A STUDY ON FACTORS INFLUENCING OPERATIONAL EFFICIENCY OF SELECTED INDIAN HOTELS



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Abstract:-Operational efficiency of a company can be gauged using many parameters such as sales, Net profits and operating profits. Positive trend in sales, operating profits and net profits indicates better growth prospects for any firm and signposts its size and growth potentials. A list of Indian hotels which are topping the list based on value of sales has been collected and data pertaining to their sales, operating profits, net profits, assets structure, liabilities structure and working capital during the ten year period of 2004-13 has been collected from moneycontrol.com and analyzed using the Eviews statistical package, employing the statistical tool of Panel Data to assess the influence exerted by various factors on sales, net profits and operating profits. Results indicate that sales of Indian hotels is significantly affected by fixed assets and net worth and current liabilities, while fixed and current assets and current liabilities are influencing net profits while investments is exerting a negative impact.

 $\textbf{Keywords:} Operational \ efficiency \ , Net profits \ and \ operating \ profits \ , growth \ potentials.$

INTRODUCTION

Performance of a company can be gauged using many parameters such as Gross Profits, Net profits, Earnings per Share, Profits after Tax, Operating Profits, Return on Capital Employed, Return on Net Worth, etc. Inter and Intra firm comparisons can be made using various tools such as ratios to assess the growth of a firm and also compare its growth with competitors. However, it is universally accepted that turnover of a firm is the strong parameter indicating its performance. Positive trend in the growth of sales of a firm indicates better growth prospects for it. Sale of companies indicates their size and growth potentials. The growth potential of hotels can best be gauged based on their sales turnover studied in the light of their assets and liabilities structure. A list of Indian hotels which are topping the list based on value of sales is displayed in table 1.

YEAR	IHCL	EIHL	MHDRL	HLVL	ITDCL	CCIL	OHL	TAJ	AHNL
2004	668.32	445.03	70.87	195.41	274.19	23.42	111.45	87.66	204.01
2005	847.63	587.23	101.71	265.51	341.14	34.02	131.18	115.47	258.27
2006	1116.15	756.39	152.72	336.39	349.35	65.03	162.39	188.92	329.27
2007	1540.86	938.97	232.31	393.69	530.84	153.86	191.75	242.94	413.78
2008	1764.51	1083.87	352.73	536.40	436.83	314.24	216.01	257.45	513.83
2009	1619.57	894.10	393.06	471.94	372.76	292.93	214.83	237.48	641.90
2010	1473.29	774.13	468.75	449.18	271.59	212.44	192.82	228.25	145.09
2011	1673.45	1027.51	487.13	464.04	367.18	216.71	234.70	259.28	240.58
2012	1808.73	1116.67	573.83	571.84	397.63	244.49	263.09	253.97	226.00
2013	1875.86	1133 50	658 54	653.86	410.03	314 52	290.04	252.70	216 16

Table 1: Top Nine Hotels in Terms of Sales (in Rs.Crores)

SNAPSHOT OF TOP INDIAN HOTELS

1.Indian Hotels Company Limited (IHCL): IHCL was incorporated on 1902 and it established its first hotel, TajMahal Palace & Tower, on 1903 in Mumbai. Since then, the company has undertook a massive expansion drive with the establishment of the "Taj Hotels Resorts and Palaces Group", comprising of Indian imperial palaces into world class luxury hotels such as the Taj Lake Palace in Udaipur, the Rambagh Palace in Jaipur and Umaid Bhawan Palace in Jodhpur. The company has distinct achievements such as opening the country's first international five star deluxe beach resort, the Fort Aguada Beach Resort in Goa on 1974 and operating star hotel services in all the five metropolitan cities of Mumbai, Delhi, Kolkata, Bangalore and Chennai. The company established Taj Sheba Hotel in Yemen, Taj Exotica Bentota in Sri Lanka, undertook many foreign management contracts (such as Taj Palace Hotel in Dubai, developing high end Luxury Resorts with 100 and 206 keys in Mexico and British Virgin Islands respectively and establishing a Taj Luxury Hotel in Marrakech, Morocco), acquired on lease, The Pierre, a prominent hotel in New York, acquired the "W' hotel" in Sydney (which was later renamed as "Blue, Woolloomooloo Bay"), Ritz Carlton in Boston and Taj Campton Place in San Francisco, established Taj Exotica Hotel in Ras Al Khaimah, United Arab Emirates with the partnership of Saraya Islands, established the TajTashi Bhutan in coalition with Tashi Group, established the Vivanta in Maldives, Pierre in New York, the TAJ Cape Town and BanjarTola in Kanha and Taj Cape Town in South Africa, expanding its presence globally. The company has emerged as a prominent hotel service provider both in and outside India, through its subsidiaries. The Taj Group possesses an inventory to the tune of 103 hotels with 12243 rooms.

2.EIH Limited (EIHL): A flagship company of Oberoi group, the company was incorporated on 1949 as a public limited company. The first hotel established by the company was The Oberoi Intercontinental (renamed as Oberoi) in New Delhi on 1965, since which there was no looking back. this company has expanded tremendously since then in India, shaping as one of the largest chains of hotels in India, engaged in the business of luxury hotels, restaurant, management contracts and travel and tours, providing airline catering, management of restaurants and airport bars, travel and tour services, car rentals, project management and corporate air charters under the brand name of "Oberoi and Trident". The company has made a mark in the international level with the establishment of an international luxury resort, "The Oberoi Lombok" in Indonesia, opening of luxury resort hotel in the Himalayas, construction of the 252 key Oberoi hotels in Dubai, and undertaking of management contracts of Oberoi Luxury Hotels in Abu Dhabi, Oman, Greece and Mauritius. The exemplary services offered by the company won it the rating of best first class

hotel brand in India at the Galileo-Express Travel World Awards, 2007.

- **3.Mahindra Holyday & Resorts India Limited (MHDRL):** A part of USD 6.7 billion Mahindra Group, the company was incorporated on 1996 as a private limited company and later converted into public limited company on 1998. With the establishment of first resort at Munnar on 1998, followed by a second at Goa on 1999, the company succeeded in expanding tremendously and has emerged as one of the leading leisure hospitality service providers in India, offering quality family holidays through a diversified range of products and services such as Club Mahindra Holidays, Zest, Club Mahindra Fundays, Mahindra Homestays and clubmahindra. The company ventured into the foreign market with the entry of a long-tern lease for an international resort in Pattaya, Thailand. Provision of innovative facilities to customers such as launching of Svaastha spa and Gourmet express option in dining programme in some resorts won the company status of Business Superb rand in 2009 by the Brand Council of India and the flagship brand 'Club Mahindra Holidays' was selected as a Consumer Super brand.
- **4.Hotel Leela Venture Limited (HLVL):** Incorporated on 1981, the company is one of the leading players in Indian hospitality industry. The company established its first 5-star deluxe hotel "LeelaPenta" in Mumbai (renamed as LeelaKempinski on 1988) and witnessed commendable growth, diversifying into leisure and business sectors. The company ventured into the foreign segment by striking a collaboration deal with Preferred Hotels in USA, Global Hotel and Penta Hotels in UK to set up and operate 5-star hotels and undertaking management contract with Four Seasons Hotel, Canada.
- **5.India Tourism Development Corporation Limited (ITDC):** Established on 1966, this company, owned by the Ministry of Tourism, Government of India, is engaged in providing Hospitality, retail and Education services, consisting of providing Duty Free Travel Solutions, Advertising Solutions, Event Management, Engineering Consultancy, Education and Training. The Ashok Hotel has the privilege of hosting all VIP movements such as members of Commonwealth Games Associations (CGAs), the Commonwealth Games Federation (CGF), International Sports Federations, Technical Delegates and the International Olympic Committee (IOC) and family members of Commonwealth Games participants. The Ashok Group of Hotels commands an overall inventory of 680 rooms.
- **6.Country Club (India) Limited (CCIL):** The CCIL, formerly known as Amrutha Inns, was incorporated as private company on 1991 and later converted to public company on 1992. The hotel was constructed on a European Medieval architectural style to provide facilities such as health club, swimming pool, business Centre etc. to members of the club.
- **7.Oriental Hotels Limited (OHL):** Promoted by the Reddy group of South India, the company established Taj Coromandel, the flagship hotel, on 1974. The OHL has ventured into foreign business by establishing Finolhu Island Resort in Maldives and acquiring controlling stake in Coramandel Hotels, St. James Court Hotel of London, Taj Lanka Resorts Limited of Sri Lanka and Taj Maldives Pte. Limited of Maldives.
- **8.TajGVK Hotels & Resorts Limited (Taj):** Incorporated on 1995 as a joint venture company between Indian Hotels Company Limited of Tata group and the Hyderabad-based GVK Group, The Company is engaged in the hospitality and tourism industry. The company currently has operations in Hyderabad, Chandigarh and Chennai. The company has the privilege of establishing the first branded five star hotels in Chandigarh, "Taj Chandigarh".
- **9.Asian Hotels (North) Limited (AHNL):** Incorporated on 1980, the company established accommodation for the 1982 Asian Games guests. The company commenced its full-fledged commercial services on 1983 and developed into a leading player in the Indian hospitality industry operating a chain of deluxe category hotels under the brand "Hyatt Regency Hotels". The company has ventured into Delhi, Mumbai and Kolkata. The hotels of this company provides distinct services such as High Speed Internet, Swimming Pool, Fitness Centre, Business Centre, Boutiques, Salon and Restaurants offering a wide variety of dining options. The company's promoters constitute three major groups of Jatia Group, Gupta Group and Saraf Group which have gained control over Asian Hotels (North) Limited, Asian Hotels (West) limited and Asian Hotels (East) limited respectively.
- A brief description about the different companies constituting the hotel industry in India reveals that most of the companies have expanded in leaps and bounces and this has arouse an interest in the researcher to analyse the various factors that influence the operational efficiency of each of these companies to arrive at fruitful suggestions for enhancing operational efficiency of the Indian hotel industry.

OBJECTIVES OF THE STUDY

- 1. To give a short description about top Indian hotels.
- 2.To analyze the impact exerted by assets structure, liabilities structure and working capital on sales, Operating profit and Net profit of the Indian hotel:
- 3. To assess whether such impact is caused due to time effect or company effect.

METHODOLOGY

The proposed study is descriptive in nature, purely based on secondary data, collected from Money control.com website. Financial data pertaining to the ten year period of 2004-13 of top nine Indian hotels namely, Indian Hotels Company, EIH Limited, Mahindra Holy Day & Resorts, Hotel Leela Venture, India Tourism DC, Country Club India, Oriental Hotels, Taj GVK Hotels & Resorts and Asian Hotels (North) have been collected and represented suitably and analyzed using the statistical package of EVIEWS, employing the statistical tool of panel Data.

RESULTS AND DISCUSSION

Hausman Test Results for Impact on Sales:

The first step in ascertaining the impact exerted by a set of independent variables on dependent variable is to arrive at the results of Hausman Test, which shall decide whether the impact is due to time effect or random effect. If the Prob. value is less than 0.05, the impact is due to time effect implying that duration of study is casting a cascading impact, while if the value exceeds 0.05, then the impact is due to random effect, implying that the company's effect is causing the impact. The results of Hausman Test in respect of sales as dependent variable and assets structure and liabilities structure as independent variables are displayed in Table 2.

Table 2: Hausman Test Results for Impact on Sales

Dependent Varia	ble Independent Variab	les Chi-Sq. Statistic df	Prob.	\mathbb{R}^2
Sales	Assets	5.003786 2	0.0819	0.952061
Sales	Liabilities	20.217233 3	0.0002	0.926085
Sales	Working Capital	0.586419 2	0.7459	0.954238

It can be inferred from Table 2 that the values of r2 in respect of all the variables exceed the 90% mark. Hence, it can be said that the independent variables explain significant variance of the respective dependent variables. The Prob. value in respect of Hausman Test considering sales as dependent variable and liabilities structure as independent variables is less than 0.05, implying that fixed effect model has to be used for estimating the impact of the liabilities structure on sales, while random effect model has to be employed in respect of the other two cases. Hence, the impact exerted by liabilities structure on sales of the hotel industry is due to time effect, while the impact exerted by Assets structure and Working capital on sales is due to the effect of respective hotel companies. Determinants of Sales of Hotel Industry

1. Impact of Assets Structure on Sales of Hotel Industry

Composition of fixed assets and current assets does exert significant impact on sales of a company. Effective utilization of assets results in better turnover for a company. Current assets may exert significant impact on the turnover of a company in many cases while the fixed assets may do the important job in some other cases. The impact exerted by the assets structure on sales of hotel industry has been assessed using Panel Data tool and the results have been displayed in Table 3.

Table 3: Model Summary for Sales and Assets

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	121.6254	64.74769	1.878452	0.0671
Fixed Assets	0.611659	0.057648	10.61015	0.0000
Current Assets	-0.111443	0.085205	-1.307944	0.1978

It can be inferred from Table 3 that fixed assets structure of the hotel industry alone exerts significant impact on turnover of the hotel companies while the current assets fail to exert any such influence.

Based on Table 3 results, the following model can be arrived at:

Sales=121.6254+0.611659*Fixed Assets

2. Impact of Liabilities Structure on Sales

Effective utilization of funds leads to enhancement of operational efficiency of any undertaking. Hence, liabilities structure exerts a significant influence on sales of a company. The impact exerted by liabilities of hotel companies consisting of Net Worth, Current Liabilities and Borrowed Funds on sales of hotel companies has been displayed in Table 4.

Table 4: Model Summary for Sales and Liabilitie

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	203.8076	31.51463	6.467080	0.0000
Net Worth	0.275308	0.034260	8.035799	0.0000
Current Liabilities	0.340318	0.162017	2.100511	0.0389
Borrowings	-0.015448	0.027900	-0.553694	0.5814

It can be inferred from Table 4 that Net Worth and Current Liabilities exert significant influence on sales of the hotel companies while borrowed funds does not exert any influence on the sales. As always, current liabilities exert the maximum impact on sales, followed by net worth. Based on the results depicted in Table 4, the following model can be arrived at: Sales=203.8076+0.275308*Net

Worth+0.340318*Current Liabilities

3. Impact of Fixed Assets and Working Capital on Sales

Operational efficiency revealed from sales of a company may be influenced by its working capital management. Hence, the impact exerted by Fixed Assets and Working capital on turnover of hotel companies has been assessed and the results have been displayed in Table 5.

Table 5: Model Summary for Fixed Assets and Working Capital

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	67.96610	29.85147	2.276810	0.0255
Fixed Assets	0.617269	0.044311	13.93027	0.0000
Working Capital	-0.066298	0.064103	-1.034255	0.3042

can be inferred from Table 5 that fixed assets alone exerts significant impact on sales of hotel companies while working capital fail to exert such influence. Based on the results derived from Table 5, the following model can be arrived at:

Sales = 67.96610 + 0.617269 * Fixed Assets

Factors Influencing operating Profits of Hotel Industry

The impact of Assets structure, Liabilities structure and Working capital on Operating profits of hotel industry has been explored using Panel data and the results have been depicted in Table 6.

Table 6: Hausman Test for Determinants of operating profits

Dependent Variable	Independent Variables	Chi-Sq.Statistic	d.f	Prob.	\mathbb{R}^2
Operating Profit	Liabilities	12.071967	3	0.0071	0.718587
Operating Profits	Assets	3.821152	2	0.1480	0.681627
Operating profits	Working Capital	1.395905	2	0.4976	0.459

It can be inferred from Table 6 that the independent variables of Liabilities and assets explain significant variance of the dependent variable of operating profits while working capital explain only 46%

It can further be inferred from Table 6 that the impact exerted on operating profits by liabilities is due to fixed effect while the other two independent variables of assets and working capital exert impact on operating profits due to random effect.

Factors Influencing Operating Profits of Hotel Companies

1.Liabilities: The Liabilities structure of hotel companies consisting of Net worth, current liabilities and borrowed funds may influence operating profits of a company. The impact exerted by these liabilities on the operating profits of hotel companies is displayed in Table 7.

Table 7: Model Summary for Impact of liabilities on operating profits

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	89.78356	23.22679	3.865518	0.0002
Net Worth	0.012501	0.025250	0.495071	0.6219
Current Liabilities	0.323733	0.119409	2.711128	0.0082
Borrowings	-0.021884	0.020563	-1.064275	0.2905

It can be inferred from Table 7 that Current Liabilities alone exert significant impact on operating profits of hotel companies while the Net worth and borrowed funds fail to exert any sort of influence. Based on the results derived from Table 7, the following model can be arrived at:

Operating Profits=89.78356+0.323733*Current Liabilities

2.Assets Structure: Fixed and current asset composition plays a significant role in influencing operating profits of any company. The effect exerted by these assets on operating profits of hotel companies has been displayed in Table 8.

Table 8: Model Summary for Impact of Assets on operating profits

Table 8: Model Summary for Impact of Assets on operating profits

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	-0.962145	33.85596	-0.028419	0.9774
Fixed Assets	0.158921	0.027797	5.717110	0.0000
Current Assets	0.156803	0.062862	2.494425	0.0162

Table 8 portrays that both fixed and current assets exert significant impact on operating profits of hotel companies. It is however, fixed assets which exert maximum impact on operating profits followed by current assets. Based on the results displayed in Table 8, the following model can be arrived at: Operating profits=-0.962145+0.156803*Current Assets+0.158921*Fixed Assets

3.Working Capital: Rational utilization of fixed assets and working capital significantly affect operational efficiency of any company. The influence exerted by fixed assets and working capital on operating profits of hotel companies has been displayed in Table 9.

Table 9: Model Summary for Impact of Working Capital on operating profits

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	40.30479	54.51652	0.739313	0.4634
Fixed Assets	0.165066	0.039686	4.159264	0.0001
Working Capital	0.073638	0.076889	0.957716	0.3431

It can be inferred from Table 9 that fixed assets alone exert significant impact on operating profits of hotel companies while working capital fail to exert any such influence. Based on the results portrayed by Table 9, the following model can be arrived at:

Operating profits=40.30479+0.165066*Fixed Assets

Hausman Test for Impact on Net Profits

Before proceeding on to assess the factors influencing net profits of hotel companies, it is inevitable to conduct the Hausman Test to detect whether such influence is due to fixed effect or random effect. The results of Hausman Test are displayed in Table 10.

Table 10: Hausman Test Results for Impact on Net Profits

Dependent Variable	Independent Variables	Chi-Sq.Statistic	d.f	Prob.	\mathbb{R}^2
Net Profits	Working Capital	10.557456	3	0.0144	0.277830
Net Profits	Assets	8.151521	3	0.0430	0.293543
Net profits	Liabilities	19.674891	3	0.0002	0.433017

It can be inferred from Table 10 that Liabilities explain about 43% variance of Net profits while working capital and assets structure explain about 27 and 28% variance respectively. It can further be inferred from the table that the impact exerted by Liabilities structure on net profits is due to fixed effect while the impact exerted by assets structure and working capital is due to random effect.

$Factors\ Influencing\ Net\ Profits\ of\ hotel\ companies$

1.Liabilities: The liabilities structure consisting of Net worth, current liabilities and borrowed funds influence net profits of any company. The influence exerted by these factors on net profits of hotel companies is displayed in Table 11.

Table 11: Model Summary for Impact of Liabilities on Net Profits

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	59.37920	19.08895	3.110659	0.0026
Net Worth	0.014396	0.020752	0.693706	0.4899
Current Liabilities	0.215207	0.098136	2.192937	0.0313
Borrowings	-0.092396	0.016899	-5.467408	0.0000

It can be inferred from Table 11 that Current Liabilities and Borrowed funds exert significant impact on Net profits of hotel companies while Net worth has failed to exert any such influence. However, borrowings are exerting a negative impact on profitability of hotel companies. Based on the results displayed by Table 11, the following model can be arrived at:

Net Profits=59.37920+0.215207*Current Liabilities-0.092396*Borrowings

2 Assets Structure: The assets structure consisting of Fixed Assets Current Assets and

2.Assets Structure: The assets structure consisting of Fixed Assets, Current Assets and Investments exert significant impact on profitability of any company. The impact exerted by these assets on Net profits of hotel companies is portrayed in Table 12.

Table 12: Model Summary for Impact of Assets on Net profi

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	2.228962	30.19998	0.073807	0.9414
Fixed Assets	0.077000	0.054226	1.420005	0.1596
Current Assets	0.078684	0.059737	1.317176	0.1916
Investments	-0.064498	0.036154	-1.783978	0.0783

It can be inferred from Table 12 that only Investments is exerting influence on the net profits of hotel companies. However, it is worthy to note that investments are exerting a negative impact on net profits.

Based on the results portrayed by Table 12, the following model can be arrived at:

Net Profits=2.228962-0.064498*Investments

3.Working Capital: Rational utilization of funds consisting of investment in fixed assets and working capital go a long way in enhancing the profitability of any company. The impact exerted by investments, fixed assets and working capital on net profits of hotel companies is displayed in Table 13.

Table 13: Model Summary for Impact of Working Capital on Net Profitsts

	Variable	Coefficient	Std. Error	t-Statistic	Prob.
	С	16.99657	28.63404	0.593579	0.5545
	Fixed Assets	0.102814	0.053387	1.925826	0.0578
	Working Capital	0.000105	0.067695	0.001555	0.9988
	Investments	-0.086662	0.033899	-2 556457	0.0125

It can be inferred from Table 13 that Investments is exerting a negative impact on net profits of Hotel companies while fixed assets is influencing net profits at 10% level. Based on the results revealed by Table 13, the following model can be arrived at:

Net Profits = 16.99657 + 0.102814*Fixed Assets - 0.086662*Investments

INFERENFCES FROM THE STUDY

It can be inferred from the study that liabilities structure of hotels exert impact on sales, operating profits and net profits of hotels due to time effect while both assets structure and working capital impact sales, operating profits and net profits due to random effect wherein the respective hotel companies are responsible for the cascading effect.

It can further be inferred from the study that turnover of hotels is significantly affected by fixed assets while current assets and working capital have failed to exert any such impact. However, both fixed and current assets are influencing operating profits of hotels though working capital has failed to make any impact. Finally, fixed assets are exerting an influence on net profits of hotels while investments are exerting a pegative impact on net profits.

Similarly, current liabilities and net worth are exerting significant impact on sales of the hotel companies while borrowed funds have failed to exert any such influence. However, operating profits and net profits of hotel companies have been influenced positively by current liabilities while borrowed funds exert a negative impact on net profits.

CONCLUSION

It can be concluded from the study that rational fixed asset management will result in maximization of operational efficiency of hotels while minimization of investments and borrowed funds

will be of immense utility in achieving the same. Hence, Indian hotels should try to effectively manage their fixed assets to further boost their operational efficiency in the future. References

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