

## **Fundamental Analysis of Consumer Durables Sector with special reference to Dixon Technologies**

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### **ABSTRACT**

*The prominent nature of consumer durables market imposes analysts to use fundamental analysis on those companies whose performance become superior. The performance of the market that represent the company can be said to depend on the performance of the company itself. However, companies are operating in business and industrial sector, which are a part of India economy. The selection of a company and an investment will start with fundamental analysis. Fundamental analysis evaluates the macroeconomic factor, industry performance and company performance. Fundamental analysis guide investors which company is suitable for long term investment and which company is suitable for short term investment. Fundamental research also focuses on identifying and analyzing the factors that influence company stock price. It helps the investors to identify which company is performing better in consumer durables sector and which company give higher return on investment. This paper would analyze the fundamental position of Dixon Technologies with respect to Amber Technologies and Industry.*

**Keywords:** Equity Research; Fundamental Analysis; Financial Modelling; Financial Statements; Equity Returns; Equity Ratios; Consumer Goods/ Consumer Durables.

### **INTRODUCTION:**

India is a developing country where many people are interested to invest in financial markets especially on equities to get high returns, and to save tax in honest ways. Equities are playing a major role in contribution of capital to the business from the beginning of capital markets. Fundamental analysis studies the core underlying elements that influence the economy of a particular entity, like stock and currency. It endeavors to predict price action and trends by analysis macro economy factor, government policy, and other factor in a business cycle framework. Fundamental is the examination of the underlying forces that affect the welfare of the economy, industry and companies. Fundamental analysis and technical analysis can co-exist in peace and complement each other. Since all the investors in the stock market want to make the maximum profits possible, they just cannot afford to ignore either fundamental or technical analysis. [1]

In this paper we would discuss on Fundamental aspects that would complement the kind of returns and parameters we would like to understand from Consumer durables and related sectors. Fundamental analysis may involve examination of the financial data, management, business concept and competition at the company level. It helps in picking and selling the stock which are undervalued and overvalued. The investors invest for long term in the companies which are fundamentally strong and for short term which are fundamentally weak but technically strong.

Dixon technologies had established it seed in 1994 for manufacturing color television. In year 1996, they established a new manufacturing facility in Noida. After 12 years it entered the lighting products vertical with the manufacture of CFL products and began with reverse logistics operations. In year 2009 & 2010 it commencement of manufacturing of washing machine & commercial manufacturing in the metal sheet and Moulding segments began. After 4 years it achieved more than 10000 million of revenue from operation on a

standalone basis. In year 2015 they went for acquisition with their subsidiaries companies DAPL & DBMPL. In 2016 they entered into the manufacturing of mobile phones through their joint venture, PEPL and established new manufacturing plant in Tirupati with this tremendous growth they entered into a joint venture agreement with Aditya Info Tech Ltd for manufacturing of security systems in 2017 and listed on BSE Ltd & National Stock Exchange of India Ltd. on 18th September, 2017. In year 2018 they commence manufacturing of security systems including CCTVs & Digital Video Recorders (DVR's) and company strategy of backward integration which would be India's largest facility for LED TV panel manufacturing.

## LITERATURE REVIEW:

**IBEF view**, by 2022, it is expected that India appliance and consumer electronic industry will increase at a 9 percent CAGR to reach Rs 3.15 trillion (US\$48.37 billion). Currently, India is one of the largest growing electronic market in the world and electronic market is expected to grow at 41 per cent CAGR between 2017-20 to reach US\$ 400 billion. In 2017, refrigerators segment made up 27% of the consumer appliances market, production of air conditioners and washing machine in India enlarged 4.9% and 5.1 % year-on-year in 2017-18 to 3.19 million units and 5.79 million units, electric fans penetration is expected to reach 76-78 per cent in 2019-20 from 65 per cent in 2017 in rural areas. Rising in consumer disposable income, increasing urbanization, a growing middle class, evolving lifestyles and easy financing schemes have led to shortened product replacement cycles where consumer durables (ACs, and LCD TVs,) have perceived as utility items rather than luxury possessions. In 2017, our per capital GDP was US\$ 1,749 and this is expected to reach US\$ 3,274 in 2023. India has huge opportunities to grow in untapped consumer appliances market as compared to other countries. Air condition have a penetration of 4 per cent in India, compared to global average of 30 per cent. A policy (M-SIPS) has introduce for growth of consumer durable industry.

*Vinod Kumar P Pathade (2017)* in the paper discussed about the long term and stated that the investment decision of investors in long term in capital market instrument is completely depend on fundamental factors. An investor discerns the performance of the securities which depend on the performance of the company itself. However, company's performance relies on industry and business sector, which in turn are a part of overall economy, so this would affect the decision of an investor. Fundamental analysis helps the investors on their investment decision, it evaluates the macroeconomic factor, industry performance, and company performance before making correct investment decision.

P. Devika & Dr. S. Poornima (2015) in their paper that the investors make an investment decision to invest their own money in some security, they have to examine on few parameters for instance earning, cash flow, and assets, is functional in determining buyout and liquidation value of a company framework. The investors use technical analysis when market is bullish and depend on fundamental analysis when market is bearish this emphasis on the usage of these tools while taking positions in Large cap, Mid Cap and Small cap companies. After the survey of respondents, they concluded that Conservative fundamental analysis was better for conventional companies such as Banking, Cement, Pharmacy, Steel over the Technical analysis but this tools was better for modern sectors such as, information Technology, Telecom, Real estate, Food products, etc. they also said that there is no definite answer about whether technical analysis should be used as a substitute to fundamental analysis.

Chen, Been-Lon (2014) consumer durables are more flexibly priced than nondurables goods and services. This can be done through two-sector neoclassical sticky-price models with flexible prices, following monetary secure, nondurables decrease but consumer durables increase.

Dr. Sreemoyee Guha Roy (2013) in the paper discussed about the fundamental analysis and stated that Fundamental analysis is conduct by analyst to identify the capital market instruments (security, stock, currency) of different companies to help investors in their investment decisions. Fundamental analysis inspects the economic factor, industry performance and company performance before taking an investment decision. Fundamental research emphasis on identifying and analyzing the factors that influence security prices. As per investors panorama fundamental research is prominent for minimize investment risk and maximize return on investment. After the Fundamental Analysis of three companies in IT sector she concluded that EPS, Price to Earnings Ratio & Price to Sales ratio are the ley factors to be considered before choosing any stock for long term investment.

Joseph Guiltinan (2010) this paper discussed about the consumer durables replacement behavior. This research reveals the value of enlarge a rational consumer decision making perspective on replacement decisions to accommodate insights from consumer behavior. He concludes while saying that the paper attempts to integrate the existing research bse by offering a framework for conceptualizing the replacement decision process.

Jeffery S. Abarbanell & Brain J. Bushee (1998) they examined the application of fundamental analysis can yield significant abnormal returns and also found the evidence that the fundamental signals provide information about future returns that is associated with future earnings news. These findings are consistent with the underlying focus to the fundamental analysis on the prediction of earnings. They found that additional analysis on a holdout sample suggests that the introduction of the fundamental signals in the literature.

Marianne Baxter (1996) the paper discussed about consumer durables which are important for the generation and propagation of business cycles. He developed a two-sector model that succeeds in generating business cycles that imitate empirical patterns of cross-sector volatility and co-movement. He found about the relatively higher volatility associated with the durable goods sector and in the end he concludes that incorporating durable consumer goods has little effect on the behavior of other macroeconomic variables.

Albert L. Page, Harold F. Rosenbaum (1992) the paper discussed about the new product development process and research is based on the process to determine the degree of buyer's interest in the new product idea. The investment involved in the tooling to make prototypes if buyers have little interest in the product. They had described the development and use of an effective concept testing procedure for durables goods.

Jacob Paroush (1965) the paper discussed about the order in which consumer durable goods are acquired is of considerable crucial, chiefly in market research. He had used the econometric approach to this problem is demonstrated as well as the way in which psychometric tools can be used in an economic investigation. He also concludes that the order of acquisition is conceptually linked with the passage of time with the help of simple cross-section data.

### **OBJECTIVE:**

1. To explain how Dixon technologies, contribute the consumer durable sector.
2. To interpret the company data with the help of fundamental analysis.

Dixon technologies listed on stock exchange last year due to its good financial result in the sector of consumer durables. This research paper involves its performance, compare to its peers with the help of interpretation of fundamental factors.

### **RESEARCH METHODOLOGY:**

This study has done to evaluate financial performance and comparison of Dixon technologies and its peer (Amber). It is based on secondary data and subsidiary data which was collected from their operational sites and is helpful to analyze their operational readiness. The relevant data are collected from the past available annual report, financial report (balance sheet, profit and loss account), prospectors and transcript. The ratio for financial year have been collected & calculated.

### **CONCEPTUAL FRAMEWORK:**

#### **Scale leading to economies of scale:**

<b>Unit (Million)</b>	<b>Market Share (FY16)</b>
FPD TV	50.4
Washing Machine	42.9
LED & CFL Lighting	38.9
Mobile	8.4

Dixon's experience in manufacturing, significant level of backward integration, design capability, superior execution with low rejection levels and deep relationship with suppliers and customers have helped them to achieve market leadership in all product verticals except mobile phone and security systems (which the company has recently started).

#### **Focus on Cost Leadership:**

Dixon maintains flexibility in manufacturing through multiple function training and use of surface mounting technology lines which can be used to manufacture diverse products like LED TV, CFL and LED products. Flexible manufacturing lines have helped bring efficiency both in terms of asset and labor usage.

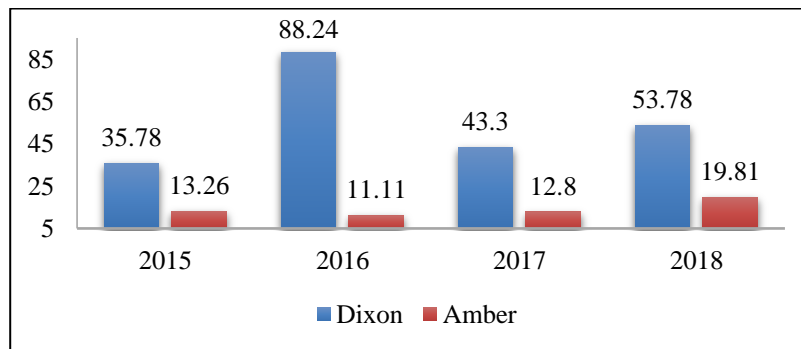
Tools of financial analysis:

- 1) **Earnings per share (EPS):** This is one of the prominent ratio to measure the performance of a company. This ratio is calculated as shown below.

ESP= Net Profit after Tax & Preference Dividend/No. of equity share

**Table 1: Earnings per Share**

Years	Dixon	Amber
2015	35.78	13.26
2016	88.24	11.11
2017	43.3	12.80
2018	53.78	19.81



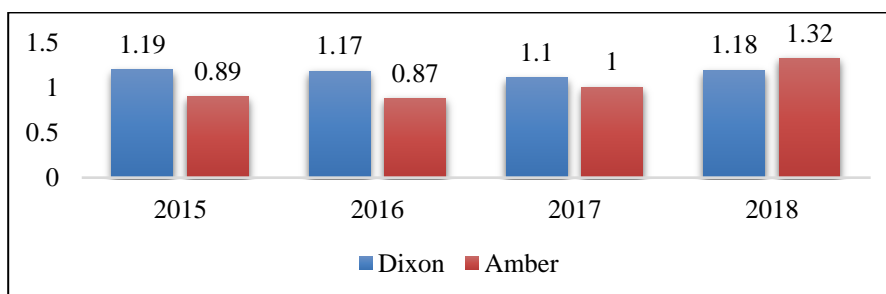
This bar chart represents the earning per share of the companies. On 1<sup>st</sup> April 2016, Dixon technologies had gone for merger with Dixon Bhurji Moulding Pvt. Ltd. & Dixon appliance Pvt. Ltd for this amalgamation company EPS in that period is higher as compare to other financial years. Dixon performance is superior than Amber in terms of earning per share in last four years' time period.

2) **Current Ratio (CR):** This ratio is used by financial industry to assess a company's short term liquidity. The formula of this financial term is shown below:

$$\text{Current Ratio} = \text{Current Asset} / \text{Current Liabilities}$$

**Table 2: Current Ratio**

Years	Dixon	Amber
2015	1.19	0.89
2016	1.17	0.87
2017	1.1	1
2018	1.18	1.32



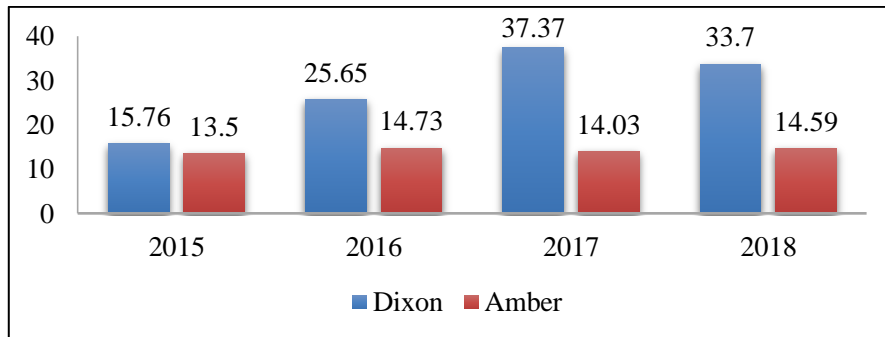
This bar chart figure represents the current ratio of both the companies. Company use this ratio to identify the amount for paying its short term liabilities. It can be seen that the current ratio of Dixon is on stable growth as compare to Amber. In 2015, current ratio of amber was 0.89 and in 2018 it was 1.32. It means Amber's current assets position with compared to its current liabilities gradually increased which means that Amber is in growing position.

3) **Return on Capital Employed (ROCE):** It expressed in term of percentage which narrows the vision of shareholder for better understanding of a company's ability to generate returns from its available capital base.

$$\text{ROCE} = \text{EBIT} / \text{Capital Employed}$$

**Table 3: Return on Capital Employed**

Years	Dixon	Amber
2015	15.76	13.5
2016	25.65	14.73
2017	37.37	14.03
2018	33.7	14.59



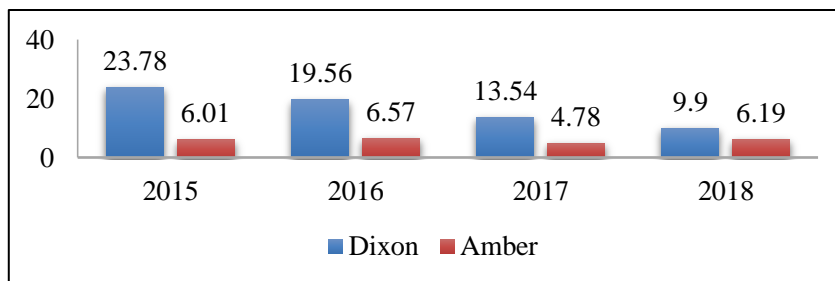
The above figure show Return on Capital Employed of Dixon and Amber. It can predict that Return on Capital Employed of Dixon has increased in 2015 and 2017 but in 2018 it has decreased. Return on Capital Employed of Amber has increased in 2015 and 2016 and again increased in 2017 and 2018.

4) **Receivable Turnover Ratio:** The ratio analyze an accounting measure used to quantify a firm’s effectiveness in extending credit and in agglomerating debts on that credit. It also measures how efficiently a firm uses its assets.

$$\text{Receivable Turnover Ratio} = \text{Net credit sales} / \text{Average Accounts Receivable}$$

**Table 4: Receivable Turnover Ratio**

Year	Dixon	Amber
2015	23.78	6.01
2016	19.56	6.57
2017	13.54	4.78
2018	9.9	6.19



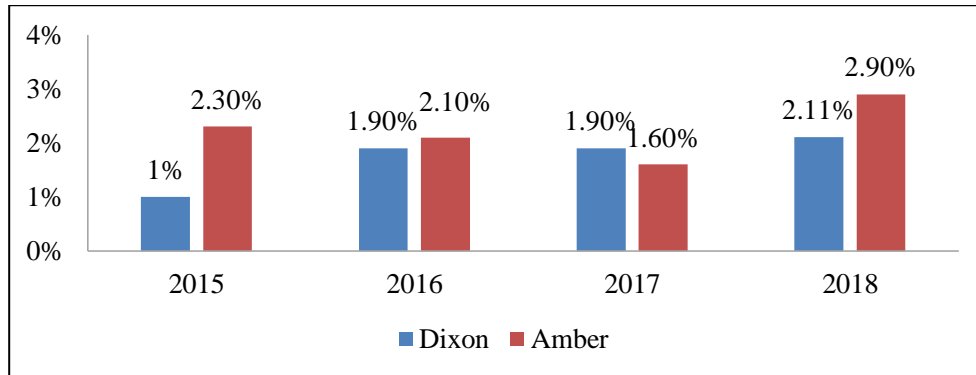
It can be seen that Receivable Turnover Ratio of Dixon technologies has shown decreasing trends which means company has not managed their debtor’s in better ways and it shows that money from debtors is not collected fast. Amber receivable turnover ratio is stable but in 2017 it ratio has gone down this could be happened due to bad debt in that year. As compared to performance Amber is better than Dixon in terms of Receivable Turnover Ratio in last four years’ time period.

5) **Net Profit Margin:** This ratio is typically expressed as a percentage of revenue remaining after all operating expenses, interest, taxes and preferred stock dividends have been deducted from total revenue. It provides clues to the company’s pricing policies, cost structure and production efficiency.

$$\text{Net Profit Margin} = \text{Net profit} / \text{Net sales} * 100$$

**Table 5: Net Profit Margin**

Year	Dixon	Amber
2015	1%	2.30%
2016	1.90%	2.10%
2017	1.90%	1.60%
2018	2.11%	2.90%



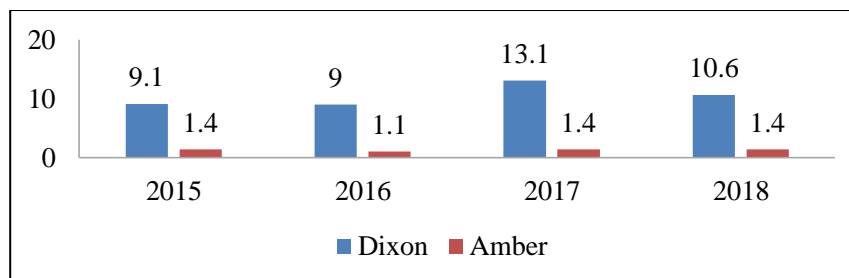
The above bar chart shows the net profit margin of two companies. Amber has more efficiency to convert its revenue into actual profit as compared to Dixon. In the year 2015, Amber had 2.30% NPM which means in this year Amber had converted its revenue into actual profit more than Dixon which NPM was 1%. NPM of Dixon has improved in 2015, stable in 2016 & 2017 and it also has appreciated in 2018.

6) **Asset Turnover Ratio:** This ratio helps the company to identify revenue generated relative to the value of its assets. The formula is shown below:

**Table 6: Asset Turnover Ratio**

Year	Dixon	Amber
2015	9.1	1.4
2016	9	1.1
2017	13.1	1.4
2018	10.6	1.4

$$\text{Asset Turnover Ratio} = \text{Revenue} / \text{Total Asset}$$



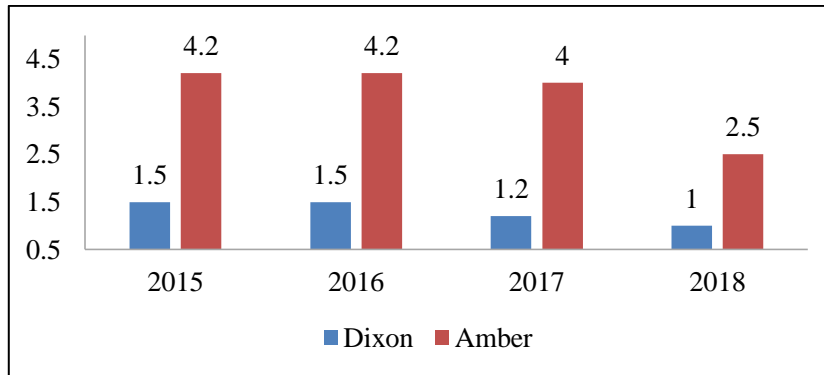
The above bar chart represents the Asset turnover ratio of two companies. Dixon has a higher turnover ratio as compared to Amber due to full usage of its asset efficiency. In other words, the company is generating more revenue for investing in assets.

7) **Financial Leverage:** The financial leverage is a prominent ratio of calculating the combination of equity and debt. This ratio guides the company to finance their operations, and knowing the amount of debt held by a company is useful in evaluating whether it can pay its debts off as they come due.

$$\text{Financial Leverage} = \text{Average asset} / \text{Average equity}$$

**Table 7: Financial Leverage**

Year	Dixon	Amber
2015	1.5	4.2
2016	1.5	4.2
2017	1.2	4
2018	1	2.5



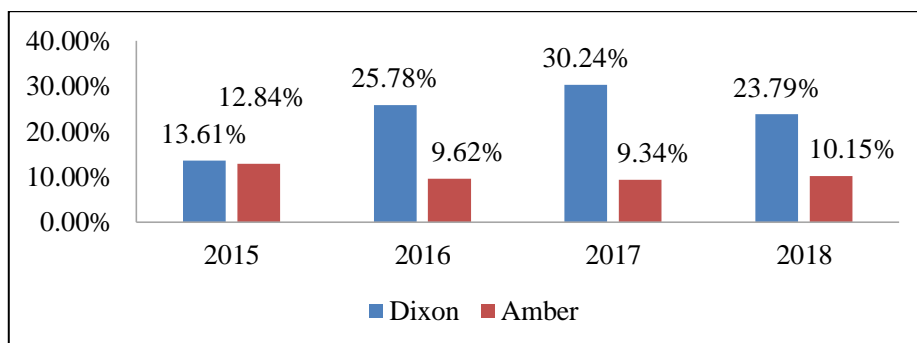
The above chart represents financial leverage ratio of two companies. The financial leverage ratio of Amber is much higher in 2015,2016 & 2017 which means that company may not be able to generate enough cash to satisfy its debt obligations as compare to Dixon but lower financial leverage is not good this indicate that the company isn't grabbing advantage of the increased profits that financial leverage may bring this scenario has happened in Dixon where its FMR is much lower than amber in 2015,2016, 2017 & 2018.

8) **DuPont Analysis:** This ratio is used to analyze a company's ability to increase its return on equity and its breaks down the return on equity ratio to describe how companies can increase their return for investors.

$$\text{DuPont Analysis} = \text{Net Profit Margin} * \text{Asset Turnover} * \text{Financial Leverage}$$

**Table 8: DuPont Analysis**

Year	Dixon	Amber
2015	13.61%	12.84%
2016	25.78%	9.62%
2017	30.24%	9.34%
2018	23.79%	10.15%



The above chart represents the DuPont analysis of two companies. In this, we have seen that Dixon ROE was much higher in 2017 as compare to Amber which indicate that there was high asset turnover than Amber. Amber has low ROE as compare to Dixon due to high financial leverage or may be low asset turnover. As investors point of view, they are looking to analyze what is causing the current ROE.

<b>DuPont Analysis of [Dixon technologies]</b>					
<b>Financial Statement Data (Rs Crore)</b>	<b>FY14</b>	<b>FY15</b>	<b>FY16</b>	<b>FY17</b>	<b>FY18</b>
Sales	1,119	1,220	1,409	2,499	2,853
Net Profit	13	12	27	48	61
Total Assets	127	140	172	210	327
Equity	84	95	118	197	315
<b>Three-Step DuPont Model:</b>					
Net Profit Margin (Net Profit ÷ Sales)	1.2%	1.0%	1.9%	1.9%	2.1%
Asset Turnover (Sales ÷ Average Assets)	17.6	9.1	9.0	13.1	10.6
Financial Leverage (Average Assets ÷ Average Equity)	1.5	1.5	1.5	1.2	1.0
<b>Return on Equity</b>	<b>31.9%</b>	<b>13.61%</b>	<b>25.78%</b>	<b>30.24%</b>	<b>23.79%</b>

<b>DuPont Analysis of [Amber Enterprises]</b>					
<b>Financial Statement Data (Rs Crore)</b>	<b>FY14</b>	<b>FY15</b>	<b>FY16</b>	<b>FY17</b>	<b>FY18</b>
Sales	1,004	1,268	1,128	1,713	2,128
Net Profit	22	29	24	28	62
Total Assets	861	1,006	1,115	1,287	1,729
Equity	209	239	263	335	893
<b>Three-Step DuPont Model:</b>					
Net Profit Margin (Net Profit ÷ Sales)	2.2%	2.3%	2.1%	1.6%	2.9%
Asset Turnover (Sales ÷ Average Assets)	2.3	1.4	1.1	1.4	1.4
Financial Leverage (Average Assets ÷ Average Equity)	4.1	4.2	4.2	4.0	2.5
<b>Return on Equity</b>	<b>21.2%</b>	<b>12.84%</b>	<b>9.62%</b>	<b>9.34%</b>	<b>10.15%</b>

#### **FINDING & CONCLUSIONS:**

This study is conducted to understand the financial performance of two companies Dixon technologies & Amber Enterprises Pvt. Ltd. for investing purpose. The study has done on the basis of fundamental analysis which guide investors in their investment decision. The below are the main points:

- 1) Dixon technologies has resulted superior in view of earning per share as compared to Amber.
- 2) Dixon has performed better than Amber on the parameter of current ratio which means Dixon's has more consistency in current ratio than Amber, where Amber current ratio is in increasing trends.
- 3) Amber has performed well on the basis of return on capital employed as compared to Dixon. Dixon has high volatile in his return on capital employed as compare to amber, so amber more consistency in ROCE than Dixon.
- 4) The performance of Amber is better that Dixon in case of receivable turnover ratio and Amber is more consistent.
- 5) Amber well in view net profit margin as compared to Dixon. Amber has more consistency in net profit margin than Dixon.
- 6) Dixon performance in this ratio is much higher than Amber. Amber is lacking behind in this scenario due to in its management and production problems.
- 7) Dixon performance in this ratio is much better than Amber because as investors view they are more likely to receive at least some of their original investment back in the event of a liquidation.
- 8) In this ratio Dixon has performed well than Amber. Amber has struggled with their performance due to investors being unsatisfied with a low ROE, so management use this to identify the problem area whether it is a lower profit margin, asset turnover or poor financial leveraging.

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