

Valuation of company: study of Sun pharmaceuticals Industries Ltd

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Abstract- Merges refers to consolidation of two or more companies to form an all new entity with the new name. the merges assist the companies in uniting their strengths, resources and weakness. To face the challenges of increasing competition and to achieve synergy in the business operations. The main objective of the study is to determine the value of the firm using free cash flow to the Sun pharma and Ranbaxy labs merger, the study period is 2014 to 2018 whereas FCFE calculates the value of the firm equity in a leveraged firm, the value firm equity is a subset of the total value of the firm. As discussed, on the micro level, on a micro level, equity valuation is beneficial for the entire stock ecosystem, however, how does it benefit an individual to study and apply the principles of equity valuation. The study will discuss different methods that can be used to determine the values of the companies and analyze how the free cash flow method, a common method in company valuation, can be used in M&A.

Index Terms- Company Valuation, Merger and Acquisition

1. INTRODUCTION

In today business climate, constantly increasing competition, shifting profit margins, and rapidly changing technology have directed business to M&A as faster way of growing. M&A means combination of two or more companies, including their assets and debts, to become a single company. As result of merges, current companies may lose their entities and create a new company or combine with each other under the legal entity of the current companies. Sometimes companies obtain a majority share of another company. This type of a merger is called “acquisition”. No matter their valuation motivation and type, primary concern of M&A is to help business create a large value than the value they

create on their own. Equity valuation is the back bone of the modern financial system. It enables companies with sound business models to command a premium in the market. On other hand, it ensures that companies whose fundamentals are weak witness a drop in their valuation. The art and science of equity valuation therefore enables modern economic system to efficiency allocate scare capital resources amongst various market participants

2. CONCEPTUAL BACKGROUND

2.1 company valuation

Free cash flow to the firm represents the amount of cash flow from operations available for distribution after depreciation expenses, taxes, working capital, and investments are accounted for and paid. FCFC is essentially a measurement of a company’s profitability after all expenses and reinvestments. It is one of the many benchmark used to compare and analysis a firm’s financial health.

Free cash flow represents the cash that a company is able to generate after laying out the money required to maintain or expand its assets base.

2.2 Significance of Valuation

- Free cash flow is important because it allows a company to pursue opportunities that enhance shareholder value without cash, it’s tough to develop new products, make acquisitions, pay dividends and reduce debt.
- Some investors prefer using free cash flow instead of net income to measure a company’s financial performance, because free cash flow is more difficult to manipulate than net income

- It is important note that negative free cash flow is not bad in itself; on the face of it. If free cash flow is negative, it could be a sign that a company is making large investments. If these investments earn a high return, the strategy has the potential to pay off in the long run.

2.3 Limitations of Valuation

- By their nature, expenditure for capital assets that will last decades may be infrequent, but costly when they occur. Hence free cash flow in turn will be very different from year to year.
- Investor must therefore keep an eye on companies with high levels of FCF to see if these companies are under reporting capital expenditure and research and development.
- Companies can also temporarily boost FCF by stretching out their payments, tightening payment collection policies and depleting inventories. And hence look for companies generating FCF on sustainable basis.

3. LITERATURE REVIEW

Mergers and Acquisition: A review of valuation methods –Nurhan Aydin (2017)¹Individuals use multiple methods to decide on company value, and give a weight to each method considering the conditions of the company, country, and market. Corporate business valuation for merges and acquisition – Abdul Rasheed AMIDU 2005² It provides relevant information on how corporate business entity can be valued for mergers and acquisitions. It is found that value of holding property holding property to the business needs to be measured against the returns that equity could achieve both business and elsewhere. Company valuation using free cash flow technique- Dr. S.KKhatik(2018)³ it conclude that company is price fairly and have good prospect in future. The company is fundamentally strong. The predicted FCFF of the company is positive which indicate the company does not have any cash problem in the future. Sorensen and Williamson (1985)⁴ A simple study of the Dividend Discount model (DDM) was conducted on 150 stocks from the S&P 400 in December 1980. They use the difference between the market price and the intrinsic value obtained from the model to form

five portfolios based upon the degree of under- and overvaluation. They make fairly broad assumptions by testing the dividend discount model: (a) the average of the earnings per share between 1976 and 1980 is used as the sustainable earnings per share; (b) the cost of equity is estimated using the CAPM, (c) the extraordinary growth period is assumed to be five years for all stocks, (d) the stable growth rate is assumed to be 8% for all stocks and (e) the payout ratio is assumed to be 45% for all stocks. They conclude that model performance improves as model sophistication increases. Haugen (1997)⁵ In another study, Haugen (1997)⁶reports on the results of a fund that used the DDM to analyze 250 large capitalization US firms from 1979 to 1991 and to classify them into five quintiles. The valuation was done by six analysts who estimated an extraordinary growth rate for the initial high growth phase, the length of the high growth phase and a transitional phase for each of the firms. They find that the undervalued portfolio earned significantly higher returns (22.2% p.a.) than the overvalued portfolio (13.75% p.a.) and the S&P 500 (16.8% p.a.). Skantz and Marcheini (1992)⁷ use a DCF model to value liquidating firms where the cash flows and growth patterns are known. They conclude that the market appears to value stocks by discounting expected free cash flows using a risk-adjusted required rate of return. The uniqueness of their sample however makes a generalization to going concern companies difficult.

Frankel and Lee (1998)⁸ test the residual income model of Ohlson (1995) operationalized with analysts' earnings forecasts. They find that the model predicts abnormal returns over one-, two-, and three-year holding periods. Specifically, a portfolio constructed by taking a long position in the most undervalued quintile of firms and a short position in firms in the most overvalued quintile produces cumulative returns of 3.1%, 15.2%, and 30.6%, over one,two,and three-year holding periods.

Sabal (2007)⁹ states that WACC-based methods are more adequate in a perpetuity situation with a fixed debt ratio, arguing that in APV there is still debate on which discount rates to use when valuing tax shields, while the WACC method is supposed to “automatically correct for the discount rate applicable to the tax shield”. Michel and Oded (2007)¹⁰ Also show the equivalence between the Adjusted Present

Value (APV), Capital Cash Flow (CCF), FCFE and FCFE (or WACC) methods. However, they do so basing themselves on the assumption that there are no leverage costs, that the Book Value of Debt (N) equals its Market Value (D) and that the firm maintains a fixed Debt to Enterprise Value ratio. Luehrman (1997)¹¹ Generally points to the same limitations, emphasizing WACC's poor adequacy in the real world given the extensive nature of the required adjustments, as well as the poor fit for cross border valuation.

4. RESEARCH GAP

There literature reviews related to merger and acquisition company cash flow analysis in this study. This analyzed for cash flow in the companies. To know the profitability performance in out of the companies.

- The few studies are made in profitability analysis in India.
- The few studies focus on only secondary data and some the study used both primary and secondary data.
- The few studies focus on the mean, standard deviation, co-efficient of variation and compound annual growth rate.
- The few studies there is efficient and profitability utilization of capital invested into the business
- The few studies focus on analysis of profitability of selected cement companies and hotel industry in India.
- The few studies focused on the relationship between markets liquidity and the real economy.

5. PROBLEM OF STATEMENT

A majority of companies in India are profitable units, this is followed by emergence of surplus of cash flows, but a few of them announced a dividend regularly, this will effect on number of the investors, who like to invest in them.

6. OBJECTIVE OF THE STUDY

Following are the objective of the study: -
To investigate the financial performance with respect to profitability of merger and acquisitions

7. LIMITATION OF THE STUDY

Following are the limitations of the study: -

- This study is based on secondary data and its reliability depends on its audit report.
- Data are grouped and sub grouped as per the requirement of the study.
- It has covered limited time period from 2015 to 2017.
- Non-availability of sufficient data and literature.

8. RESEARCH METHODOLOGY

The nature of study is micro and its type is descriptive and exploratory, the data used in the study is secondary. To evaluate the financial performance of National Thermal Power Corporation Limited (NTPC) data are taken form company annual report, BSE website, newspaper, analyst's reports company press release, prospectus. Time period of the study covers 4 years i.e. from 2014 to 2018

The present study has used free cash flow model which is based on the principle that the future cash flow of a company should be free to be distributed among the debt holders and share holders. Broadly speaking, Free Cash Flow (FCF) is the cash flow available to the company's suppliers of total capital. The following formula is used for the model.

9. STATISTICAL TOOL

T-test: A t-test looks at the t-statistic, the t-distribution values, and the degrees of freedom to determine the probability of difference between two sets of data. To conduct a test with three or more variables, one must use an analysis of variance.

Descriptive method: this study used descriptive method. It try to prove the reason for effectiveness of cost control and company performance based on the review of literature was find that there is indifference performance of profitability but the result found some are negative and positive inputs therefor the study is gain to ascertain whether its impact negative or positive with respect to related company by consisting the study period of 4 years.

Mean: the mean or average that is used to derive the central tendency of the data in question. It is determined by adding all the data points in a

population and then dividing the total by the number of points.

Medium: The statistical median is the middle number in a sequence of numbers. To find the median, organize each number in order by size; the number in the middle is the median.

10. Hypothesis of the study

Ho ; There is no significant change in profitability in valuation of company .

11. DATA ANALYSIS AND INTERPRETATION

Table 11.1 Ratio calculations

Liquidity Ratio	2014	2015	2016	2017	2018
Current Ratio	3.12	1.78	2.28	1.84	1.59
Inventory Turnover Ratio	5.15	4.84	4.44	4.58	3.84
Quick Ratio	22.6	1.43	1.79	1.46	1.25
Dividend Payout Ratio	9.88	15.9	15.88	3.45	36.9
Earnings Retention Ratio	90.12	84.1	84.12	96.55	63.1
Cash Earning Ratio	91.26	87.41	87.08	97.08	78.22
Interest coverage ratio	161.64	12.47	14.87	23.63	9.56

Source; Money Control Data Base- Author Calculation

In the liquidity ratio analysis, the current ratio is decrease in the year 2015 compared to 5 year and increase in the year 2014. In the inventory turnover ratio, it increases in the year 2014 and decrease in 2018. Quick ratio increase in the year 2014 and

Table 11.3 Ratios calculation One-Sample Test

	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
BSEPS	5.600	4	0.005	18.200	9.176	27.224
CEPS	7.230	4	0.002	27.190	16.748	37.632
OPREV	8.193	4	0.001	121.388	80.252	162.524
NP	6.150	4	0.004	22.476	12.328	32.624
PBDITA	8.952	4	0.001	33.436	23.066	43.806
PBIT	6.985	4	0.002	29.382	17.703	41.061
PBT	8.250	4	0.001	23.386	15.515	31.257
RONW	6.096	4	0.004	14.628	7.966	21.290
ROCE	8.255	4	0.001	15.700	10.420	20.980
ROA	6.061	4	0.004	8.564	4.641	12.487
DER	8.132	4	0.001	0.232	0.153	0.311
ATOR	19.413	4	0.000	50.808	43.541	58.075
CR	7.747	4	0.001	2.122	1.362	2.882
INVTOR	20.868	4	0.000	4.570	3.962	5.178
QR	7.112	4	0.002	1.706	1.040	2.372
DPR	2.920	4	0.043	16.402	0.807	31.997
ERR	14.883	4	0.000	83.598	68.003	99.193
CER	28.642	4	0.000	88.210	79.659	96.761
INCOV	1.512	4	0.205	44.434	-37.181	126.049

decrease 2018. Dividend payout ratio increase in the year 2018 and it decrease 2017. In Earnings Retention Ratio increase in the year 2017 and decrease in the year 2018. Cash earnings ratio it increase2018 and increase 2017. In interest coverage ratio it increases 2018 and increase in the value of 2014.

Table 1.2 Ratio calculations One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
BSEPS	5	18.2	7.267393	3.250077
CEPS	5	27.19	8.409408	3.760802
OPREV	5	121.388	33.13007	14.81622
NP	5	22.476	8.172609	3.654902
PBDITA	5	33.436	8.352061	3.735155
PBIT	5	29.382	9.406273	4.206613
PBT	5	23.386	6.338748	2.834774
RONW	5	14.628	5.365526	2.399536
ROCE	5	15.7	4.25254	1.901794
ROA	5	8.564	3.15934	1.4129
DER	5	0.232	0.063797	0.028531
ATOR	5	50.808	5.852373	2.617261
CR	5	2.122	0.61247	0.273905
INVTOR	5	4.57	0.489694	0.218998
QR	5	1.706	0.536405	0.239887
DPR	5	16.402	12.55969	5.616864
ERR	5	83.598	12.55969	5.616864
CER	5	88.21	6.886516	3.079743
INCOV	5	44.434	65.73047	29.39556

Sources: SPSS Data Base- Author Calculation

The mean value of profitability ratio in the range of 10% to 17%. The ROE and ROCE ratio in the range of 8% to 16%. The ROCE ratio in the range of 1.901794 andOPREV ratio in the range of 33.13007.

Sources: SPSS Data Base- Author Calculation

The study found that, selected ratios are statistically significant Except INCOV. Therefore, the present study is reject the null hypothesis. Therefore, the study proven that there is significant change in financial performance in valuation company.

The company has made huge investment in fixed assets which indicate that company has increased its plant capacity by seeing the future demand of electricity.

- PBDITA margin of the company is very good maintained on an average of 33.03% which is good sign
- Company has sufficient cash to pay its interest cost and repayment of principle loan amount.
- Company has made investment in working capital which is required to manage day to day operations.

12. RESULTS AND DISCUSSIONS

On the basis of study following are the suggestions: -

- Company should diversify its business to other new pharmaceutical resources to generate more medicines.
- Company should decrease its investment in fixed assets.
- Company should decrease its overall cost structure.
- To finance its capital expenditure company should raised capital through capital market by issuing right share in the market. Instead borrowing from banks.

13. CONCLUSION

The fundamental value or intrinsic value of the company is Rs 326.34 as on 7th February 2018 and market price of the company as on 7th February 2018 is Rs 557.45. Hence we conclude that the company is price fairly and have good prospect in future. The company is fundamentally strong. The predicted FCF of the company is positive which indicate the company does not have any cash problem in the future.

REFERENCES

- [1] H. Sorensen and David a Williamson (Nov-Dec 1985): Financial analyst's journal, The dividend discount model, Volume 41 issue 6. No-6.60-25.
- [2] Robert A Hagn Prentice Hall, 1997, business and economics 748 pages, modern investment theory, edition 4.
- [3] Terrance Skantz, (march 1987). journal of financial research, The effect of voluntary corporate liquidation on shareholder's wealth, volume 10, Issue 1, Page:65-75.
- [4] Frankel, Richard, Lee, Charles, (1998), Accounting valuation, market expectation, and cross sectional stock returns, journal of accounting and economics, volume 25(3) page 283-319.
- [5] Timothy A. Luehrman, (june1997) Harvard business, Using APV: Better tool for valuing operations. Reprint 97306
- [6] Dr.S.K.Khatik, Mr.Milind Patil, (March 2018), Journal of Advance Management Research, Company Valuation using free cash flow technique: A case study of National Thermal Power Corporation Limited, Vol.06 Issue-03, (March 2018),
- [7] Professor Nurha (May, 2017), international journal of business and social science, Mergers and acquisition: valuation methods, volume 8, No 7.
- [8] Abdul Rasheed Amidu, (2005), International journal of strategic property management. corporate business valuation for mergers and acquisitions