

## ANALYSIS OF FINANCIAL AND TECHNICAL USEFULNESS IN DECISION MAKING

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### ABSTRACT

*This study focused on the practical usefulness of fundamental and technical analysis in decision making. Fundamental analysis is more helpful for long term investment, whereas technical analysis is useful for short term perspective. The data have been taken in the study are mainly secondary in nature. The study covers the period from 2011 to 2020 and five market capitalization services companies were selected. Price earnings ratio employed for the technical analysis and profitability ratios, turnover ratios, debt equity ratio employed for fundamental analysis. In this way, technical analysis can be made to accumulate efforts of fundamental analysis. In the study, it was observed that both analyses help to judge in dealing with stock market activities. Hence, the study provides useful insights for investing community, Portfolio managers, stock analyst to trace overvalued and undervalued stock that encourage trading lead to fair valuation of equity stocks which is beneficial for the proper allocation of resources in the economy.*

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**Keywords:** EPS, EBIT, ITR, ATR, D/E and P.E.

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### Introduction

On each day, we have to look into business section of a newspaper on the stock page to determine the market perception of the value of a publicly traded company. These are only two types of analysis i.e. fundamental and technical. Fundamental analysis involves looking at the balance sheets and financial health of a business organization while technical analysis is about analyzing past price action and deriving a predictive model for the future from it. In a real world, each trade would come about from a combination of the two, i.e. fundamental analysis supports the technical analysis or vice-versa. Technical analysis is better useful from a short-term perspective whereas fundamental analysis is useful for long term investment decisions. In general, technical analysis is used for trade; whereas fundamental analysis is used to make an investment.

### Review of Literature

Available literature states that there is significant relationship between price earnings ratio and market price of equity share. Nissim and Penmanetal. (2001) examined major ratios and tested their ability to predict stock return. The results found a significant positive relation between market price and P.E. ratio. Agra and Kocaman (2006) examined industrial price index, consumer price index and stock behaviors with P.E. ratio and found that for each of the stock price earnings ratios happens to be significant explanatory variable for the stock returns but the co –efficient both for IPI and CPI are not significant. Nirmala et al (2011) identified the determinants of share price in the Indian market. The

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results witnessed that the variable price earnings is a significant determinants of share prices for all the sectors under study. Tiller (2017) examined that over a period of a few minutes to a day or two, technical level of support and resistance can influence the direction of a price massively. Roy (2015) tested that fundamental analysis and technical analysis can co –exist in peace and complement each other. Kulkarni and Kulkarni (2013) pointed out that at the most basic level, a technical analyst approached security from the charts while fundamentals analysis starts with financial statements. Technical analysis can be used in a time frame i.e. weeks, days or even minutes whereas fundamental analysis after looks at data over a number of years. Investors buy assets believing that the stock prices may increase in value, while traders buy assets believing that they can sell it to somebody else at a greater price.

#### Objectives of the Study

- To examine the long-term investment decision through fundamental analysis.
- To assess the short-term investment decision through technical analysis.

#### Methodology

The secondary data is taken as input to achieve the objectives of the study. The secondary data have been procured from financial website www.moneycontrol.com and CMIE proless data base. This study also employed data and information from various articles, reports, books, and publications. The sample size of the study is five companies selected on the basis of investment. The selected companies namely Reliance Industries, Tata consultancy services (TCS), Coal India, Hindustan Zinc and Hindustan Unilever Ltd. (HUL). The evaluation of first objective requires earnings per share (EPS), earnings before interest and Taxes (EBIT), inventory turnover ratio (ITR), assets turnover ratio (ATR) and debt –equity ratio (D/E) to examine the fundamentals analysis. In order to assess the technical analysis in the second objective, Price –earnings (P.E.) ratio is used in the study. The periods of analysis are from 2011 to 2020 and a total of five market capitalization services companies selected.

**Table 1: Analysis of Profitability Ratio of Top Five Companies from 2011-2020**

Year	Reliance		TCS		Coal India		Hindustan Zinc		HUL		Industry	
	EPS	EBIT	EPS	EBIT	EPS	EBIT	EPS	EBIT	EPS	EBIT	EPS	EBIT
2011	62.00	15.59	38.61	31.62	7.42	1204.83	11.60	64.48	10.58	14.95	26.04	31.91
2012	61.21	12.06	55.95	36.21	12.83	2160.62	13.08	66.74	12.46	16.14	31.11	32.79
2013	64.82	10.76	65.22	34.14	15.65	3042.94	16.33	67.03	17.56	17.86	35.92	32.45
2014	68.05	10.20	94.15	38.11	23.76	4991.45	16.34	64.52	17.88	18.18	44.04	32.75
2015	70.25	12.25	98.31	34.65	21.19	3591.56	19.35	69.24	19.95	18.91	45.81	33.76
2016	84.66	20.46	116.13	35.75	25.87	10051.81	19.33	65.86	18.87	19.47	52.97	35.39
2017	96.90	21.47	120.04	34.15	23.12	4964.64	19.68	70.70	20.75	20.61	56.10	36.73
2018	53.08	20.67	131.15	34.52	14.97	2489.24	21.95	63.49	24.20	22.72	49.07	35.35
2019	55.48	18.24	79.34	34.57	16.87	1135.25	18.83	58.96	27.89	24.33	39.68	34.03
2020	48.75	19.76	88.64	34.60	18.31	1343.99	16.11	58.08	31.13	26.64	40.59	34.77
Average	66.52	16.25	88.75	34.83	17.99	3497.68	17.26	64.91	20.12	19.98	42.13	33.99

Table 1 shows the profitability analysis in term of EPS and EBIT over the period of ten years study among the five services companies. TCS has the highest average EPS of Rs. 88.75 and Hindustan Zinc has the lowest average EPS of Rs. 17.26. Coal India has the highest 10 years average EBIT (3497.68) whereas Reliance has the lowest average EBIT (16.25). It can be inferred that lowest profitability ratio indicates low margin due to operating expenses. HUL should improve their EPS at least at par with industry level. On the other hand, firms namely Reliance and HUL, Hindustan Zinc and Coal India should increase their EBIT at least at par with industry level. Hence, TCS performance matches to industry performance regarding profitability. So, TCS is better firm among all the firms.

**Table 2: Analysis of Turnover Ratio of Top Five Companies from 2011-2020**

Year	Reliance		TCS		Coal India		Hindustan Zinc		HUL		Industry	
	ITR	ATR	ITR	ATR	ITR	ATR	ITR	ATR	ITR	ATR	ITR	ATR
2011	8.32	87.16	5451.66	112.41	11.47	1.47	13.17	40.07	0.63	194.19	1097.05	87.06
2012	9.18	111.77	9386.12	113.42	22.47	1.35	14.29	38.68	8.79	201.82	1888.17	93.41
2013	8.43	113.11	7638.19	112.58	22.49	1.03	11.43	35.80	10.21	224.19	1538.15	97.34
2014	9.09	106.13	7546.43	112.27	7.88	1.25	11.38	32.71	10.20	215.55	1516.99	93.58
2015	9.00	82.73	5962.57	116.66	6.64	1.74	12.20	30.18	11.84	225.94	1200.45	91.45
2016	8.32	50.93	9551.04	110.55	1.09	0.79	13.44	25.75	12.65	225.78	1917.31	82.76
2017	7.11	44.26	4413.95	103.26	4.24	1.53	8.92	33.34	13.50	216.18	889.54	79.71
2018	7.33	46.96	3894.24	106.91	17.04	1.97	16.01	51.43	14.64	201.32	789.85	81.72
2019	8.40	47.82	12317.00	123.78	30.46	4.90	13.68	49.73	15.78	213.96	2477.06	88.04
2020	8.66	34.67	26261.20	125.08	56.42	3.77	10.11	39.51	14.71	197.86	5270.22	80.06
Average	8.38	72.55	9242.24	113.69	18.02	1.98	12.46	37.72	11.30	211.68	1858.48	87.51

Table 2 highlights the analysis of turnover ratios i.e. inventory turnover and assets turnover among the five companies over the periods of the study. TCS has been recorded the highest average inventory turnover ratio of 9242.24 and Reliance has the lowest average inventory turnover ratio of 8.38. HUL has the highest average assets turnover ratio of 211.68 while Coal India has the lowest average assets turnover ratio of 1.98. The industry figure showed the average inventory turnover ratio (1858.48) and asset turnover ratio (87.51). It can be inferred that TCS has shown the higher performance than that of industry in both cases i.e. ITR and ATR. Hence, TCS is the best company among all the five companies. The lowest ratio indicates poor generation of sales, while high turnover is beneficial because it means that company is generating sales efficiently to sell inventory.

**Table 3: Analysis of Debt-Equity Ratio of Top –Five Companies from 2011-2020**

Year	Reliance	TCS	Coal India	Hindustan Zinc	HUL	Industry
	D/E	D/E	D/E	D/E	D/E	D/E
2011	.081	.016	.166	.001	.250	.103
2012	.362	.023	.168	.042	.284	.176
2013	.307	.024	.165	.041	.442	.196
2014	.380	.029	.165	.046	.341	.192
2015	.418	.003	.187	.061	.302	.194
2016	.385	.019	.216	.072	.364	.211
2017	.350	.000	.000	.260	.000	.305
2018	.310	.000	.000	.000	.000	.310
2019	.390	.000	.000	.080	.000	.235
2020	.540	.000	.000	.020	.000	.280
Average	.352	.019	.177	0.062	.331	.220

Table 3 reveals the debt –equity ratio among the five companies over the period of ten years study. The average lowest debt –equity ratio is observed to be .019 in TCS whereas highest average debt –equity ratio in happened to be .352 in Reliance. The industry figure showed to be .220. It is deducted from the table that low debt –equity ratio is better for the companies and investors. Hence, TCS has the lowest average debt –equity ratio. It proves that TCS is less profitable and less risky. On the other hand, Reliance has more profitable and more risky firm. So, Reliance has comedown the debt-equity ratio at par with industry level and TCS should improve the debt –equity ratio at par with industry level to take the advantage of trading of equity. Extended use of debt always added profits.

**Table 4: Analysis of P.E Ratio of Top Five Companies from 2011-2020**

Year	Reliance	TCS	Coal India	Hindustan Zinc	HUL-	Industry
	P.E Ratio	P.E Ratio	P.E Ratio	P.E Ratio	P.E Ratio	P.E Ratio
2011	10.34	24.08	27.84	8.50	38.71	21.89
2012	13.75	20.08	25.85	9.34	37.88	21.38
2013	13.15	24.92	10.98	7.75	35.78	18.52
2014	13.01	24.57	55.10	8.90	45.58	29.43
2015	12.39	23.05	17.21	7.66	46.82	21.43
2016	11.77	19.82	11.69	15.95	42.23	20.29
2017	17.84	21.35	12.05	13.79	64.71	25.95
2018	20.12	24.60	9.86	13.79	65.79	26.83
2019	26.00	23.82	15.02	12.58	60.31	27.55
2020	-	-	-	-	-	-
Average	15.37	22.92	20.62	10.92	48.65	23.70

Table 4 depicts the analysis of P.E. ratio among the five firms over the period of the study. HUL has the highest average P.E. ratio and Hindustan Zinc has the lowest average P.E. ratio. The share price of HUL is the highest as it has the highest P.E. ratio. It can be inferred that P.E. ratio indicates market expectation. A high P.E. ratio shows high rate of growth and investor's confidence. The P.E ratio of HUL tends to be highest. It means fast growth company while, the P.E. ratio of Hindustan Zinc and Reliance Ltd. tend to be lowest. It means slow growth firms. The P.E. ratio TCS Ltd. is performed at par with industry level. It proves that TCS Ltd. tends to be normal growth firm. So, Hindustan Zinc and Reliance Ltd. should improve their P.E. Ratio at least at par with industry.

**Table 5: Summary of the Results**

Ratio	Bad Ratio	Implications	Good Ratio	Benefits
Profitability Ratio	HUL	Low margin on the account of operating expenses, interest cost, high leverage and assets depletion	TCS	High Margin
Turnover Ratio	Coal India	Poor generation of Sales	TCS	It means that firm is generating sales efficiently to sell inventory.
Debt – Equity Ratio	TCS	Less profitable and less risky	Reliance	More profitable and more risky
P.E Ratio	Hindustan Zinc and Reliance	Slow growth prospects	HUL	More Growth Prospects
			TCS	Normal growth firm

### Conclusion

The analysis of the study helps to know the financial health of the company and usefulness of fundamental and technical analysis in investment decisions. The fundamental analysis helps to judge the investors to take long term investment decision whereas technical analysis helps to take short –term investment decisions. Technical analysis cannot identify the securities i.e. undervalued and hyped, which can be done by fundamental analysis only. Fundamental analysis is ideal approach for recognizing the overvalued/ undervalued securities whereas use of technical analysis to choose the best time for purchasing/ selling of securities. Hence, technical analysis can be made to accumulate efforts of fundamentals analysis.

### Scope for Further Research

Fundamental and technical analysis may not always give full picture as there are a number of other qualitative and quantitative external factors like tax, govt. policies and international business environment which influence the position of share market as well as financial health of the business organization. Further researchers can explore the degree of applicability of fundamental and technical analysis.

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