RESEARCH ARTICLE

PROFITABILITY PERFORMANCE ANALYSIS OF HYDERABAD INDUSTRIES LIMITED AT HYDERABAD, INDIA

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ARTICLE INFO	ABSTRACT
	The Primary objective of a business undertaking is to earn profits. Profit earning is considered essential for the survival of the business. Profitability analysis measures how will a firm is performing in terms of its ability to generate profits. Profitability of the firm is highly influenced by internal and external variables, i.e., size of organizations, liquidity management, growth of organizations, component of costs and inflation rate. In this paper an attempt has made to measure the profitability performance and to analyze the impact of selected profitability ratios on ROE of the company, for fulfillment of the objectives the data collected from the annual report from 2002-03 to 2011-12; the collected data is analyzed and computed to fit for drawing inferences. In this investigation correlation and multiple regression analysis were used to find out the impact of selected profitability ratios (Gross Profit, Operating Profit, Net Profit, Earning per Share and Return on Total Assets) on ROE. The result reveals that selected profitability ratios have significant impact on ROE.

INTRODUCTION

The Primary objective of a business undertaking is to earn profits. Profit earning is considered essential for the survival of the business. In the words of Lord Keynes, "Profit is the engine that drives the business enterprise". A business needs profits not only for its existence but also for expansion and diversification. Profitability analysis measures how will a firm is performing in terms of its ability to generate profits. It is a financial metric that are used to assess business ability to generate earning as compare to expenses and other relevant costs incurred during a specific period of time .For most of these profitability ratios, having a higher value relating to a competitor's ratios or the same ratios from a previous period is indicative that the company is doing well. Profitability analysis helps the firm to take various strategic and operational oriented decisions such as net sales generated from the operation, gross profit figures in specific years compare to previous periods and also take the decisions relating to need for modernizations, expansion and diversification of business in the different markets. Profitability ratios are used to give an idea of likely it is company turn a profits as well as how that profit relates to other important information about the company, in general the higher a company's profit margin the company is in better in terms of sale, net profit and assets utilization so, there is special focus is mode on profitability analysis .Profitability analysis is carries out with the help of different profitability ratios.

Literature review

The determinants of the profitability of Australian manufacturing firms analyzing to estimate the dynamic profitability models over the business cycle, to test both the persistence and cyclically of firm profitability. Econometric results suggest that lagged profitability is a significant determinant of current profit margins, and that industry concentration is positively related to firm profit margins.

Also, profit margins are found to be procyclical in concentrated industries but counter-cyclical in less concentrated industries (Mc Donald, 1999). The trade reforms are often expected to decrease profit margins as firms struggle to compete in international markets, there is the possibility that increased competition may improve firm efficiency and provide a positive impetus to firm profitability .the authors developed an efficient index to directly analyze the impact of changing efficiency levels on firm profit margins (Kambhampati, 2003). The determinant of profitability of Public Sector Banks in India by an empirical estimation of profit function model which showed that interest cost, interest income, other income, deposits per bank, credit to total assets, proportion of priority sector advances and interest income loss were the significant determinants of profits and profitability of Public Sector banks. Also, the average establishment cost positively contributed to the profitability but adversely affected the net profit of the Indian Public Sector Banks (Ganesan, 2001). Assessed the financial performance (profitability) of commercial banks in Saudi Arabia. The authors employed a regression model to test the effect of business risk, concentration and market size on the profitability of the bank measured in terms of return on assets (ROA) and return on equity (ROE), and earnings per share (EPS).The empirical results generated from the three models showed that business risk and the bank size were the main variables which determined bank's profitability (Ahmed, 1999).

Thomas (1987) indicated that financial ratios express relationships among items taken from financial statements. The traditional use of financial ratios has been as a measure of the liquidity, performance and profitability of a firm and thereby as monitor of the efficiency and effectiveness of the management. The profitability determinants into two main categories, namely the internal determinants and the external determinants. The internal determinants included management controllable factors such as liquidity, investment in securities, investments in subsidiaries, loans, non-performing loans, and over head expenditure. Other determinants such as savings,

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current account deposits, fixed deposits, total capital and capital reserves, and money supply also play a major role in influencing the profitability of commercial banks. The external determinants include those factors which are beyond the control of management of these institutions such as interest rates, inflation rates, market growth and market share (Rasiah, 2010). The superior firm hypothesis stating that firms differ with respect to their level of productivity and that these inter firm differences are the major factor behind profit heterogeneity. The logic behind it is that firms operating at relatively higher productivity levels have competitive advantages over less productive competitors which are reflected in their profitability (Demsetz, 1973). According to Walker (1974) the return on investment should be considered as the best measure of profitability. According to Pandy (1979) recent experience in countries with totally planned economies indicates that economists are probably right in emphasizing the importance of overall profitability as a criterion for the efficient operation of an enterprise. On other hand few studied have identified and tested a number of factors affecting the profitability of business enterprises. Notable among them are Baker(1973), Philips(1976), Rumelt (1982), Paul (1985), Brahmaiah (1991), Schwalback (1991), Kaur (1997), Sahu (2000), Vijaya kumar and Kadirvrlu (2003), Raman and Dangwal (2003), Bhayani (2004 and 2006), Mishra and Mishra (2006) and Venkata Ramana. N *et al*. ((2011).

Objectives of the study

- To measure the profitability performance of Hyderabad Industries Limited, India through profitability ratios.
- To analyze the impact of profitability ratios on ROE with the help of multiple regression.

Hypothesis of the study

H_{o1}: Gross Profit Ratio positively affects profitability
H_{o2}: Net profit Ratio positively affects profitability.
H_{o3}: Operating Profit positively affects profitability.
H_{o4}: Return on Total Assets (ROA) positively affects profitability.
H_{o5}: Earning Per Share (EPS) positively affects profitability**.**

Research Design and Scope of the study

In this research paper Analytical research design is used as it uses already available facts and which critically evaluates available facts of the selected concern. This study investigate the affect of selected profitability ratios on ROE, for this analysis data is gathered from the annual financial statements of Larsen &Toubro Limited, India from 2002-03 to 2011 -12.

Research Methodology and Tools for Analysis

In this study principal tool is used are selected profitability ratios such as Gross Profit, Operating Profit, Net Profit , Earnings Per Share, Return on Assets and Return on Net Worth Ratios. The model is build based on selected profitability ratios (Gross Profit, Operating Profit, Net Profit, Earnings Per Share, Return on Assets) are used as independent variables and Return on Equity is used as dependent variable apart from ratios analysis statistical treatment of data are also performed among them Mean, Standard Deviation, Correlation, Multiple Regression analysis is carried out to draw out inferences for testing the hypothesis of the study.

OPERATIONAL DEFINITIONS

Gross Profit Margin

Gross profit margin = sales - cost of sales /Sales OR Gross profit / Sales. It measures the relative profitability of a firm's sales after the cost of sales has been deducted. The higher the gross profit margin, the better or the lower the relative cost of the merchandise sold.

Operating Profit Margin

Operating profit margin = Operating profit / Sales. It measures the percentage of each sales amount remaining after all costs and expenses other than interest, taxes, and preferred stock dividends are deducted. It represents the pure profits earned on each sales amount. A high operating profit margin is preferred.

Net Profit Margin

Net profit margin =Earnings after Taxes (EAT) / Sales. It measures how profitable a company's sales are after all expenses, including taxes on interest and preferred stock dividends, have been deducted. The higher the firms net profit margin, the better.

Earnings Per Share (EPS)

Earnings per share =Earnings after Taxes less preference dividend /Number of shares of common stock outstanding. Earnings per share represent the number of amounts earned during the period on behalf of each outstanding share of common stock. The firm's earnings per share (EPS) are generally of interest to represent or prospective stockholders and the management.EPS is closely watched by the investing public and is considered as an important indicator of corporate success.

Return On total Assets (ROA)

Return on Total Assets = Earnings after Taxes (EAT) / Total Assets. The return on total assets (ROA), often called the return on investment (ROI), measures the overall effectiveness of the management in generating profits with its available assets. The higher the firms return on total assets, the better.

Return On common Equity (ROE)

Return on common equity = Earnings after Taxes (EAT) / common stock Equity. The return on equity (ROE) measures the return earned on the common stockholders' investment in a firm. The higher this return, the better off the owners.

RESULTS AND DISCUSSIONS

Table 1. Correlation between ROE and GPR

		ROE	GPR
ROE	Pearson Correlation	1	.932[**]
	Sig. (2-tailed)		.000
	N	10	10
GPR	Pearson Correlation	.932[**]	1
	Sig. (2-tailed)	.000	
	N	10	10
** Correlation is significant at the 0.01 level (2-tailed).			

Table no 1 describes correlation between ROE and Gross Profit. It reveals that there is positive correlation between ROE and GPR which is significant at 1% level of significance hence, we accept hypothesis that there is influence of Gross Profit on ROE.

Table 2. Correlation between OPR and ROE

		ROE	OPR
ROE	Pearson Correlation	1	.965[**]
	Sig. (2-tailed)		.000
	N	11	11
OPR	Pearson Correlation	.965[**]	1
	Sig. (2-tailed)	.000	
	N	11	11

Table no 2 reveals correlation between Operating profit and ROE and the Pearson correlation was used to test the hypothesis 2: Operating Profit ratio positively affects profitability. The results reveal that operating profit is positively correlated with return on equity (ROE) which is statistically significant at 1% level of significance.

Table 3. Correlation between ROE and NPR

		ROE	NPR
ROE	Pearson Correlation	1	.918[**]
	Sig. (2-tailed)		.000
	N	10	10
NPR	Pearson Correlation	.918[**]	1
	Sig. (2-tailed)	.000	
	N	10	10
**Correlation is significant at the 0.01 level (2-tailed).			

Table no3 refers that correlation between Net Profit and ROE is positive correlation i.e.0.918 which is significant correlation at 1 %

level of significance. The Person correlation was used to test the Ho3: Net Profit Ratio positively affects profitability, but in this test Net Profit Ratio positively influencing on profitability.

Table 4. Correlation between EPS and ROE

		ROE	EPS
ROE	Pearson Correlation	1	.863**
	Sig. (2-tailed)		.001
	N	10	10
EPS	Pearson Correlation	.863**	1
	Sig. (2-tailed)	.001	
	N	10	10

**Correlation is significant at the 0.01 level (2-tailed

Table no 4 indicates that correlation between ROE and EPS is positive correlation i.e.0.863 which is significant correlation between ROE and EPS at 1 % level of significance. Pearson correlation is used to test the Ho4: EPS positively affects profitability. As per Pearson correlation EPS is influencing positively on ROE.

Table 5. Correlation between ROE and ROA

		ROE	ROA
ROE	Pearson Correlation	1	.256
	Sig. (2-tailed)		.476
	N	10	10
ROA	Pearson Correlation	.256	1
	Sig. (2-tailed)	.476	
	N	10	10

**Correlation is significant at the 0.01 level(2-tailed.

Table no 5 shows that correlation between ROE and ROA is 0.256.To test the hypothesis Ho5: ROA positively affects profitability .It is positive correlation between ROE and ROA which is insignificant correlation at 1% level of significance. So, Ho5 is rejected.

Table 6. Mutiple Regression Analysis

Variable	Regression Coefficient	Standard Error of Regression Coefficient	"t" value	Sig.t
GPR	-0.214	1.444	-0.352	0.743
OPR	1.196	1.736	1.865	0.136
NPR	0.931	2.434	1.301	0.263
EPS	-1.278	0.135	-3.493	0.025
ROA	0.297	0.019	1.314	0.259
CONSTANT	-16.67	9.55	-1.746	0.156
Multiple R =0.991	$R^2_{=0.982}$	adj.$R^2_{=0.959}$	S.E of R = 2.988	

Source: SPSS & Annual Reports of Hyderabad Industries Limited.

Ho: There is no significant evidence of multiple correlations among selected variable under study. We use F-test and work out the test statistic as under: $F = R^2 / (k-1) \div (1-R^2) / (n-k)$ Where R is any multiple coefficient of correlation, k being the number of variables involved and n being the number of paired observations. The test is performed by entering tables of the F- distribution .**F** table value of for $v1$= k-1=6-1=5 & $v2$= n-k=10- 6=4 at 5 % level of significance =6.26 .F cal > Ft. i.e., 43.39 > 6.26. we can reject Ho. Inference: By applying F-test, we conclude that there is significant evidence of multiple correlations among selected variable under study. It is statistically significant. Table no 6 reveals the result of multiple regressions. The regression model used in this analysis is as follows. ROE = β0 + β1GPR + β2OPR + β3NPR + β4EPS +β5ROA, where = β0, β1, β2, β3, β4 and β5 are the parameters of ROE line to be estimated. The pooled regression results of the model used to find out the impact selected profitability ratios on ROE .In the pooled regression ROE is used as dependent variable and selected profitability ratios (Gross Profit, Operating Profit, Net Profit, Earning per Share and Return on Total Assets) are all the independent variables taken together and the impact of these independent variables on the ROE of the company. The multiple correlation and coefficient for all independent variables are Gross Profit (-0.214), Operating Profit (1.196), Net Profit (0.931), Earnings Per Share (-1.278) and Return on Total Assets (0.297) from these figures it is found that

Operating Profit, Net Profit and Return on Total Assets have positive impact on the ROE of the company and remaining profitability ratios such as Gross Profit Ratio and Earnings Per Share have negative influence on ROE of the company. The multiple correlation co-efficient of ROE on Gross Profit, Operating Profit, Net Profit, Earning Per Share and Return on Total Assets is 0.991,it reveals that ROE is highly influenced by selected profitability ratios in the study. It is also evident from the R^2 value that the independent variables Gross Profit, Operating Profit, Net Profit, Earning Per Share and Return on Total Assets contribute 98.2 percent of the variation on the ROE .Hence, it is inferred that selected profitability ratios have significant impact on ROE of the company.

Conclusion

Efficiency of any organization can be judge through its profitability. Profitability of the firm is highly influenced by internal and external variables, i.e., size of organizations, liquidity management, growth of organizations, component of costs and inflation rate. The results found that the multiple correlation co-efficient of ROE on Gross Profit, Operating Profit, Net Profit, Earning Per Share and Return on Total Assets is 0.991 , It reveals that ROE is highly influenced by selected profitability ratios in the study. It is also evident from the R^2 value that the independent variables Gross Profit, Operating Profit, Net Profit, Earning per Share and Return on Total Assets contribute 98.2 percent of the variation on the ROE .Hence, it is inferred that selected profitability ratios have significant impact on ROE of the company.

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APPENDIX

Profitability Ratios

YEAR	GPR	OPR	NPR	EPS	ROA	ROE
2003	0.49	5.12	-0.46	-3.93	-0.86	-2.15
2004	-0.36	3.57	-1.78	-1.16	-0.26	-8.57
2005	9.94	12.22	6.07	13.63	3.41	32.87
2006	15.89	16.23	9.13	52.73	12.70	32.65
2007	7.81	8.26	4.01	18.73	190.02	12.98
2008	5.21	7.52	2.90	18.86	202.36	9.59
2009	12.49	14.73	7.02	59.08	249.51	25.72
2010	19.50	21.73	12.79	120.22	350.79	34.52
2011	9.66	12.13	6.91	67.81	399.69	15.74
2012	10.12	12.60	7.02	81.13	459.13	18.09

Source: Compiled from the annual reports of Hyderabad Industries Limited (HIL).

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