Research Paper on Fundamental Analysis of Indian Paint Industry

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Abstract: Fundamental analysis helps to evaluate the correct price of the shares. The shareholders can invest their money in the companies by making fundamental analysis. The main purpose of this analysis is to identify overpriced or underpriced securities. The fundamental analysis has a proper framework. For this research Top Down (Economic, Industry and Company Analysis) approach has been adopted. The Indian paint industry is growing in multifold. The innovation in products like friendly, odor free, and dust & water resistant paints have attracted large customers. The Paint industry has bright prospects in the coming year. Therefore the investments in Paint industry may results in profit. Two leading companies, Asian Paints Ltd & Berger Paints Ltd, listed in National Stock Exchange are chosen for the study. The analysis is carried out based on secondary data. The data collected from the reports published by RBI, Website of NSE, Annual Reports for the five year period of the both the Companies. Fundamental of both companies is carried out by EIC approach to determine the intrinsic value.

Keywords: Fundamental Analysis, EIC Approach, Intrinsic value,

I.   Introduction

Fundamental analysis aims to determine the health & performance of the company as to find out the fundamentally strong and weak companies. To evaluate the correct price of the stock and compare with the market price helps to decide whether the stock is overvalued or undervalued. There are certain macro economic factors which affects directly or indirectly performance of the company and results into the increase or decrease in the prices of the security. The study of these factors helps to take decision about the future performance of the company. The investors invest for long term in the Companies which are fundamentally strong and for short term in the companies which are fundamentally weak.

Fundamental analysis is based on certain qualitative and quantitative economic parameters, industry conditions & financial performance. It studies historical and present data as to forecast future financial, business performance of the Companies. The stock evaluation helps to predict future market price of the security. It helps in taking the decision of buying the stocks which are underpriced and selling the stock which is overpriced.

Approach of Fundamental analysis:

There are mainly two approaches for the fundamental analysis

a)   Top Down Approach (EIC): It includes Economic, Industry and Company Analysis.

b)   Bottom up Approach (CIE) : It includes Company, Industry and Economic Analysis

For this Research we are following Top Down approach. It includes first the study of overall economy, favourable and unfavourable macro indicators. Secondly study of industry in which the companies are operating and lastly the company analysis which consists of analysis of performance of the company.

II.   Literature Review

[1] **Baresa, Suzana, Sinisa Bogdan, and Zoran Ivanovic** had concluded that the Fundamental analysis and historical data are base to predict the future prices of a particular task. It determines the future prices by analyzing the economy, studying the financial statements of the company and also making sector analysis. They have also stated that the fundamental analysis did not provide any guarantee of profit in future but it assess the risk possibility prior taking any decisions.

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[1] Baresa, Suzana, Sinisa Bogdan, and Zoran Ivanovic. 2013. Strategy of stock valuation by fundamental analysis . Special issue, *UTMS Journal of Economics* 4 (1): 45–51.

[2]**Mr. Suresh A.S.**, found that the investment may be in Physical Asset or in Financial Asset. Both the types of investments are associated with Risk and Return. It also considers safety & liquidity. The person having high income possesses high risk bearing capacity & vice versa. Speculation is different than investment because we can predict future risk and return while making investment. The fundamental analysis and technical analysis are equally important for taking decision.

[3]**J.Mounika Reddy, Dr.K.Sowmya**, have researched the fundamental analysis of the Cement Sector and found that the inflation rate has been declined which results minimum increase on the cost of raw material and other expenses. It is found that the prices of selected companies are more than the intrinsic value which is not benefited for long term investment but one may purchase it for short term as to get profit from speculation.

[4]**Dyna Seng, Jason R. Hancock,** have researched that the information included in financial statements is useful for determining earnings or changes. This data helps to predict future earnings. Sometimes there is scope for abnormal returns. There is always association between earnings and returns. Earning predictability would imply return predictability**.**

III. Objective of this study
a)   To analysis of the financial performance of selected Paint industries
b)   To estimate the intrinsic value of the stocks of the selected companies.
c)   To assist the investors in making investment decisions in Paint Industry.

IV. Research Methodology
        Asian Paints is fast growing and best performing Indian Paint Company. It has its own strategies like concern about the consumer and spirit of innovation. It has created image in the society about its professionalism, consistent growth record and building shareholder equity. Asian Paints operates in 16 countries and has 25 paint manufacturing Facilities in the world servicing consumers in over 65 countries. Besides Asian Paints, the group operates around the world through its subsidiaries Berger International, Apco Coatings, SCIB Paints, Taubmans and Kadisco. Asian Paints manufactures wide range of paints for Decorative and Industrial use.   In Decorative paints, Asian Paints is present in all the four segments v.i.z Interior Wall Finishes, Exterior Wall Finishes, Enamels and Wood Finishes. It also offers Water proofing, wall coverings and adhesives in its product portfolio. It is also operating through PPG
        In the Home Improvement and Décor category, the company is present in the Kitchen and bath fittings space and offers various products under Sleek and Ess Ess brand respectively.
        Berger Paints India Limited is the second largest paint company in the country. Berger Paints India is headquartered at Kolkata, with 10 strategically located manufacturing units and about 110 stock points. The company also has an international presence in 4 countries (Nepal, Bangladesh, Poland and Russia). The company has shown its growth track record. It has its focus on Innovation, customer-focus, contemporary and responsible products. It has strategy to pursue the activities which are beneficial to the society or environment.

V. Data Analysis
a)   Economic Analysis
        The investor carry out the fundamental analysis framework to determine the future of the his investment. The first step is to determine the economic conditions in a country. If the economic conditions are favourable for the performance of a particular industry then the company in the particular industry group would expect better prospects. It is observed that when the economic conditions are unfavourable then stock prices may likely to decline as the economic environment affects the performance   of the company in which it operates. The selection of a country for the purpose of investment is totally depends on the direction of

[2] **Mr. Suresh a.s, A study on fundamental and technical analysis.** International Journal of Marketing, Financial Services & Management Research, ISSN 2277- 3622, Vol.2, No. 5, May (2013), Online available at www.indianresearchjournals.com

[3] J.mounika Reddy, Dr.K.Sowmya, fundamental analysis on select cement companies , Volume 6, Issue 6 (June, 2016) (ISSN 2231-4334) International Journal of Research in IT & Management (IMPACT FACTOR – 5.96) International Journal of Research in IT & Management
[4]**Dyna Seng, Jason R. Hancock**, fundamental analysis and the Prediction of Earnings, International Journal of Business and Management Vol. 7, No. 3; February 2012, 32 *ISSN 1833-3850 E-ISSN 1833-8119*

economic activities. The operational policies, administrative procedures, tax structure, corporate profits are based on the economic performance.
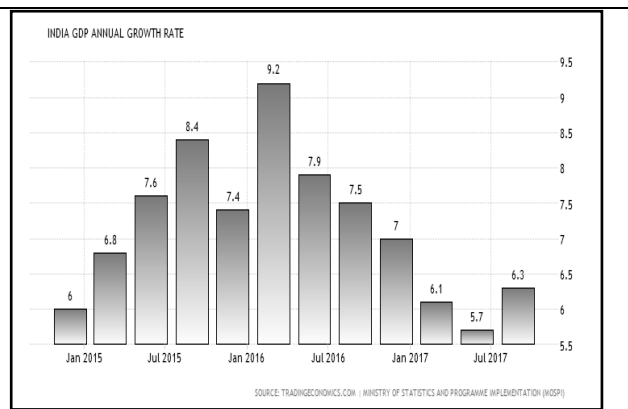
The prices of stocks are always subject to market risk. Therefore utmost precaution is taken before investing in the stocks. The main macro indicators considered for this research are

- GDP of a Country
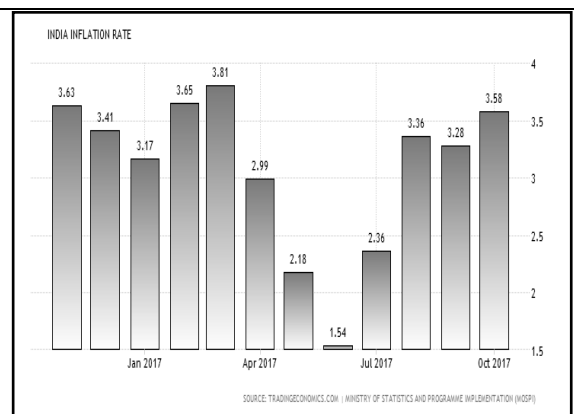- Inflation Rate
- FDI
- Unemployment

1. GDP of a Country

[5]The economy of any country is measured in terms of GDP. GDP is the total value of all goods and services produced in a country. The income earned by the individual staying within the boundaries of a country is considered for the valuation of GDP

[6]The GDP of a country is expanded 6.3% YOY in the third quarter of 2017. It was 5.7 % in the previous quarter and which was considered lowest in the previous three years. GDP Annual

Growth Rate in India is expected to be 6.80 percent by the end of this quarter, according to Trading Economics global macro models and analysts expectations. The graph reflects the rate of GDP in last five years.

INDIA GDP ANNUAL GROWTH RATE

SOURCE: TRADINGECONOMICS.COM | MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION (MOSPI)

2. Inflation rate

Inflation rate is based upon the consumer price index (CPI).[7]Consumer price in India in Oct 2017 was 3.58% YoY. Market expectation was 3.46%. It was the highest inflation rate in last seven months. This is mainly because rising cost of food and fuel. It was lowest in the month of June which was 1.54 and was a record. The following chart shows the inflation rate at different period of time.

INDIA INFLATION RATE

SOURCE: TRADINGECONOMICS.COM | MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION (MOSPI)

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[5]https://tradingeconomics.com/india/gdp-growth-annual

[6]https://tradingeconomics.com/india/gdp-growth-annual/forecast

[7]https://tradingeconomics.com/india/inflation-cpi/forecast

3.   FDI in India

[8]According to the figures of the Department of Industrial Policy and Promotion (DIPP), India had received USD 7.59 billion FDI during April-June 2016-17. It has grown by 37 per cent to USD 10.4 billion during the first quarter of the current fiscal. The main sectors which attracted the highest foreign inflows include services, telecom, trading, computer hardware and software and automobile.USD Million in August of 2017 and a record low of -60 USD Million in February of 2014.
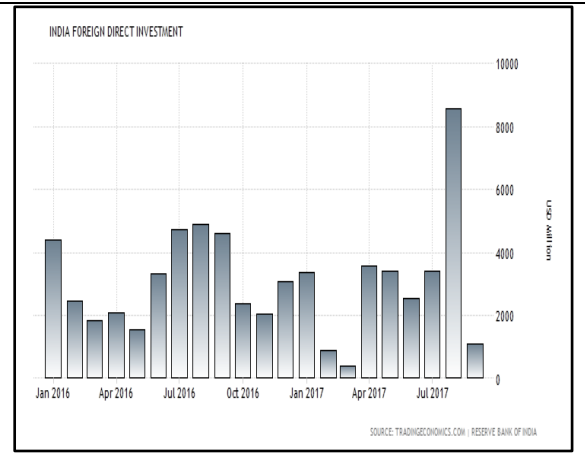
4.   Unemployment in India

The report published by World Employment and Social Outlook of United Nations International Labour Organisation, 2017 has mentioned that the economic growth of a country is lagging in the year 2017 which is not fulfilling the employment needs of a country.

Unemployment Rate in India decreased to 3.46 percent in 2016 from 3.49 percent in 2015. Unemployment Rate in India averaged 4.08 percent from 1983 until 2016, reaching an all time high of 8.30 percent in 1983 and a record low of 3.46 percent in 2016. In the month of Nov. 2017 it was reflected as 4.59 percent which is quite high comparatively previous years.
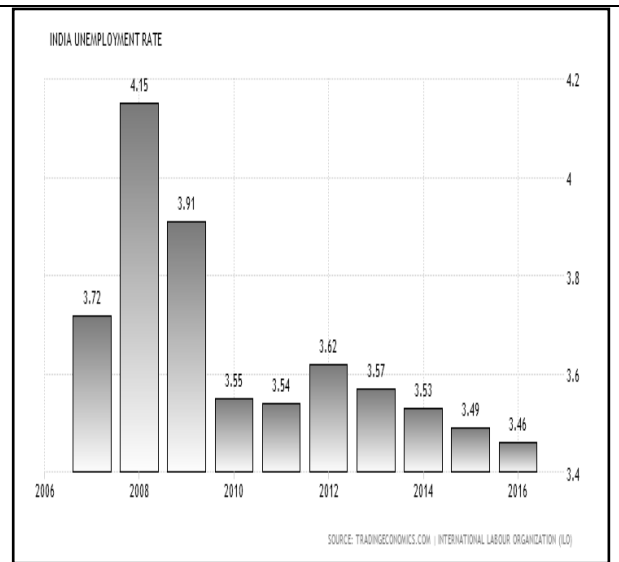
Findings of economic Analysis

From the economic analysis we can say that Inflation rate has increased which has affected to certain sectors. However GDP rate is increasing. The flow of FDI has increased in the last two years due to Government initiatives at various levels which attracts the foreigner to invest more in a country like India. In all there is positive atmosphere for the growth of a country. The growth of paint industries may generate more employment opportunities in a country.

b)   Industry Analysis

The performance of any industry is relevant to economic conditions of a country. But there are certain stocks which are defensive in nature and do not decline in the recession of the economy. The study of industry analysis helps the investor to analysis the potential growth factors in the adverse economic conditions.

The industry analysis comprises the study of customers, market share, SWOT analysis, business cycle, existing competition, rules n regulations provide the deeper insight to the investor while choosing the stock of a particular industry group.

The industry analysis provides certain clarification to the investor like profitable opportunities for that industry in a particular period, risk associated with the industry. The industries benefiting in the same period of time and the current & future growth prospects.

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[8]https://tradingeconomics.com/india/foreign-direct-investment

Industry analysis of Paint industry

The Report revealed by Indian Paint Association has highlighted that [9]The Indian paint market which was around INR 40,300 crores in 2014-15 is expected to reach INR 70, 875 crores by 2019-2020.

The Indian Paint Market consists of two types of paints.

- Decorative Paints: Major segments in decorative include exterior wall paints, interior wall paints, wood finishes and enamel and ancillary products such as primers, putties etc. Decorative paints account for over 75% of the overall paint market in India. Asian Paints is the market leader in this segment.
- Industry Paints: Three main segments of the industrial sector include automotive coatings, powder coatings and protective coatings. Kansai Nerolac is the market leader in this segment. User industries for industrial paints include automobiles engineering and consumer durables. The industrial paints segment is Far more technology intensive than the decorative segment.

Demand for decorative paints arises from household painting, architectural and other display purposes. Demand in the festive season (September-December) is significant, as compared to other periods. This segment is price sensitive and is a higher margin business as compared to industrial segment.

- The decorative paint market is expected to witness CAGR of 12.7%
- The industrial paint market is expected to witness CAGR of 9.5%
- The split of the decorative paint market to industrial market is around 75-25 (Decorative Paint market size in India was INR 30,385 crores and the Industrial Paint was INR 9,915 crores in FY 2014-15)
- The industry has grown at a CAGR of 12.9% from 2011-12 to 2014-15 in terms of value
- For FY 2014-15, per capita consumption of paint in India was estimated at 3.34 Kg. The High growth is witnessed for Exterior and Interior emulsions in the decorative paints category, Auto refinish and Powder coatings in the industrial paints category
- India's share in the world Paint Market is just 0.6%

Key Players in the Market

- The Paint Industry has divided in two categories: Organised & Unorganised. The 35% market been controlled by unorganized market. The rest has been controlled by the organized market. The top players in this market are Asian Paints (30% market share), Kansai Nerolac (20% market share), Berger Paints (19% market share) and ICI (12% market share).

SWOT Analysis of Paint Industry

1. Strengths
a. Strong Market Share
b. Covers wide market from rural, urban and semi urban areas.
c. Wide variety of Product range is available
d. Wide Distribution network and transportation Facilities through out the countries.
e. Large network of Dealers
f. Pricing strategy based on the nature of consumer
g. Highly qualified staff , majority are possessing MBA
h. Proper coordination between production marketing activities.
i. Innovative and user friendly, reliable products.
j. No compromise in quality.
k. In house production and highly reliable on suppliers

2. Weaknesses
a. Asian Paints has covered only 14% market of Industrial Paints. There is tremendous scope for growth in future.
b. Wide variety of product mix & expanding market shares pulls strain on production distribution, inventory management, accounting and administration.
c. Asian Paints has major weaknesses on the technology of industrial paints. Nerolac has a tie up with Kansai Paints so can very easily tap Maruti in India. Berger has tie up with Herbets, Germany for automotive paints
d. Difficult to position the premium brands in Rural areas.
e. There is seasonal demand for certain products which creates cash flow issues.

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3. Opportunities

Asian Paints has tremendous opportunities in Automobile industry which company can encash it. The company has shifted its focus on industrial paints.

4. Threats

a. Some Foreign companies are entering in the Paints market.

b. Asian Paints has threat from Nerolac and Berger as these companies may capture the market of Industrial

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Asian Paints Ltd

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paints.

c. Hi tech Facilities have provided many opportunities for the customer in no of shades, interior and exterior.

Findings of Industry Analysis

While studying the Indian paint industry it is observed that there is excess supply than demand in both Decorative and industrial paint segment. The Demand for paint industry is depend upon the growth of housing, auto, engineering & consumable things. As the Govt has taken intuitive in housing Facilities & infrastructural Facilities to auto industry it is expected the growth of paint industry also.

There are ample of opportunities for paint industries due to increased spending capacities of consumer, availability of disposable income and rise of nuclear of Families.

The Govt initiative in bringing reforms in GST, infrastructure and power will benefit the paint industry.

c) Company Analysis

There are certain parameters which makes the company's performance unbeatable in adverse economic and industry conditions. To find out and analysis these Factors is the main purpose of Company Analysis. These parameters are in qualitative and quantitative nature.

The qualitative parameters includes management of the Company, structure of the Board of Directors, operational strategies of the company, future plans of the Company and growth prospects.

To study the efficiency and profitability the company are include in quantitative analysis. The income statement and Balance Sheet statements provide the overall performance of the company. The budget and Cash flow statements also provide insight to the investors for the investment.

The following Factors are considered for this research.

A) Analysis of Earning & Dividend Level
a) Return on Equity
b) Book Value Per Share
c) Earnings Per Share
d) Dividend per Share
e) Dividend Payout Ratio
f) Total Debt/Equity ratio

B) Growth Performance
a) Compound Annual Growth Rate
b) Sustainable Growth Rate

## C) Estimation of Intrinsic Value

Company Analysis of Asian Paints Limited & Berger Paints Ltd.

Year	PAT	Share Cap	Reserves & Surplus	Shareholder's Funds	ROE
2017	1,803.10	95.92	6,855.06	6,950.98	26%
2016	1,597.43	95.92	4,867.24	4,963.16	32%
2015	1,327.40	95.92	4,134.34	4,230.26	31%
2014	1,169.06	95.92	3,505.01	3,600.93	32%
2013	1,050.00	95.92	2,926.34	3,022.26	35%
Berger Paints Ltd.					
2017	446.45.	97.10	1,825.04	1,922.14	23%
2016	354.87	69.35	1,440.27	1,509.62	24%
2015	266.03	69.33	1,222.64	1,291.97	21%
2014	234.25	69.30	1,061.76	1,131.06	21%
2013	209.80	69.26	914.33	983.59	21%

A)   Analysis of Earning & Dividend Level

a)   Return on Equity

Return on equity (ROE) indicates the efficiency of the company to generate the profit in the given resources provided by the stockholders. It is calculated by taking a company's after-tax income (after preferred stock dividends but before common stock dividends) and dividing by its shareholder's equity (Share capital & Reserves & Surplus). Higher the ratio indicates the growing performance of the Company.
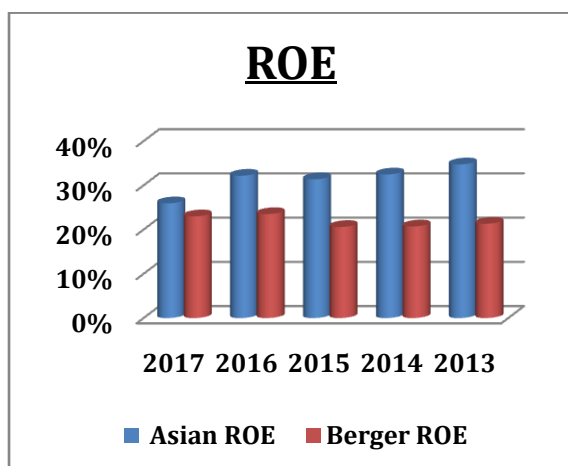
From the above graph it is observed tha ROE of Asian Paints was 35% in the year 2013 where as it is decreased to 26% in the year 2017. It shows there is significant reduction in the Return on equity. On the other hand the ROE of Berger Paints was 21% in the year 2013 which is increased upto 23% in the year 2017.It shows growth in the shareholder equity.
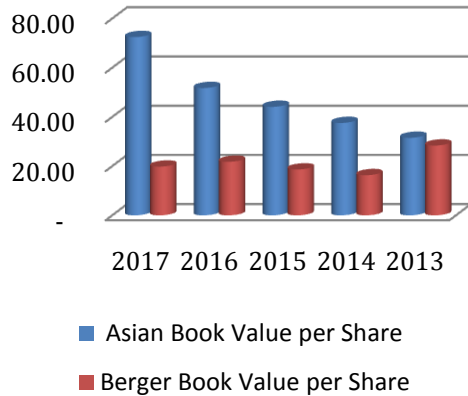
b)   Book Value Per Share: The book value of a company is the company's net worth which is by its total assets minus its total liabilities. It indicates the amount cash to be generated to run & grow the business of the company.

Book Value Per Share = (Paid up Capital + Reserves & Surplus)/ No. of Outstanding shares

Book Value per Share of Asian Paints

Year	Paid up capital (in Cr. Rs)	Reserves & Surplus (in Cr. Rs)	No. of shares (in Cr. Rs)	Value per Share (Rs.)
2017	95.92	6,855.06	95.91978	72.47
2016	95.92	4,867.24	95.91978	51.74
2015	95.92	4,134.34	95.919779	44.10
2014	95.92	3,505.01	95.919779	37.54
2013	95.92	2,926.34	95.919779	31.51
Book Value per Share of Berger Paints				
2017	97.10	1,825.04	97.10	19.80
2016	69.35	1,440.27	69.35	21.77

2015	69.33	1,222.64	69.35	18.63
2014	69.30	1,061.76	69.33	16.31
2013	69.26	914.33	34.68	28.36

Book Value Per Share

This ratio indicates the value of shareholder Equity of Asian Paints in the year 2013 was 31.51 of which Face value was Rupee 1. It significantly increases upto 72.47 in the year 2017. It shows continuous rise in the book value.

The book value per share of Berger Paints was Rs. 28.36 in the year 2013. From the graph it was observed that the Book value per share is decreased in the year 2016 & 2015 and again increased up to 21.77 and again decreased in the year 2017

c)   Earning Per Share

It indicates the profitability of the company. It is the portion of company's profit allocated to each outstanding shares in a stock. EPS = net income ÷ average outstanding common shares

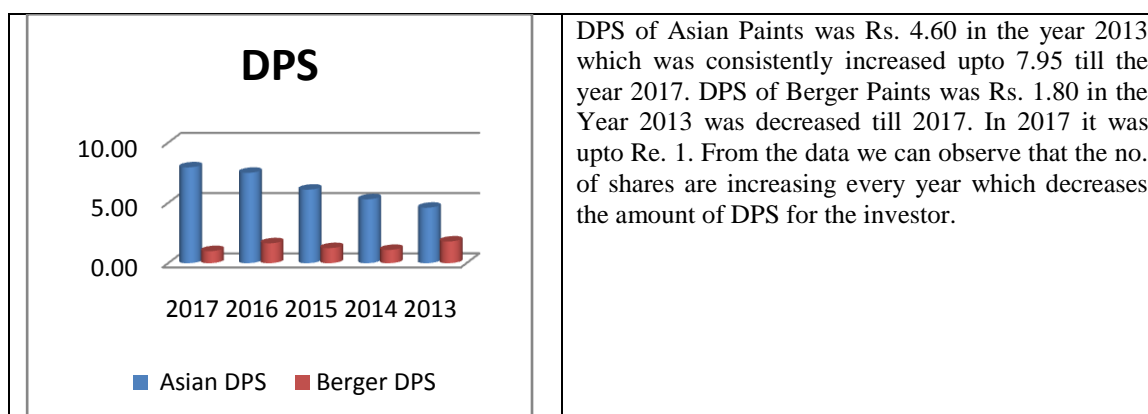| EPS of Asian Paints			
Year	**PAT**	**No. of shares**	**EPS**
2017	1,803.10	95.92	18.80
2016	1,597.43	95.92	16.65
2015	1,327.40	95.92	13.84
2014	1,169.06	95.92	12.19
2013	1,050.00	95.92	10.95
EPS of Berger Paints			
Year	**PAT**	**No. of shares**	**EPS**
2017	446.45.	97.10	4.60
2016	354.87	69.35	5.68
2015	266.03	69.35	7.57
2014	234.25	69.33	8.60
2013	209.80	34.68	9.59

EPS
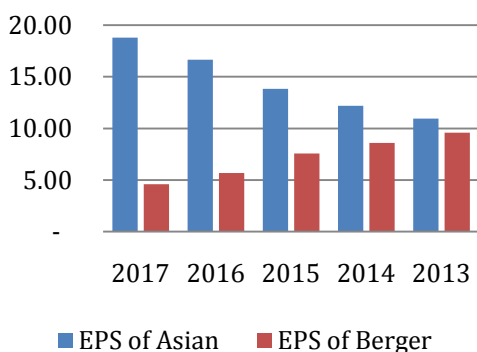
EPS is one of the indicator of the Dividend. In the above graph we can observe that the EPS of Asian Paints was 10.95 in the year 2013. It has become 18.80 in the year 2017. The company has shown consistent growth in the EPS of the company. It shows healthy performance of the company.

EPS of Berger Paints was 9.59 in the year 2013. It was decreased upto 8.60 in the year 2014 as company has increased the no. of shares. It was consistently decreasing till the year 2016. In the year 2018 it was 4.60 but again the company has increased the no. of shares which has resulted low earning par share to the shareholder.

d) **Dividend Per Share**

Dividend Per Share(DPS) indicates the amount of dividend received by each shareholder as a return on their investment. DPS is calculated by dividing no. of shares to Total Amount of dividend available for the distribution among the shareholder. Higher DPS indicates more the benefit to the investors.

Year	No. of shares In Cr.	Dividend In Cr.	DPS In Rs.
Asian Paints DPS			
2017	95.92	762.56	7.95
2016	95.92	719.39	7.50
2015	95.92	585.12	6.10
2014	95.92	508.37	5.30
2013	95.92	441.23	4.60
Berger Paints DPS			
2017	97.10	97.09	1.00
2016	69.35	114.43	1.65
2015	69.35	86.66	1.25
2014	69.33	76.23	1.10
2013	34.68	62.33	1.80

DPS of Asian Paints was Rs. 4.60 in the year 2013 which was consistently increased upto 7.95 till the year 2017. DPS of Berger Paints was Rs. 1.80 in the Year 2013 was decreased till 2017. In 2017 it was upto Re. 1. From the data we can observe that the no. of shares are increasing every year which decreases the amount of DPS for the investor.

e) **Dividend Pay Out Ratio**

This ratio indicates what percentage of a co. earnings is paying out as a dividend to the investor. The higher Pay out ratio shows that the company is issuing more share of earnings to the investor where as in lower Pay Out ratio it is assume that the Company has more growth prospects for that purpose they are keeping more cash.
Dividend Pay Out Ratio = Dividend/PAT or DPS/EPS

| Year	Dividend	PAT	Payout
Asian Paints Dividend payout			
2017	762.56	1,803.10	0.42
2016	719.39	1,597.43	0.45
2015	585.12	1,327.40	0.44
2014	508.37	1,169.06	0.43
2013	441.23	1,050.00	0.42
Berger Paints Dividend payout			
2017	97.09	446.45	0.22
2016	114.43	354.87	0.32
2015	86.66	266.03	0.33
2014	76.23	234.25	0.33
2013	62.33	209.80	0.30

Dividend Pay Out Ratio
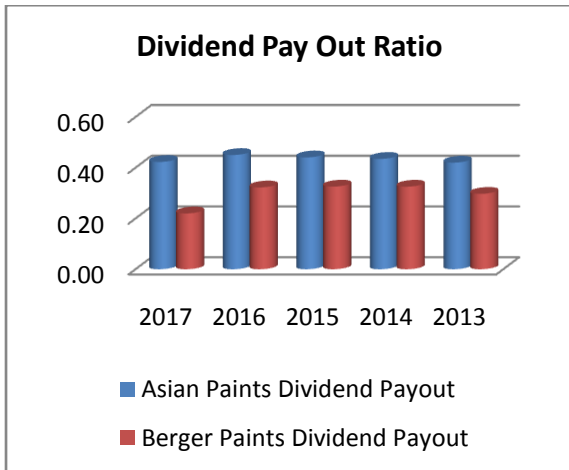
For Asian Paints we can observe the Dividend pay out ratio is .42 in the year 2013. In the year 2017 it has remain same. It was slightly flexible in the year 2014 to 2016.

For Berger paints Dividend Pay out ratio was .30 and it was decreased upto .22 till 2017. Between 2014 to 2016 it was 33 & 32%. As the tremendous rise in no. of shares may have affected the Dividend Payout Ratio.

f) **Debt Equity Ratio: It indicates the ratio of long term liability to Shareholder's equity.**

Asian Paints Debt Equity Ratio			
Year	Long term Borrowings in Cr.	Equity Capital in Cr.	D/E Ratio
2017	16.34	95.92	0.17
2016	33.23	95.92	0.35
2015	32.09	95.92	0.33
2014	39.63	95.92	0.41
2013	47.26	95.92	0.49
Berger Paints Debt Equity Ratio			
2017	6.44	97.10	0.07
2016	4.21	69.35	0.06
2015	14.38	69.33	0.21
2014	15.8	69.30	0.23
2013	12.47	69.26	0.18
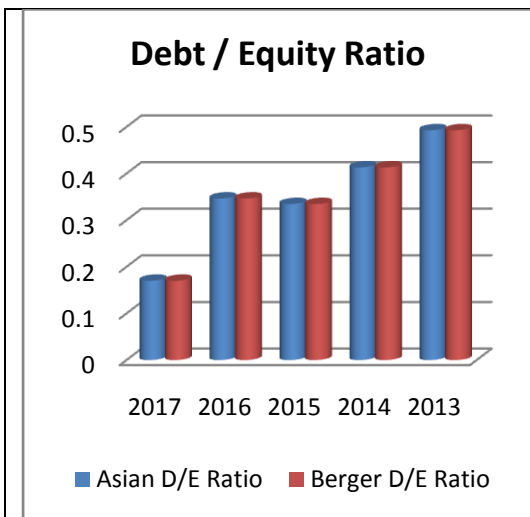
Debt / Equity Ratio

For Asian Paints Debt Equity ratio was 0.49 for the year in the year 2013. It shows that debts are near about half of the Equity In the year 2014 it was decreased 0.41. in the year 2017 it was observed that debts were decreased and are 0.17. It means the company has decreased tremendous outside liabilities.

Berger Paints had 0.18 Debt Equity Ratio which was increased in the year 2014 upto 0.23. In the year 2015 it was reduced to 0.21 where the outside liabilities were increased. In the year 2016 the Company has decreased its outside liabilities in a enormous manner which is .07 in the year 2017

A)	Growth Performance of the Company		
Sr. No.	**Particulars**	**Asian Paints**	**Berger Paints**
1	CAGR of Sales = Sales for 2017/ Sales for 2013	1.91157	-0.65396
2	CAGR of EPS = EPS for 2017/ EPS for 2013	-0.57	-0.810
3	CAGR of DPS= DPS for 2017/ DPS for 2013	-0.567	-0.861

B) Sustainable Growth Rate			
Sr. No.	**Particulars**	**Asian Paints**	**Berger Paints**
1	Average Retention Ratio (A)	0.57	0.70
2	Average Return on Equity(B)	0.31	0.22
3	**Sustainable Growth Rate= A * B**	**0.1767**	**0.154**

Calculation of Risk Exposure

Measure of Stock's volatility in relation to the market. As per the definition market has Beta and individual stocks are ranked according to how much they deviate from the market.

A stock that swing more than market has beta more than 1 where as the stock that moves slowly has beta less than 1. High Beta stocks are more riskier but have more potential of higher returns and vice versa.

We have computed Beta for Asian Paints & Berger Paints based on the month end closing prices of the company and BSE Sensex prices over the period of time. The calculated beta is as follows.

Beta of Asian Paints 1.13

Beta of Berger Paints 1.08

Volatility of n Return Equity = Range of Return over Equity/ Average Return on Equity

Volatility of Equity			
Sr. No.	**Particulars**	**Asian Paints**	**Berger Paints**
1	Range of Return over Equity (Higher observation- Lower Observation)	0.088	0.03
2	Average Return on Equity	0.31	0.22
	Volatility of Equity	**=0.2838**	**=0.1364**

Estimation of Intrinsic Value

Required ROE	**Asian Paints**	**Berger Paints**
Risk Free Return	0.09	0.09
Beta	1.13	1.108
Market Risk	0.08	0.08
ROE=Risk Free Return +(Beta of Equity*Expected Market Risk Premium)	0.1804	0.1786
Average dividend Pay Out Ratio	0.43	0.3
Retention Ratio= (1- Average dividend Pay Out Ratio)	0.57	0.7
Expected Growth = (Retention Ratio * Avg ROE)	0.1767	0.154
Expected P/E = Average Dividend Pay out Ratio/ (Required ROE- Expected Growth)	116.22	12.175
Historical analysis of P/E Ratio	48.46	36.06
Weighted P/E=(P/E ratio based on Historical Analysis + P/E ratio based on Sustainable growth Model)/2	82.338	24.118
Intrinsic Value= Expected EPS * Weighted P/E Ratio	**1548**	**192.94**

Comparison with Asian Paints & Berger Paints

Sr. No.	**Particulars**	**Asian Paints Ltd**	**Berger Paints Ltd.**
1	Return on Equity	31%	22%
2	Book Value per Share	72.47	19.8
3	Earnings Per Share	18.8	4.6

4	Dividend Per share	7.94	0.99
5	Compounded Annual Growth of Sales	1.9115	-0.6539
6	Volatility	0.2838	0.1364
7	Debt Equity Ratio	0.17	0.07

Observations
1. From the above analysis we can say that Asian Paints has higher ROE than Berger Paints. Book Value of share of Asian Paints is higher than Berger Paints. EPS & DPS of Asian Paints are higher which shows that the earning capacity of the company is quiet high. Compounded Annual Growth of sales of Asian Paints is more than Berger Paints. The overall performance of Asian Ltd is higher than Berger Paints Limited. Therefore investment in Asian will provide more returns than Berger Paints.
2. We can also observe that volatility of Asian Paints is high than Berger paints. So Asian paints is riskier than Berger Paints but will have potential to give more returns.
3. Value Range Estimation and Decision Rules for the Investors
   The valuation is inaccurate exercise therefore it is necessary to put great faith in a single point of intrinsic value estimate where possibility of some error may occur. Therefore to define value range is more appropriate than to be stick to single point value.

Decision Rule for the Investor of Asian Paints Ltd.
The value range for intrinsic value of the share of Asian Paints will be Rs.1525 to Rs. 1575(as intrinsic value is Rs.1548) In the given range decision would be as follows
Value Range of Intrinsic Value of Asian Paints Ltd.
Market price Decision
Less than Rs.1525 Buy
Between Rs.1525 and Rs.1575 Hold
More than Rs.1575 Sell
Market Value as on December 2017 is Rs. 1138 It means intrinsic value of Asian Paints is more than its market price.
Intrinsic Value > Market Price
Rs.1548 > Rs.1138
The market price of security should be equal to its Fair value. But Market price here is lower than the intrinsic value in case of Asian Ltd. It shows that share is undervalued in market. Hence the market value is expected to increase in future. So it is better for the investor to buy the share at current price in the market
Decision Rule for the Investor of Berger Paints Ltd.
Value range for intrinsic value of the share of Berger Paints is Rs. 180 to Rs.220. (intrinsic value is Rs.192.94). Given this value range, decision rule may be as follows:
Value Range of Intrinsic Value of Berger Paints Ltd.
Market Price Decision
Less than Rs.180 Buy
Between Rs.180 and Rs.220 Hold
More than Rs.220 Sell
Market value as on December 2017 = Rs.260 It shows that intrinsic value of Berger Paints Ltd. is less than its market price of share. This is shown as below:
Intrinsic Value < Market Price
Rs.192.94 < Rs.260
The market price of security should be equal to its Fair value. But Market price here is higher than the intrinsic value in case of Berger Paints. It shows that share is overvalued in market. Hence the market value is expected to decline in future. So it is better for the investor to sell the share of Berger Paints at current price in the market.

VI. Conclusions & Suggestions
[10]Indian economy is one of the Fastest growing economies in the world as per the Central Statistics Organisation (CSO) and International Monetary Fund (IMF). It will be one of the top three economic powers in coming 10 to 15 years due to strong democracy support and partnerships.

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[10] https://www.ibef.org/economy/indian-economy-overview

1. India's Gross Domestic Product (GDP) grew only by 5.7 per cent year-on-year in April-June 2017 quarter as report by Organisation for Economic Co-operation and Development (OECD) Economic Survey of India, 2017. The rate of GDP has increased in the second quarter which was 6.3% but it was not as per the expectations. As per the report of to IMF World Economic Outlook Update (January 2017)

2. The rate of inflation has increased upto 3.58% in Oct 2017 due to increased prices of food and fuel. The remedial action is required to control the prices of food & fuel. It is necessary to take corrective steps to minimize the dependence on fuel for the consumption.

3. The flow of FDI in India has increased tremendously due to liberalised policies of the Government. Numerous foreign companies are setting up their facilities in India on account of various government initiatives like Make in India and Digital India.

4. The big brand paint companies are focusing on building brand and marketing strategies which increases the price of a product. Unorganized sectors may take the advantage of price compete.

5. From the analysis of the two leading companies of paint industry, we conclude that growth rate of sales of paint company is high. Compare to Berger Paints, Asian Paints earning more income per share and sustainable growth rate of is 17.67%

6. The results of fundamental analysis clearly indicate that Asian Paints is fundamentally stronger than Berger Paints and hence it is more profitable for the investors to invest in Asian Paints in order to earn higher returns in the long run.

7. The risk of market volatility is more to Asian Paints Ltd than Berger Paints. From the Debt Equity Ratio we can say that Asian Paints has more debt burden than Berger paints. It means the Company has more interest Berger Paints.

8. The intrinsic values of both the Company's have been calculated. There is wider gap between Market Value & Intrinsic value in case of Asian Paints Ltd which suggests that time to achieve the intrinsic value will be longer than Berger Paints. Therefore new buyers of Asian Paints Ltd have to buy the shares and hold it for longer period as to get higher returns.

9. The market value of Berger Paints Ltd is much higher than its intrinsic value. So it is advisable for the investors of Berger Paints Ltd to sell the shares and book the profit.

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