) can be obtained at a cost lower than the firm's rate of return on net assets (RONA or ROI). Damouri, et al (2013) states that leverage ratios contribute in measuring the risk of using equity costs. They adds that there are various measures known for the capital structure among which the most important are book value based measures, market value based measures and semi- market value based measures (adjusted market value). Financial leverage affects profit after tax or earnings per share. The combined effect of two leverages can be quite significant for the earnings available to ordinary shareholders (Pandey, 2010).



OBJECTIVES OF THE STUDY

- To study relationship between financial leverage and Profitability of the ONGC Ltd.
- To study relationship between liquidity and profitability of the ONGC Ltd.

LITERATURE REVIEW

Akhtar, et al (2012) examines the relationship between financial leverage and financial performance, evidence from fuel and energy sector of Pakistan. The result shows that there is a general perception that a relationship exists between the financial leverage and the performance of the companies' i.e most of the financial performance indicators have positive relationship with debt to equity ratio while the gearing ratio indicates negative relationships with the leverage indicators. The result adds that gearing ratio may differ from that of debt to equity ratio while debt equity ratio takes into account the long term debt.

Rehman (2013) studies the relationship between financial leverage and financial performance in listed sugar companies of Pakistan. The results shows positive relationship of debt equity ratio with return on asset and sales growth, and negative relationship of debt equity ratio with earning per share, net profit margin and return on equity. This negative relationship between debt equity ratio and earnings per share (EPS) support the fact that as debt increases, the interest payment will also rises, so EPS will decrease.

Akinmulegun (2012) examines the effect of financial leverage on selected indicators of corporate performance in Nigeria. This shows that financial leverage significantly affects corporate performance in Nigeria.

Rajin (2012) investigates the influence of financial leverage on shareholders return and market capitalization, evidence of telecommunication sector companies in India. He find out that the nature of relationship and the state of influence of the financial leverage on shareholder's return and market capitalization individually indicates positive relationship between financial leverage and shareholder return but negative relationship between financial leverage and market capitalization.

Ujah and Brusa (2013) suggested that financial leverage and cash flow impact the degrees to which firms manage their earnings.

Obradovich and Gill (2013) indicates that larger board size negatively impacts the value of American firms and CEO duality, audit committee, financial leverage, firm size, return on assets and insider holdings positively impact the value of American firms.

Pandey (2010) says that the variance and covariance and therefore beta depend on three fundamental factors such as; the nature of business, the operating leverage and financial leverage.

Nasrollah et al (2013) studies effect of financial leverage and investment diversification on income-increasing earning management. The results show that financial leverage coefficient is meaningful at level of 95% of confidence, consequently, it can be concluded that financial leverage has an influence on income-increasing earnings management.

Enuju and Soocheong (2005) examine the effect of financial leverage on profitability and risk of Restaurant firms. They find that financial leverage does not influence the restaurant firms' profitability. It is noteworthy that the sign of financial leverage is positive meaning that more leveraged firms had more profits on average even though it was not statistically significant.





Nazir and Saita (2013) studies financial leverage and agency cost, an empirical evidence of Pakistan. The study found out that general and admin expense ratio to sales ratio is negatively related to all four leverage ratios.

Taani (2012) investigates impact of working capital management policy and financial leverage on financial performance. The study shows that firm's working capital management policy, financial leverage and firm size have significant relation to net income and also no significant impact on return on equity (ROE) and return on Assets (ROA).

Akbarian (2013) examines the investigation effect of financial leverage and environment risk on performance firms of listed companies in Tehran stock exchange. The result shows that there is a negative relation between financial leverage and cash flow per share. It also indicates that financial leverage, market risk and economic risk with return of equity have positive significant relationship.

Gleason, et al (2000) in their study of European countries, found a significant negative relationship between the financial leverage and return on assets and profit margin.

Deesomsak (2004) in Malaysia also found a negative relationship between financial leverage and net profit margin.

Huang and Song (2004) studies on Chinese companies found a negative relationship between long-term debt and return on assets, as well as between all the liability and return of assets.

Berger and Bonaccorsi (2006) evidence that neither high level of financial leverage nor small capital of the company, are associated with higher efficiency of company's financial performance.

Rao et al. (2007) also confirmed the negative relationship between leverage and financial performance result.

Jelinek (2007) examines the effect of financial leverage and free cash flow and firm growth on earnings management. The results indicate that firm experiencing an increase in financial leverage during a five year period gradually compared to those which had high leverage degree in the same period has performed less earnings management.

Alcock, et al (2013) examines the role of financial leverage in the performance of private equity real Estate funds. The results indicates that funds overall are unable to deliver significant positive out performance on the basis of managerial skill that is unrelated to the exposure to the variation in the underlying market return. It also reveals that the impact of transaction costs, fees and other market frictions that are especially prevalent in the direct real estate investment industry, given the relatively low level of liquidity of the underlying assets. It further shows that excess fund return were approximately proportional to the excess market return, implying that these fund offers their investors effective exposure to the performance of the underlying property markets.

RESEARCH METHODOLOGY

SAMPLE SIZE

For this study, researcher has selected ONGC Ltd to study the relationship between financial leverage and profitability, and liquidity and profitability.

SOURCES OF DATA

Secondary sources of data have been used for this study. Annual reports of ONGC Ltd have been analysed.





RESEARCH PERIOD

Last 5 years' (2013-14 to 2017-18) annual reports of ONGC Ltd have been collected.

DATA ANALYSIS TECHNIQUES

Correlation matrix techniques has been used to study the relation between financial leverage and profitability, and liquidity and profitability of ONGC Ltd

DATA ANALYSIS

	CTS	ACR	DTR	ITR	WCTR	CASR	CATAR	QR	CR	ROI	DER
CTS	1.000	-0.060	0.080	-0.200	0.920	-0.200	-0.240	-0.420	-0.270	-0.270	0.050
ACR	-0.060	1.000	-0.360	-0.100	0.000	-0.620	-0.680	0.550	0.390	-0.500	0.340
DTR	0.080	-0.360	1.000	0.590	0.010	0.620	0.490	-0.390	-0.510	-0.070	0.520
ITR	-0.200	-0.100	0.590	1.000	-0.260	0.510	0.360	-0.280	-0.350	0.100	0.880
WCTR	0.920	0.000	0.010	-0.260	1.000	-0.410	-0.380	-0.260	-0.300	-0.180	0.420
CASR	-0.200	-0.620	0.620	0.510	-0.410	1.000	0.910	-0.520	-0.540	0.290	0.110
CATAR	-0.240	-0.680	0.490	0.360	-0.380	0.910	1.000	-0.560	-0.560	0.550	0.410
QR	-0.420	0.550	-0.390	-0.280	-0.260	-0.520	-0.560	1.000	0.440	-0.410	0.550
CR	-0.270	0.390	-0.510	-0.350	-0.300	-0.540	-0.560	0.440	1.000	-0.290	0.870
ROI	-0.270	-0.500	-0.070	0.100	-0.180	0.290	0.550	-0.410	-0.290	1.000	0.780
DER	0.050	0.340	0.520	0.880	0.420	0.110	0.410	0.550	0.870	0.780	1.000

FINDINGS

The analysis shows that there is a negative correlation between Return on Investment (ROI) on one hand and measures of Working Capital Management (WCM) like Current Ratio (-.290), Quick Ratio (-0.4105), Working capital turnover ratio (- 0.175), Debtors Turnover Ratio (-0.074), Absolute Cash Ratio (-0.500) and Cash to sales ratio (-0.273). This shows that with the increase in Current ratio, Quick ratio, Working capital turnover ratio, Debtors turnover ratio, Absolute cash ratio and Cash to sales ratio there is a negative impact i.e. there is a decrease in profitability and vice versa. Current Asset to Total assets Ratio (0.549), Current assets to sales ratio (0.285) and Inventory Turnover ratio (0.100) shows a positive relation with Return on Investment (ROI). This shows that with increase in CATAR, CASR and ITR there is an increase in profitability and vice versa. Through Correlation matrix table it is observed that there is a very high degree of correlation between CATAR and CASR (0.9118) and between WCTR and CTS (0.923). This high degree of correlation indicates that there is an existence of multiple correlation i.e. the existence of high correlation between the independent variables. Debt Equity ratio (DER) has high degree of correlation with Return on Investment (ROI).

REGRESSION DEBT EQUITY RATIO AND RETURN ON INVESTMENT

<i>Regression Statistics</i>						
Multiple R	0.78499					
R Square	0.6162					
Adjusted R Square	0.56823					
Standard Error	3.8091					
Observations	10					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	1	186.36	186.36	12.8443	0.00715	
Residual	8	116.074	14.5092			
Total	9	302.434				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	33.0407	4.87457	6.77819	0.00014	21.8	44.2815
X Variable 1	-19.4	5.41302	-3.5839	0.00715	-31.882	-6.9172





INTERPRETATION

Multiple R = 0.784, which indicates that there is linear relationship between Debt equity ratio vs return on investment.

From the ANOVA table, it can be seen that p-value 0.007 which is less than specified α of 0.05. So null hypothesis is rejected and it concluded that there is impact of debt equity ratio on return on investment.

CONCLUSION

The study of correlation reveals both positive and negative coefficients. Out of nine ratios relating to working capital management selected during the period under study, in case of Current Ratio (-.290), Quick Ratio (-0.4105), Working capital turnover ratio (-0.175), Debtors Turnover Ratio (-0.074), Absolute Cash Ratio (-0.500) and Cash to sales ratio (-0.273) shows a negative association with the selected profitability ratio (ROI) and the remaining ratios Current Asset to Total assets Ratio (0.549), Current assets to sales ratio (0.285) and Inventory Turnover ratio (0.100) have a positive relation with profitability (ROI). The research paper shows that the debt equity ratio of the company has an impact on profitability. When there is an increase in debt equity ratio the profitability of the company decreases and vice versa.

REFERENCES

- Akbarian, S (2013). The investigation effect of financial leverage and Environment Risk on Performance firms of listed companies in tehran Stock Exchange 8(3): 249 - 255.
- Akhtar, S; Javed, B; Maryam, A and Sadia, H (2012). Relationship between financial leverage and financial performance: Eviden ce from fuel and energy sector of Pakistan European Journal of Business and Management 4(11): 7 - 17.
- Akinmulegun, S.O (2012). The effect of financial leverage on corporate performance of some selected companies in Nigeria Canadian Social Science 8(1): 85 - 91.
- Alocock, J; Baum, A; Colley, N and Steiner, E (2013). The role of financial leverage in the performance of private equity real estate funds The Journal of portfolio management: 99 - 110.
- Berger, A and Bonaccorsi, P.E (2006). Capital Structure and firm performance: A new approach to testing agency theory and an application to the banking industry Journal of Banking and Finance (30): 1065 - 1102.
- Damouri, D; Khanagha, J.B and Kaffash, M (2013). The relationship between changes in the financial leverage and the values of the Tehran listed firms.
- Deloof, M (2003). Does working Capital Management affect Profitability of Belgian firms? Journal of Business Finance and Accountancy 30(3) and (4).
- Ekwe, M.C and Duru, A.N (2012). Liquidity Management and Corporate profitability in Nigeria ESUT Journal of Accountancy 3(1): 22 - 28.
- Emekekwe, P.E (2008). Corporate Financial Management. 5th Revised ed; Kinshasha: African Bureau of Educational Sciences.
- Enekwe, C.I (2012). Financial ratio Analysis as a planning tool for corporate profitability: A study of selected qu oted pharmaceutical companies in Nigeria Unpublished M.Sc dissertation Department of Accountancy ESUT Enugu.
- Enuju, Y and Soocheong, J (2005). The effect of financial leverage on profitability and Risk of Restaurant firms Journal of Hospitality Financial Management 13(1): 1 - 18.
- Ezeamama, M.C (2010). Fundamentals of Financial Management: A practical guide. Enugu: Ema press Ltd.
- Falope, O and Ajilore, O.T (2009). Working Capital management and corporate profitability: Evidence from panel data analysis of selected quoted firms in Nigeria Research Journal of Business Management 3(3): 73 - 84.





- Houang, G and Song, F.S (2006). The Determinants of Capital structure: Evidence from China China Economic Review 14: 14 -36.
- Jelinek, K (2007). The effect of leverage increases on earnings management Journal of Business and Economic Studies 13: 24 - 46.
- Karaduman, H.A ; Akbas, H.E; Caliskan, A.O and Durers (2011). The relationship between working capital management and profitability: Evidence from an emerging market International Research Journal of Finance and Economics 62: 61 - 67.
- Koutsoyianis, A (2003). Theory of Econometrics. 2nd ed; London: Palmgrave Publishers.
- Lazaridis, I and Tryfonidis, D (2006). Relationship between working capital management and profitability of listed companies in the Athens Stock Exchange Journal of Financial Management and Analysis 19(5): 26 - 35.
- Nasrollah, T, Mohammad, A.O and Seyed, H.S.E (2013). Effect of financial leverage and investment diversification on income -increasing Earnings management Middle-East Journal of Scientific Research 16(6): 836 - 844.
- Nazir, M.S and Saita, H.K (2013). Financial leverage and Agency Cost: An Empirical evidence of Pakistan International Journal of Innovative and Applied Finance 19: 1 - 16.
- Obradovich, J and Gill, A (2013). The impact of Corporate Governance and financial leverage on the value of American firms' Faculty Publications and Presentations. Paper 25.
- Onwumere, J.U.J (2009). Business and Economic Research Methods. 2nd ed; Enugu: Vougasen Limited.
- Pandey, I.M (2010). Financial Management. 10th ed; New Delhi: Vikas publishing House PVT Ltd.
- Rajin, S (2012). Impact of Financial Leverage on Shareholders returns and market Capitalization: Empirical evidence of telecommunication sector Companies India International Journal of Reasearch in IT, Management and Engineering 2(12).
- Rehman, S.S (2013). Relationship between financial leverage and financial performance: Empirical Evidence of listed sugar companies of Pakistan Global Journal of management and Business Research finance 13(8): 33 - 40.
- Shin, H and Soenen, L (2000). Liquidity management on profitability is there room for Both? AFP Exchange 20(2): 46 - 49.
- Singh, J.P and Pandey, S (2008). Impact of working Capital management in the profitability of Hindalco industries Limited The IUP Journal of financial Economics 6(4): 62 - 72.
- Taani, K (2012). Impact of working capital management policy and financial leverage on financial performance: Evidence from Amman Stock Exchange listed companies International Journal of management sciences and Business Research 1 (8): 10 - 17.
- Ugwuanyi, W (2004). Introduction to financial Analysis and Project Evaluation. Lagos: Johnken and willy Publications Nig. Ltd.
- Ujah, U and Brusa, O. (2012). The effect of financial leverage and cash flow volatility on Earnings management Texas A & M International University.

