Volume : 3 | Issue : 7 | July 2014 • ISSN No 2277 - 8179

Research Paper

Analysis of Liquidity and Operating Profitability of Selected Power Sector Companies In India

Management

KEYWORDS : Power sector includes power distribution and generation, financial variables relating to liquidity, profitability

Mr. R.Narayanan — Project Manager, M/S National Contracting Company Ltd., Coimbatore – 41, Tamil Nadu.

Dr.R.Hamsalakshmi — Assistant Professor in Commerce, LRG Government Arts College For Women, Palladam Road, Tirupur- 641 604, Tamil Nadu.

ABSTRACT

The Indian Power Industry is one of the largest and most important industries in India as it fulfils the energy requirements of various other industries. It is one of the most critical components of infrastructure that affects economic growth and the well-being of our nation.

India has the world's 5th largest electricity generation capacity and it is the 6th largest energy consumer accounting for 3.4% of global energy consumption. Due to the fast-paced growth of the Indian economy, the country's energy demand has grown at an average of 3.6% p.a. over the past 30 years. In India, power is generated by State utilities, Central utilities and Private players. Looking at the companies with a diversified portfolio of power, NTPC is the largest company (on Net Sales), but Tata Power has registered the highest growth rates in Sales and Net Profit. Among hydro power producers, NHPC's performance has been very good.

Since the power sector is a heavy capital intensive industry it attracts a limited private investors again the public sector companies are performing at a faster rate. In this background this article envisages an analysis of relationship between liquidity and operating profit of selected power generation and distribution companies in India.

INTRODUCTION

India has always been a power-deficient country. The demand for power is huge in India and supply of power has not been able to meet its demand. Under the Government's "Power for all by 2012" plan it is estimated that there is a capacity addition of more than 1,00,000 MW would be required. This shows that huge capacity additions are required at good efficiency rates, indicating that the opportunities available in this sector are huge.

The role of the Government in the development of Indian power industry has been very crucial. Government's policies aim at protecting consumer interests and making the sector commercially viable. As far as regulation is concerned, Electricity Act, 2003 is a very important Act as it allowed private sector participation in the generation of power, thus creating competition. It also allowed 100% FDI participation in the power generation, transmission and distribution, thus inducing investments in the power sector. Globally, every dollar invested in generation has an equal amount invested in transmission and distribution. However, in India traditionally every dollar invested in generation has a corresponding half a dollar invested in transmission and distribution. Due to this, transmission capacity in India lags behind the generation capacity. Huge investments are required in Transmission and Distribution if India's power sector is to meet the rising power demand.

I. STATEMENT OF THE PROBLEM

Power Sector is a highly capital-intensive industry with long gestation periods, before the commencement of revenue generation. Since most of projects have a long time frame (4-5 years of construction period and operating period of over 25 years), there are some inherent risks which this sector faces like availability of Coal, dependence on Equipment Suppliers, aggregate Commercial and Technical Losses**,** shortage of skilled manpower for construction and commissioning of projects, contractual disputes between project authorities, contractors and their sub-vendors, delay in readiness of balance of plants by the executing agencies. Difficulties have been experienced by developers in land acquisition, rehabilitation, environmental and forest – related issues, inter-state issues, geological surprises (particularly for Hydro projects) and contractual issues. These issues continue to pose challenges to maintain the pace of development of power projects. Besides all the above said major problems the most important factor is financial performance, due to the competitiveness in the industry after 2008 all the companies in the industry faces sever working capital problem which affects their profitability. This is due to increase in cost of raw material and other manufacturing expenses From this view point this article presents an empirical view of selected power sector companies liquidity position and its relationship towards operating profit.

II. METHODOLOGY

The objectives of the study is to find out the position of net working capital, analysis of most important variables which affects profitability and earnings per share, to examine if there is a significant relationship exists between the selected variables among the selected power generation and distribution companies.

III. SOURCES OF DATA AND TOOLS USED FOR ANALYSIS

The study is based on secondary data. To examine the above said objectives necessary data were collected from moneycontrol.com and the power generating and distributing companies were selected from BSE listing. The basis of selection was done on the value of Total Assets position as on 31st March 2013.

To carry out the study a period of 5 financial years from 2008-09 to 2012-2013 were taken. The top seven companies based on the criteria in the Industry were selected. The companies were NTPC, Power Grid, NHPC, Adani, Reliance Infrastructure, Jaiprakash and Tata Power.

To examine the performance of liquidity and to find out the relationship between liquidity and operating profit the most important variables namely Net sales, Total current assets (CA), total current liabilities (CL), net working capital (NWC), profit before depreciation, interest and taxes (PBDIT), earnings per share (EPS), current ratio(CR), interest coverage ratio (ICR), operating profit margin (OPM), return on net worth (RNW) were selected. Statistical tools namely mean, standard deviation, covariance, pearson's correlation, one sample t-test were used.

IV. ANALYSIS AND INTERPRETATIONS

This part deals with the analysis of selected financial variables performance during the study period.Analysis of summary statistical measures like mean, standard deviation and coefficient of variation are used to analyse the selected financial variables performance during the study period.

Table 4.1 Mean Performance of Selected Variables during 2009-2013 (Rs.in Cr.)

Variables	2013	2012	2011	2010	2009
TOTAL CA	19044.81	16012.69	12116.23	10394.40	8205.75
TOTAL CL	11770.77	10319.43	8193.69	5925.36	5085.70

Volume : 3 | Issue : 7 | July 2014 • ISSN No 2277 - 8179

NWC	7274.04	5693.26	3922.54	4469.05	3120.06
SALES	16601.90	15701.63	11230.41	10839.20	9781.39
PBDIT	6753.63	5681.84	3479.51	4327.21	3733.75
EPS	14.24	14.52	12.12	15.15	15.69
OPM	42.79	47.08	9.58	51.34	49.20
RETURN ON NW	2.01	7.83	6.37	8.40	11.14
CR	1.16	1.16	1.39	2.00	1.31
ICR	5.15	6.13	4.86	5.91	4.45

Source : Computed

It is observed from the table 4.1 growth rate of total current assets of the selected companies during the study period is an increasing trend of 132.09%. Total current liabilities shows an increasing trend of 131.45%. The mean performance of total current assets and current liabilities shows an equal increasing trend during the study period. Net working capital position is also increased upto 133.14% , hence adequate care to be taken to reduce current liabilities so that the working capital position can be improved. It is observed that there is an increase of 69.73% of sales revenue, PBDIT is about 80.88%, Whereas there is a negative trend is observed between earnings per share, operating profit margin, return on net worth and current ratio. It is clear that the interest coverage ratio is increased from 2009 to 2013. Performance of return on net worth is to be concentrated more to increase adequate return to profitability.

Table 4.2 Standard Deviation of Selected Variables during 2009-2013 (Rs.in Cr.)

Variables	2013	2012	2011	2010	2009
TOTAL CA	16786.45	13311.77	11466.79	9689.86	10474.50
TOTAL CL	8335.38	6339.69	6358.50	4931.51	4481.69
NWC	8766.10	7876.82	8052.45	7328.96	7901.81
SALES	22047.15	21103.95	19540.85	16048.69	14654.75
PBDIT	7489.35	5584.73	5312.82	5262.22	4859.19
EPS	28.19	27.44	20.15	19.75	21.11
OPM	31.65	32.31	95.53	30.90	39.26
RETURN ON NW	19.66	5.84	5.46	3.15	2.83
CR	0.52	0.48	0.61	1.11	0.84
ICR	4.11	4.31	3.48	2.10	1.95

Source : Computed

In general standard deviation measures the absolute dispersion, greater the standard deviation, for the greater will be the magnitude of the deviations of the values from the mean, a small standard deviation means a high degree of uniformity of the observation as well as homogeneity of a series. From table 4.2 the selected variables standard deviation is presented. There is a high positive standard deviation is found out in return on net worth during the study period. In 2009 it was 2.83 and in 2013 19.66, it reveals that there is a greater variability is found out due to the impact variables. Hence the variables which affects return on net worth to be taken care off to increase a steady return in net worth.

Table 4.3 Coefficient of variation of Selected Variables during 2009-2013 (Rs.in Cr.)

Variables	2013	2012	2011	2010	2009
TOTAL CA	0.88	0.83	0.95	0.93	1.28
TOTAL CL	0.71	0.61	0.78	0.83	0.88
NWC	1.21	1.38	2.05	1.64	2.53
SALES	1.33	1.34	1.74	1.48	1.50
PBDIT	1.11	0.98	1.53	1.22	1.30
EPS	1.98	1.89	1.66	1.30	1.35
OPM	0.74	0.69	9.97	0.60	0.80
RETURN ON NW	9.79	0.75	0.86	0.37	0.25
CR	0.45	0.42	0.44	0.56	0.64
ICR	0.80	0.70	0.71	0.36	0.44

Source : Computed

Coefficient of variation is used to compare the variability of two or more than two series, where the CV is more it is said to be more variable and less consistent and vice versa. From table 4.3 it is observed that again performance of net worth is highly variable and inconsistent due to relating factors which affects profitability. Other variable are not that much inconsistent and it is clear their performance is good and consistent.

CORRELATION RESULT

To examine the relationship between selected variables Karl pearsons correlation coefficient has been applied and it is found that there is high positive correlation coefficient exists between PBDIT and NWC about 0.97 similarly a high positive correlation coefficient of 0.94 exists between sales and PBDIT, 0.95 is found between operating profit margin and earnings per share.

ONE SAMPLE T-TEST RESULT

To examine the significant differences between the selected variables during the study period among the companies the following hypotheses have been framed and tested with one sample t-test.

Hypothesis 1:

Ho: There is no significant difference in the performance of Operating Profit Margin of the selected companies during the study period.

Ha: There is a significant difference in the performance of Operating Profit Margin of the selected companies during the study period.

Table 4.4 One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
OPM	5.171	4	.007	39.99800	18.5229	61.4731

Source: Calculated

From table 4.4 it is observed that the calculated t value is 5.171 at 5% significance level, whereas the table value is 2.776 hence it is concluded that the null hypothesis has been rejected and the alternate hypothesis that there is a significant difference exists between the selected companies Operating Profit Margin during the study period is accepted .

Hypothesis 2:

Ho: There is no significant difference in the performance of Return on Networth of the selected companies during the study period.

Ha: There is a significant difference in the performance of Return on Net worth of the selected companies during the study period.

Table 4.5 One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
RNW	4.755	4	.009	7.13800	2.9701	11.3059

Source: Calculated

From table 4.5 it is observed that the calculated t value is 4.755 and the table value is 2.776 hence the alternate hypothesis has been accepted.

CONCLUSION

Although, the Indian power sector is one of the fastest growing sectors in the world and energy availability has increased by around 36% in the past 5 years, the demand for power outstrips its supply. Nearly 60 crore Indians do not have access to electricity. The energy and peaking deficits have been hovering around double digits for the past two years and the condition might worsen in the coming years considering the huge demand of power from India's rising population and rapid industrialization and urbanization. Hence, there is no slowing down of demand for the Power Sector, thus offering ample scope for rapid capacity expansion. The Government is investing in this industry through various development schemes like Rajeev Gandhi Rural Electrification Program, 'Power for all by 2012' and Accelerated Power Development and Reform Programme (ARDRP), Ultra Mega Power Projects etc. It has also been is encouraging participation of private players in this Sector. Renewable energy sources are also being encouraged considering the growing environmental concerns. Hence, the future prospects of nuclear power, hydro power and power from renewable energy sources are also good.

From this background the present deals with selected power generating and distributing companies in India. From this analysis it is found that performance of selected variables are in increasing trend during the study period. There is a relationship exists between liquidity and operating profitability hence it is recommended that to improve the working capital position and operating profit margin the companies have to concentrate on utilization of short term loans and advances, cost of raw material, cost of fuel and manufacturing expenses so that performance of net worth also improves.

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