Fundamental Analysis: A Study of IT Sector in India

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Abstract

Investment decisions need not be based on gossips and speculative motive. Rather, investors must act rationally and wisely. They must go for comprehensive analysis of the economic factors affecting general business conditions. Investors should understand the investment analysis to earn better returns in relation to the risk assumed. A careful and systematic investment analysis can provide a sound framework for both the management of wealth and increasing the wealth. There are two basic approaches to the in-depth analysis i.e. Technical Analysis and Fundamental Analysis. For this research, the approach which has been adopted is Top Down (Economic, Industry and Company Analysis) approach. In this paper we analyse the Indian IT sector and calculate intrinsic value of major IT companies and compare with the market value. From the study, we found debt-equity ratio of all the IT companies are very less therefore, the fixed payment obligation is less resulting in more profitability and less risky for shareholders.

Keywords: EIC Approach, Fundamental Analysis, Intrinsic value

Introduction:

Fundamental Analysis attempts to find out the approximate value of securities so that the investors can decide to buy or not to buy the secure ties at the current market prices. Basic philosophy of fundamental analysis is that if an investor invests one rupee in buying a share of a company, how much expected returns from investment he has. A fundamental analyst compares the true value of a share with its market price. In case the former is higher than the latter, it means the undervaluation of share in the market and signals the buying of share and if true value is below the market price, the share is overpriced and signals the selling of a share.

There are broadly two main approaches to the fundamental analysis:

- Top-Down Approach (E-I-C APPROACH)

- Bottom-Up Approach (C-I-E APPROACH)

This Study is based upon 'Top-Down Approach' i.e. E-I-C.

In EIC Approach, study start with the economy and overall market and afterwards industry prospects analysed. On the basis of positive signals given by economic and industry analysis, move to the specific company analysis.

Literature Review

Pandya and Pandya (2013), found that analysis helps the investor in making investment decision but not every investment is entirely depending up on the analysis alone. Fundamental analysis is a method of calculating intrinsic value by examining the economic, financial, qualitative and quantitative factors and company specific factors.

According to Hema and Ariram (2016) An investor should analyse the market before investing. Investment analysis is highly important for the benefit of risk reduction and maximizes the gain. Stocks are unique investment because they allow us to take partial ownership in company.

Reddy and Sowmya (2016), analysed that fundamental analysis reduces the risk of loss of investors by examine the intrinsic value of the share price. An efficient investment requires both technical and fundamental analysis.

According to Ambily et al. (2017), the conclusion of the study to know how to invest in a systematic manner in the competitive world and importance of systematic investment decision. IT sector of India has been significantly contributed to the growth of Indian economy in terms of GDP, employment generation, and foreign earnings.

Objective of the Study

To study the future prospectus and growth of IT sector

1. To study on the Fundamental Analysis of IT companies and analyze the intrinsic value.

Research Methodology

This study is based upon the information and data gathered from multiple sources, including official website of the companies, NSE, IIFL.

We used Secondary Data for the period of (2013-2019). The selection of the period considered the two factors. First, in this period IT industry recorded significant growth. Second, a Six-year study of investment would be reasonable time frame to reduce the data fluctuation. For the evaluation of the data was collected from the official website, Annual reports of the companies. For the evaluation of the performance of the major IT Companies statistical tools is used such as Ratio, Table and Graph.

The companies of IT sector selected which listed on NSE on the basis of availability of data.

- HCL
- Infosys
- Mindtree
- NIIT Tech
- Tata Elxsi
- TCS
- Tech Mahindra
- Wipro

Economic Analysis

Economic analysis plays a major role in the investment decision. In the current scenario of globalization, it makes sense to examine the state of international economic conditions as well. The international economy might affect

the firm's export commitments, the price competition it faces internationally and the profits it makes on its foreign investments.

With reference to the Indian Economy, important variables to be looked into are:

- Gross Domestic Product
- Inflation
- Unemployment
- Corporate tax etc.

❖ **GDP Growth Rate[1]:** GDP is the value of final goods and services produced within the domestic territory of a country during the accounting year. According to Moody's Indian economy had seen a growth of 7.1% in 2017 and 7.2% in 2018. In 2019 a five-year low of 5.8% GDP growth rate had been recorded during Q1. The slowdown of the economy has deepened; the bottom on growth for 2019 has dropped from 5.8% to 5%. This growth is worst in over 6 years stretching back to 2013.There is a need of an economic emergency in the country because we are sliding down so fast.

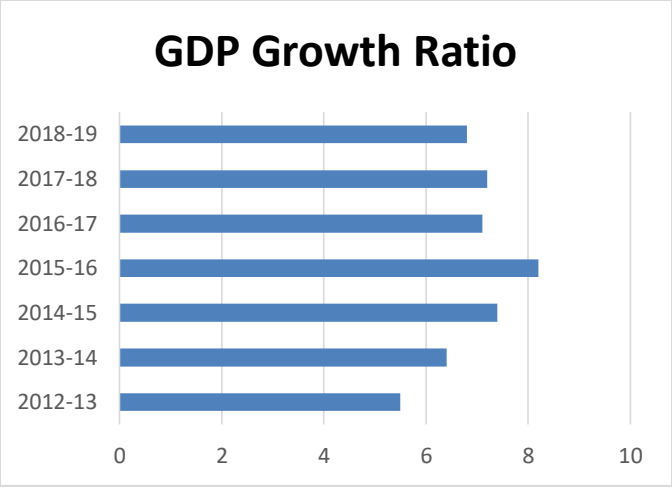
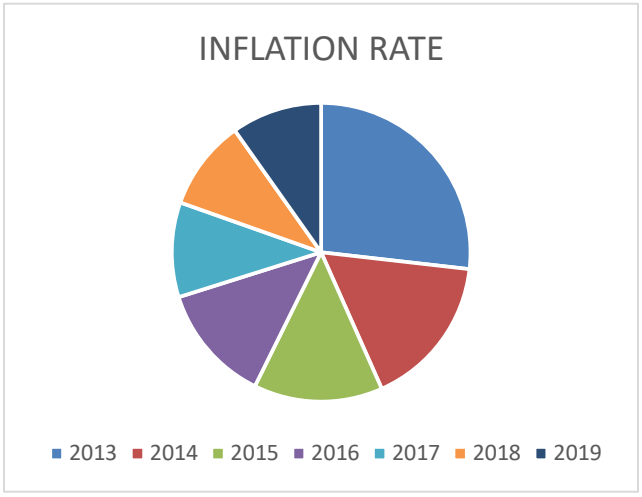


Fig: 1 GDP Growth Rate

Source:
http://statisticstimes.com/economy/gdp-growth-of-india.php

❖ **Inflation Rate[2]**: Inflation is rise in the general level of prices which reduces the purchasing power of each unit of currency. January retail inflation down to 2.05% from 2.19% in December 2018. Retail Inflation has actually cool off in July; food inflation is more than halved to 1.37% in July, 19 vs. 2.91% in the last month. Clothing Inflation to 5.28% from 5.67% in June, 19. April WPI Inflation at 3.07% vs. 3.18% in March, 19, so there has been a slight compression there with respect to month



on month move as far as the WPI figure is concerned.

Fig: 2 GDP Inflation Rate

Source:
https://www.statista.com/statistics/271322/inflation-rate-in-india/

❖ **Unemployment Rate[2]:**

Unemployment is a situation where one is willing to work but is not able to get a job. The unemployment rate has gone up from 4%to 7.6% in the last two years from May 2017 to April 2019.

❖ **Corporate Tax:**

A corporate tax, also known as company tax, which is a direct tax imposed on the capital or income of companies by the jurisdiction.

Forecasting and analysing these variables is a difficult exercise and a lot of data and expertise is required. The national and international conditions affect the various industries differently. The economy analysis must precede the industry analysis which is the next element of EIC approach.

Economic forecasting may be undertaken on the following lines:

- A trend analysis of the basic economic indicators (GDP, etc.,) should be made to identify the basic economic environment.
- Leading indicators of the economic environment be analyzed to forecast the change in phase of business cycles.
- Analysis of lagging indicators is made to study impact of change in business cycle.

Industry Analysis

In the economic analysis, the direction for the change in capital market may be identified. However, the analyst must realize that different industries respond differently in the capital market. Industry analysis is relevant and important for the same reasons that the economic analysis is. As it is difficult for an industry to perform well if the economy is ailing, it is also difficult for a firm to do well if the industry is in troubled position. So, after an economic analysis, what is required is the industry analysis.

KEY FACTORS IN INDUSTRY ANALYSIS:

- Industry`s past performance
- SWOT analysis
- Product permanence and technology.
- Government role
- Market Competitive conditions

An industry is a homogeneous group of firms which compete with one another with a similar type of products, goods and services. After forecasting the state of the economy, it is important to identify the implications of that forecast for the specific industry. It is already noted that not all industries are equally sensitive to the economic conditions and business cycles. Some industries are virtually independent and some are highly sensitive to business cycles.

Industry Analysis of IT Industry:

- The Indian IT sector has contributed to the country's GDP of around 7.7% and estimated to contribute to the India's GDP TO AROUND 10% BY 2015.
- Indian IT firms is well expanded over verticals such as retail, telecom and has a global footprint all over the world. Also Indian IT sector has a low-cost advantage and less expensive as compared to US market.
- At Rs.9,57,493 crores (US $137 billion) in 2018-19, It is estimated that India's IT sector will reach Rs. 6,98,900 crores (US $100 billion) by 2025.
- IT industry employs nearly 3.97 million people in India of which 105,000 were added in financial year 2018.Hardware exports from India are expected to grow at 7-8% in FY 19.
- The Indian Government has extended tax holidays to the IT sector for software technology parks of India (STPI) and Special Economic Zones(SEZ'S). As of May 2019, there were 273 approved SEZ's across the country where 136 are exporting SEZ's.

1. SWOT analysis:

a) Strengths

- High quality and price performance.
- Large pool of knowledgeable IT professionals.
- Flexibility and adaptability.
- Innovative and Reliable products.
- High Growth and strong market share.
- Government encouragement.
- Global and 24/7 delivery

b) Weaknesses

- Highly dependence on USA for revenues
- High rate of attrition
- More dependent on BFSI sector for revenue.

c) Opportunities

- Product innovation

d) Threats

- Increase Competition
- Global economic slowdown

Company Analysis

In company analysis firm's profitability and valuation of intrinsic value are analysed for various selected companies in order to check their financial performance. For the purpose of analysis various ratios such as EPS, Book Value, P/E ratio, return on equity and Dividend pay-out ratio are used.

Current Ratio

The Current Ratio is a liquidity ratio that measures a company's ability to pay off their short-term dues with their current assets. (Within a Financial Year)

Current Ratio = Current Assets / Current Liabilities

Ideal Ratio is equal to 2:1

If the ratio is less than 1 it means company is not able to meet their short term liabilities. Higher current ratio indicate the company has more funds which are not utilised efficiently and effectively.

Companies	2014	2015	2016	2017	2018	2019
HCL	2.62	3.23	3.80	3.06	3.29	2.93
Infosys	3.83	3.12	2.97	4.05	3.65	3.00
Mindtree	3.34	3.05	2.18	2.76	2.57	3.23
Niit Tech	2.51	1.68	1.79	3.53	3.41	3.93
Tata Elxsi	1.69	1.91	2.32	4.14	4.23	5.39
TCS	2.84	2.46	3.01	6.41	4.85	4.18
Techmahindra	2.15	2.26	3.01	2.79	2.85	2.28
Wipro	2.19	2.78	3.01	3.52	2.86	2.96

Table 1: Current Ratio

Source: Author`s Calculation

The above table shows Tech Mahindra have ideal ratio and HCL, Mindtree Wipro and Infosys have sufficient current asset but other

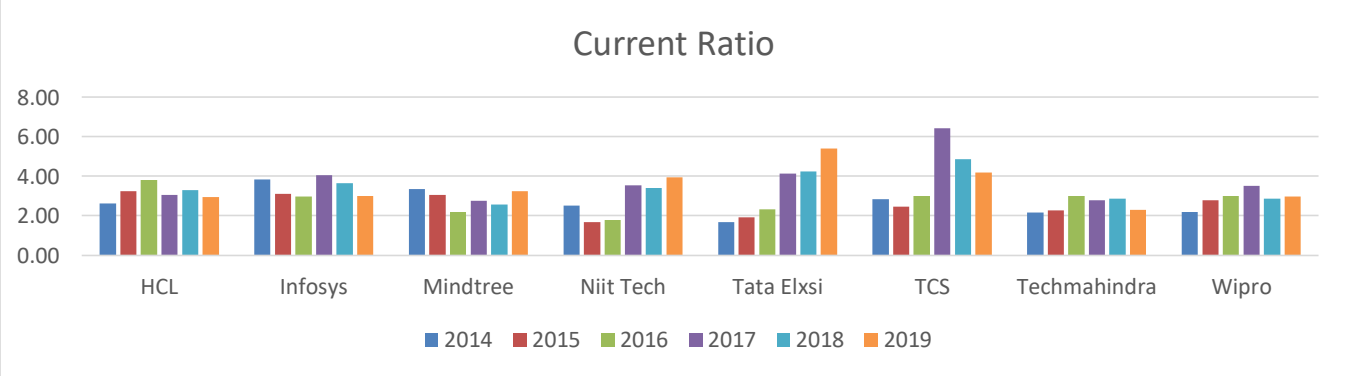


Fig: 3 Current ratio of companies (2014-2019)
Source: Author`s Calculation

companies have very high ratio.

Debt Equity Ratio

Meaning: Debt-Equity ratio measures a company's debt relative to the value of its net assets or long term financial soundness of the enterprise.

Debt Equity Ratio= Debt / Equity

Ideal Ratio is equal to 2:1 With the help of this ratio investors identify the level of risk associated with different companies and their financial stability A high debt/equity ratio is often associated with high risk and company is depending more on borrowings or debts as compared to shareholder`s fund.

Table 2: Debt-Equity Ratio

Companies	2014	2015	2016	2017	2018	2019
HCL	0.01	0.01	0.01	0.01	0.01	0.02
Infosys	0.00	0.00	0.00	0.00	0.00	0.00
Mindtree	0.00	0.00	0.00	0.00	0.00	0.00
Niit Tech	0.04	0.03	0.06	0.02	0.08	0.04
Tata Elxsi	0.02	0.04	0.05	0.03	0.01	0.01
TCS	0.01	0.00	0.00	0.00	0.00	0.00
Techmahindra	0.04	0.02	0.01	0.01	0.01	0.01
Wipro	0.04	0.03	0.03	0.03	0.00	0.00

Source: Author`s Calculation

Net Profit Ratio

This ratio helps in determining the operational efficiency of the business

Net Profit Ratio = (Net Profit after Tax / Revenue from Operation) * 100

Table 3: Net Profit Ratio

Companies	2014	2015	2016	2017	2018	2019
HCL	36.28	37.00	35.24	35.58	33.35	31.47
Infosys	22.99	25.72	29.24	23.31	26.08	20.11
Mindtree	14.88	15.06	13.88	10.29	11.74	10.74
Niit Tech	15.93	10.96	13.22	10.34	13.74	14.96
Tata Elxsi	9.73	12.11	14.40	14.05	17.32	18.16
TCS	28.57	26.17	26.65	25.52	25.93	24.41
Techmahindra	16.48	11.77	15.36	13.15	16.09	16.09
Wipro	19.06	19.88	18.12	17.88	17.27	15.85

Source: Author`s Calculation

The graph in figure 4 shows HCL have high net profit ratio and mindtree have low net profit ratio in every year. Net profit ratio of Tata Elxsi is increasing every year.

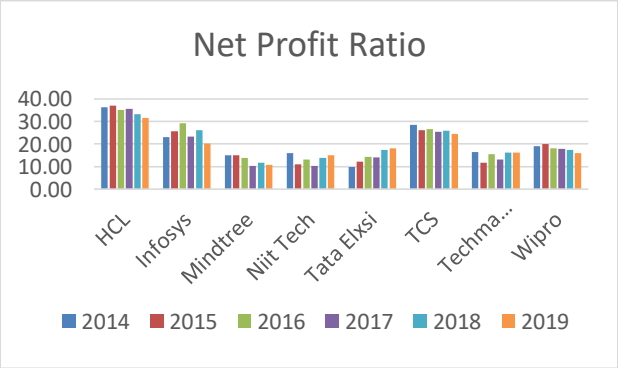


Fig: 4 Net Profit Ratio of Companies (2014-2019)

Source: Author`s Calculation

Valuation of Share Price of Companies

Table 4: Earning Per Share (EPS)

Companies	2014	2015	2016	2017	2018	2019	CAGR
HCL	85.66	45.17	33.62	48.18	52.54	59.69	-6.97
Infosys	178.39	102.33	55.51	60.16	71.28	33.66	-28.36
Mindtree	108.4	64.14	35.99	29.13	34.39	45.94	-15.78
Niit Tech	34.47	24.25	31.75	26.9	36.83	48.55	7.09
Tata Elxsi	24.12	33.05	49.72	55.65	38.54	46.56	14.06
TCS	94.15	98.31	116.3	120.04	131.15	79.34	-3.37
Techmahindra	115.49	23.58	33.4	31.37	40.84	44.58	-17.34
Wipro	30.09	33.38	32.97	33.61	12.19	12.67	-15.89

Source: Author`s Calculation

Table 5: Dividend Per Share (DPS)

Companies	2014	2015	2016	2017	2018	2019	CAGR
HCL	10	30	16	24	12	8	-4.36
Infosys	63	59.5	24.25	25.75	43.5	21.5	-19.35
Mindtree	25	17	10.5	10	9	11	-15.14
Niit Tech	9	9.5	10	12.5	15	0	-100
Tata Elxsi	9	11	14	16	11	13.5	8.45
TCS	32	79	43	47	50	30	-1.28
Techmahindra	20	6	12	9	14	14	-6.89
Wipro	8	12	6	2	1	1	-34.02

Source: Author`s Calculation

Table 6: ROE Ratio

Companies	2014	2015	2016	2017	2018	2019
HCL	38	32.7	22	26.46	26.7	26.89
Infosys	24.22	25.31	27.62	20.32	25.44	23.44
Mindtree	27.5	26.57	25.03	17.74	22.02	22.81
Niit Tech	22.44	14.47	16.9	12.31	15.34	17.55
Tata Elxsi	31.99	36.32	40.14	31	32.51	30.76
TCS	41.94	42.4	38.87	30.31	33.26	38.11
Techmahindra	31.26	20.04	213.75	18.04	20.46	21.22
Wipro	25.16	23.66	19.79	17.47	18.27	15.42

Source: Author`s Calculation

Table 7: Dividend Payout Ratio

Companies	2014	2015	2016	2017	2018	2019
HCL	0.173	0.254	0.359	0.287	0.343	0.314
Infosys	0.117	0.664	0.476	0.498	0.228	0.134
Mindtree	0.007	1.436	0.912	1.122	1.103	0.007
Niit Tech	0.266	0.359	0.182	0.06	0.082	0.079
Tata Elxsi	0.353	0.581	0.437	0.428	0.61	0.639
TCS	0.373	0.333	0.282	0.288	0.285	0.29
Techmahindra	0.261	0.392	0.315	0.465	0.407	0
Wipro	0.34	0.804	0.37	0.392	0.381	0.378

Source: Author`s Calculation

Calculation of Intrinsic Value

Companies	Average DPR	Average Retention Ratio	Average ROE	Growth In Equity	Average P/E Ratio	Projected EPS	Intrinsic Value
HCL	0.288	0.712	0.288	0.375	18.14	82.09	**1489.09**
Infosys	0.353	0.647	0.244	0.205	9.55	40.56	**387.13**
Mindtree	0.764	0.236	0.236	0.228	14.97	56.4	**844.46**
Niit Tech	0.171	0.829	0.165	0.111	18.12	53.94	**977.57**
Tata Elxsi	0.508	0.492	0.338	0.158	17.86	53.91	**962.6**
TCS	0.308	0.692	0.375	0.166	13.56	92.53	**1255.04**
Techmahindra	0.307	0.693	0.541	0.137	13.5	14.4	**194.46**
Wipro	0.444	0.556	0.2	0.259	10.58	56.14	**593.71**

Source: Author`s Calculation

Explanation of Valuation of Share

Average DPS = Sum of DPS / No. of Years

Average Retention Ratio= 1- Average DPS

Average ROE= Sum of ROE / No. of Years

Growth in Equity= Average Retention Ratio * Average ROE

Average P/E Ratio= Sum of P/E Ratio / No. of Years

Projected EPS= (Current EPS * (1 + Growth in Equity))

Intrinsic Value= Projected EPS * Average P/E Ratio

Result

Companies	Intrinsic Value	Market Value as on 31.12.2019	Result
HCL	1489.09	568	Undervalued
Infosys	387.13	731	Overvalued
Mindtree	844.46	800	Undervalued
Niit Tech	977.57	1590	Overvalued
Tata Elxsi	962.60	826	Undervalued
TCS	1255.04	2162	Overvalued
Techmahindra	194.46	762	Overvalued
Wipro	593.71	246	Undervalued

Intrinsic Value > Market Value, it is undervalued otherwise overvalued.

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Conclusion

In fundamental analysis, the determinant of fair value of a security is investigated. In the company analysis, the future earnings capacity is investigated through the use of accounting ratios and other related parameters.
From the study, HCL, Mindtree, Tata Elxsi and Wipro are undervalued as its intrinsic value is higher than its market value. In this scenario, it signals towards the buying of a share since the price of a share may increase in future. In contrast, Infosys, NIIT Tech, TCS and Techmahindra are overvalued as its market

value is higher than its intrinsic value, which signals towards the selling of a share. The basic theory is that in the long run, the market price tends to move towards its intrinsic or fair value.

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Foot Notes:

1. http://statisticstimes.com/economy/gdp-growth-of-india.php
2. https://www.statista.com/statistics/271322/inflation-rate-in-india/