

Dupont Model of Sensex 30 Companies: A Study Conducted For the Period from 2010-19

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ABSTRACT

DuPont analysis is a framework for analyzing fundamental performance originally popularized by the DuPont Corporation, now widely used to compare the operational efficiency of two similar firms. DuPont analysis is a technique used to decompose the different drivers of return on equity (ROE). The present study aims at analyzing the performance of SENSEX 30 companies for a period of 10 years from 2010-2019. DuPont analysis is used to enumerate the financial performance of 30 companies. The results indicate positive trend with a faster swiftness.

Keywords: Dupont, SEXSEX, PBIT, ROE, PAT.

INTRODUCTION

Dutch, joint stock companies became the most popular and leading company where it was the model of business for many companies. In 1602 the shares are first issued in papers so, it helps to the people for easily trading activity i.e., buying and selling of the shares frequently and easily. When there is hike in price then the volume of the shares in the market place there the exchange becomes necessary. So, the shareholders decided to meet at their market place i.e., London Coffee House, which they consider as a market place. In 1773, they changed the name from London Coffee House to Stock Exchange. Thus, the first stock exchange was founded and named as "London Stock Exchange". Stock markets started to trade with other countries. So, many people wanted to start their own businesses but they couldn't raise their capital alone. So, they wanted to pool their investors, for this the group of people started to take off their savings then the people became the partners and also the owners of the company. At present we have so many exchanges across the world. For this supplying of the capital is important to help industries for their growth. Without, capital the revolutionary ideas will never become the fact nor it would help for the important developments to be completed towards the present products. In accumulation to these all, the stock market has the stability in finance and also it creates personal wealth through investment privately, permitting people to deposit their departure and through the undertakings. Therefore, the evaluation of the performance is done in the following chapters like introduction in the 1st chapter, conceptual background in the 2nd chapter, nature and scope in the 3rd chapter and further followed by analysis and interpretation in 4th chapter with findings, suggestions and conclusions in the 5th chapter.

LITERATURE REVIEW

M. Raju, Trinley Paldon (2019) The author had collected the data by using optional data from various books and journals. The study is of analyzing the Share market criticalness and also to know the effectiveness and impact of the share market in the economy. The market fails due to influence of wide money supply. **Sarika keswani, Bharti Wadhaw (2019)** The author had identified the following factors they are government policies, rates, inflation these all factors are collected from the secondary sources. This analysis of the microeconomic vulnerability and deciding price stability and analysing the macroeconomic factors and determine the future investment. For this study the tests conducted are multi regression analysis, Granger causality test, multicollinearity test. From these above tests they said it has a strong relationship between different factors and the difference is stationary the period taken for the study is monthly data for 2006 to 2016. **Somnath Mukhati (2018)** In this study the author identified the following factors are financial and statistical tools. The data has collected from secondary source from world database, world gold council database, BSE and NSE database and Reserve bank of India database. It is made to analyse the market and also examine the gold price of our country i.e., India and the duration of this study is from 2008-2018. The test used is correlation, regression, time series, ganger casuality test, so that from the above test correlation indicate positively for BSE and

NSE and other test are not stationary at levels. **Dr. Pravin choudhary and Prof. Apporva Bhatnagar (2018)** This study is mainly to analyze the market and also analyze technically for 5PSU's listed on BSE for the period of 1 year that is 2017 returns. The data is collected from secondary sources that is from internet. From the above data that there is a relationship between market indices and coal India, ONGC and also the power grid Corp but no relationship between NTPC limited.

Smriti Menon (2018) This study is mainly to measure and study comparatively so that we can know that where BSE stands in comparison with global markets. The data is collected from secondary source i.e., from official websites. In this study they used statistics and the relation between the variables using the statistical tools and also in MS Excel where overall study found that null hypothesis is proven wrong and alternative hypothesis in respect to BSE and NYSE has proven right. **Sukhmander Singh, Deepak Kumar (2018)** In this study the author main objective is to attract and capture the global market trends and patterns which are related to global trends. The period of this study is from 2014-2018. This study also helps to know the relation between the various countries and also analyze the international market. For this study the tests used are Descriptive analysis of value of stock and also co-relation.

Dr. Mayur Savsani, Uravi Rathod (2018) "In this analysis the author had set the objective to analyse the risk returns comparatively between the stock market and the banks. The main objective is to analyze the risk so that it helps the investors about the stock market and how the risk factor arises and also understands the risk return analysis for easy use of trading in stock market. In this study the author identified the following factors by using weekly closing value of BSE and from BSE website and the data is collected from 2005- 2017. These tests used for this study is standard deviation and the T test to know the volatility of weekly returns and this analysis is conducted by using IBM SPSS Software and MS-Excel. **Sameer Yadav (2017)** The author has identified the different factors for the study they are publications of commerce, SEBI, statistics, BSE, NSE, RBI guidelines. The data is collected from the daily closing index and it is averaged to get the index value for each year. It is made to analyze the different causes of volatility in market and also the factors which causes are change in inflation rate, interest rate, budget, credit policy etc. Some measures are adopted to control volatility they are circuit breakers, pre trading session. stock market cycle is not that much stronger in the historical data so the change in liberalization had faced upward and downward in the market.

Pankaj srivastava and Mr. ugrasen (2017) This analysis is made by the author to analyse the stock market condition with respect to financial factors and also to know the recent trends in the Indian market. The information is collected from secondary sources like newspaper, internet, research paper, articles. In this study the author had Expressed that attracting the more and more people and spending the money in the stock market and get the valuable information. It helps to contribute for raising the capital and allocating resources to gain the strength in the Indian economy. Many people are stepping back to invest because of the fearness, it is the government responsibility to gain trust and provide information to people.

Mrunal ChetanBhai joshi and Yashika batra (2017) The author identified different factors to know the perception of the investors in which various factors affect the stock market they are PE ratio and earnings per share is used. The data is collected through structured questionnaire by survey method. From the collection of data, the author analyse that 90% of investors are investing continuously and remaining 10% are the speculative investors. **Namitha K Cheriyan, Daniel lazar (2017)** In this study they use intraday data where they can trade minimum 1 and price for 50 securities for this the information is collected from 01/2016 – 31/2016. By this we can analyze the relation between the changes in the market and liquidity position and also the trading activity in the stock market. In this study they used least square regression analysis and found higher volatility liquidity in the market.

SadhanKumar Chattapodhyay, samirRanjanBehera (2017) The author has identified the following factors by using the secondary data they had collected the BSE index where it comprises of 30 scrips from a daily basis data. Their objective is that according to their analysis the Indian market should combine with the developed Stock market across the globe. Those developed market is USA, UK, hongkong and made the analysis through the granger causality test and co- integration test. From this test it shows positive daily returns for the period of analysis. so, it says i.e., the result says it is responsible for improving the Indian stock market where it has not that much differed between the Japanese and Indian Stock market. **Edwin Prabu A, Indrani Bhattacharya, Partha Roy (2016)** This study is made to understand that the stock market of India has the impact in the Indian monetary policy where it directly links for the economy and following factors used for the study are treasury bill rate the data is collected from the secondary source then the test used are robustness checks.

Valarmathi A, Kousalya P (2016) The author identified the following factors such as exponential moving average, relative strength index. The study had made from the technical analysis by using RSI and exponential moving average and found that IT companies after the recession it had gain more profits to the investors in the short-term so the technical analysis holds good for short period rather than for long period. As the technical analysis suit for only short period compared to long duration. so it has limited to time and cost constraints. **Aditya Bharadwaj, Yogendra Narayan, Vanraj, Pawan, Maitreyee Dutta (2015)** In this study the author identified the different factors like python to know and make the production of on what shares when and how much should be invested by the investor. It makes

use of various data like the language, texting and also the processing in order to find and also to analyze the users opinion, evaluation, attitude and emotions. There are many ups and downs in the market where it will not be static. Sensitive index and the Nifty these are the two indicators which helps for analyzing the future market. It should be checked regularly for the sensx and nifty so that sentimental analysis is used for predicting the stock market.

Madhvi (2014) The author identified the following factors for the study by using secondary data they are RBI bulletins, journals, websites of BSE and NSE. The data has been collected since the implementation of Globalization and the period i.e., the data is taken up to 2005 where the growth and the relation between the market is analyzed and has found that the stock market goes on increasing and decreasing due to recession effect. We have learned that the market returns will have safe returns from those risk factors as the stock market doesn't give complete information so that it has the chances of getting negative returns. This study reveals that the market fluctuates frequently it will be not static in respect to the returns also the risks. **Mohanamani P, Dr T sivagnanasithi (2014)** This study is all about analysing the macroeconomic variables in respect to market and also implications of the market. In this study the data is collected from the secondary source by collecting the BSE sensx data, wholesale price index, exchange rate, call money rate. The duration of this study is from 2012-2017 and it is analysing monthly. The test used for the study is stationary test, descriptive statistics, ganger casuality test and the result of this test are stock prices are positively show the result with respect to interest rate and call money rate.

Ms. Anju Bala (2013) The author has identified the different factors for the study they are inflation, money supply, GDP, fiscal deficit. The study is made to analyze the Indian stock market in depth and to analyze the change in stock market as the climate change in the economy. stock markets are mainly influenced by broad money supply, inflation. **Najeeb M.H Masoud (2013)** The author identified many factors such as inflation, GDP, standard of living etc. It helps to understand how the economy is dependent and clearly shows and express the relation also the ups and downs in the country market economy. These factors had helped the market to gain importance by increasing the private sector role, technological advances and many more. If there is any issue or improper working in the stock market affects the economy and vice versa. **Debjiban Mukherjee (2007)** In this study the author identified the different factors and made comparative analysis using both qualitative and quantitative parameters it is to know the current trends, patterns , similarities of Indian stock exchange with the comparison of international stock exchange it is mainly analyzed to know the comparison between Indian stock market with other stock exchanges because how efficient and effectively the stock exchange uses the qualitative and quantitative analysis. As the market is lacking back in listing foreign company shares.

Objectives of the Study:

1. To get a basic understanding of the products, principle investment, players and functioning of the stock market.
2. It helps to understand the regulatory framework for the market.
3. It helps to learn about the trading of stocks in the stock exchange
4. To get in depth study of Indian and other global stock markets.

RESEARCH METHODOLOGY

The Dupont study has been made by extracting the secondary source of data i.e., from the financial reports of the company, official websites, research gate website and the published annual reports of the company. This study period for annual reports has extended from the year 2010 – 2019. In this study Dupont model is used and the information is extracted from capitaline.

ANALYSIS AND FINDINGS

Table 5.1: Data of Asian Paints Ltd (2010-19) Industry: Paints / Varnishes

Years	03/2010	03/2011	03/2012	03/2013	03/2014	03/2015	03/2016	03/2017	03/2018	03/2019
PBIDT/Sales (%)	20.51	17.03	16.38	16.03	15.98	16.02	17.79	18.36	21.98	21.89
Sales/Net Assets	3.55	3.42	3.35	3.32	3.27	3.14	2.47	2.24	1.84	1.82
PBDIT/NetAssets	+0.73	+0.58	+0.55	+0.53	+0.52	+0.5	+0.44	0.41	0.4	0.4
PAT/PBIDT (%)	65.39	62.86	64.16	62.62	60.14	60.67	60.9	60.57	59.2	59.48
NetAssets/NetWorth	+1.04	+1.07	+1.1	+1.04	+1.03	1.03	1.02	1.02	1.02	1.02

ROE (%)	58.42	43.89	42.95	38.11	35.3	33.9	31.96	27.68	25.45	25.59
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Table 5.2: Data of Axis Bank Ltd (2010-2019) Industry: Banks - Private Sector

Years	03/2010	03/2011	03/2012	03/2013	03/2014	03/2015	03/2016	03/2017	03/2018	03/2019
PBIDT/Sales (%)	58.7	60.55	66.46	67.28	65.47	65.26	64.3	53.58	48.35	55.72
Sales/NetAssets	+0.27	+0.27	+0.29	+0.29	+0.33	+0.37	+0.37	0.42	0.36	0.38
PBDIT/NetAssets	+0.16	+0.16	+0.19	+0.2	+0.21	0.24	0.24	0.23	0.17	0.21
PAT/PBIDT (%)	27.49	28.28	23.28	22.82	24.96	25.72	25.4	12.21	1	12.32
NetAssets/NetWorth	+3.56	+3.91	+4.18	+3.51	+3.03	2.69	2.54	2.38	2.49	2.68
ROE (%)	19.15	19.34	20.29	18.53	17.43	17.75	16.81	6.76	0.11	7.19

Table 5.3: Data of Bajaj Auto Ltd (2010-2019) Industry: Automobiles - Scooters and 3-Wheelers

Years	03/2010	03/2011	03/2012	03/2013	03/2014	03/2015	03/2016	03/2017	03/2018	03/2019
PBIDT/ Sales (%)	21.04	25.8	20.48	20.99	22.79	19.35	24.52	24.45	23.81	23.05
Sales/Net Assets	2.84	3.12	3.18	2.56	2.14	2.06	1.77	1.34	1.32	1.38
PBDIT/NetAssets	+0.6	+0.81	+0.65	+0.54	+0.49	+0.4	+0.43	+0.33	0.31	0.32
PAT/ PBIDT (%)	66.77	74.68	71.63	68.65	67.4	64.55	67.11	67.81	66.7	67.04
NetAssets/NetWorth	+1.46	+1.13	+1.07	+1.04	+1.03	+1.02	1.02	1.01	1.01	1.01
ROE (%)	70.98	70.16	54.86	43.66	37.05	27.72	32.8	25.26	22.51	22.87

Table 5.4: Data of Bajaj Financial Securities Ltd (2010-2019) Industry: Securities/Commodities Trading Services

Years	03/2014	03/2015	03/2016	03/2017	03/2018	03/2019
Â PBIDT/Sales (%)	10.53	25	60	94.74	95.77	98.68
Sales/NetAssets	+0.02	+0.01	+0.01	+0.05	+0.07	+0.07
PBDIT/NetAssets	+0	+0	+0	+0.04	+0.07	+0.07
Â PAT/PBIDT (%)	-500	100	100	88.89	122.79	79.33
Â NetAssets/NetWorth	+1	+1	+1	+1	+1	+1
Â ReturnOE (%)	0	0.15	0.43	3.43	9.92	5.88

Table 5.5: Data of Bharti Airtel Ltd (2010-2019) Industry: Telecommunications – Service Provider

Years	03/ 2010	03/ 2011	03/ 2012	03/ 2013	03/ 2014	03/ 2015	03/ 2016	03/ 2017	03/ 2018	03/ 2019
PBIDT/Sales (%)	39.11	35.93	34.3	32.93	33.95	44.37	38.76	14.37	34.06	35.74
Sales/NetAssets	+0.85	+0.65	+0.62	+0.63	+0.61	+0.53	+0.37	0.38	0.31	0.26
PBDIT/NetAssets	+0.33	+0.23	+0.21	+0.21	+0.21	+0.24	+0.14	0.05	0.11	0.09
PAT/PBIDT (%)	67.69	56.49	40.16	34.13	38.95	53.61	33.28	-110.92	0.43	-10.32
NetAssets/NetWorth	+1.14	+1.33	+1.36	+1.32	+1.22	+1.33	1.44	1.64	1.67	1.9
ROE (%)	29.28	19.09	12.25	9.84	10.92	14.47	8.19	3.73	0.73	-4.42

Table 5.6: Data of Housing Development Finance Corporation Ltd (2010-19) Industry: Finance - Housing – Large

Years	03/ 2010	03/ 2011	03/ 2012	03/ 2013	03/ 2014	03/ 2015	03/ 2016	03/ 2017	03/ 2018	03/ 2019
PBIDT/Sales (%)	96.8	96.65	97.05	96.88	97.12	96.94	95.41	95.53	90.25	94.57
Sales/NetAssets	+0.1	+0.1	+0.11	+0.11	+0.11	+0.11	0.11	0.1	0.11	0.1
PBDIT/NetAssets	+0.1	+0.09	+0.1	+0.11	+0.11	+0.11	0.11	0.1	0.1	0.09
PAT/PBIDT (%)	25.7	28.4	24.48	23.67	23.15	22.49	24.01	23.49	29.83	23.48
Net Assets/Net Worth	7.35	7.75	8.45	7.52	7.71	7.86	8.08	8.19	5.91	5.73
ROE (%)	19.95	21.74	22.69	22.11	20.61	20.33	21.79	20.18	20.89	13.51

Table 5.7: Data of HCL Technologies Ltd (2010-2019) Industry: Computers - Software – Large

Years	06/ 2010	06/ 2011	06/ 2012	06/ 2013	06/ 2014	06/ 2015	03/ 2016	03/ 2017	03/ 2018	03/ 2019
PBIDT/Sales (%)	30.09	24.76	31.56	40.45	48.31	46.98	45.44	45.6	45.49	43.15
Sales/Net Assets	0.8	0.96	1.09	1.09	0.97	0.86	0.61	0.73	0.78	0.84
PBDIT/NetAssets	+0.24	+0.24	+0.34	+0.44	+0.47	+0.4	+0.28	0.33	0.36	0.36
PAT/PBIDT (%)	69.14	71.21	69.38	73.17	75.09	78.74	77.31	78.02	73.32	72.93
NetAssets/NetWorth	+1.28	+1.21	+1.24	+1.12	+1.08	+1.03	+1.03	1.02	1.02	1.02
ROE (%)	25.08	22.2	31.29	43.99	46.05	36.1	30.77	28.96	27.5	28.22

Table 5.8: Data of HDFC Bank Ltd (2010-19) Industry: Banks - Private Sector

Years	03/2010	03/2011	03/2012	03/2013	03/2014	03/2015	03/2016	03/2017	03/2018	03/2019
PBIDT/Sales (%)	53.26	54.86	59.89	61.98	63.46	63.15	63.3	62.15	60.37	61.59
Sales/NetAssets	+0.33	+0.33	+0.34	+0.37	+0.4	+0.37	0.36	0.37	0.39	0.47
PBDIT/NetAssets	+0.18	+0.18	+0.2	+0.23	+0.25	+0.23	0.23	0.23	0.23	0.24
PAT/PBIDT (%)	27.47	29.5	25.63	25.89	27.23	28.15	27.37	28.69	30.34	29.35
Net Assets/Net Worth	2.82	2.88	3.34	3.16	2.85	2.5	2.74	2.44	2.31	1.97
ROE (%)	16.12	16.74	18.69	20.34	21.28	19.37	18.26	17.95	17.87	16.5

Table 5.9: Data of Hero MotoCorp Ltd (2010-19) Industry: Automobiles - Motorcycles / Mopeds

Years	03/2010	03/2011	03/2012	03/2013	03/2014	03/2015	03/2016	03/2017	03/2018	03/2019
PBIDT/Sales (%)	18.03	13.56	15.79	14.35	14.68	13.24	15.89	16.71	17.66	16.71
Sales/Net Assets	4.75	4.04	4.17	4.29	4.56	4.41	3.45	3.03	2.77	2.59
PBDIT/NetAssets	+0.86	+0.55	+0.66	+0.62	+0.67	+0.58	+0.55	0.51	0.49	0.43
PAT/PBIDT (%)	73.77	68.31	59.7	57.51	52.91	61.49	64.79	65.48	63.68	60.21
NetAssets/NetWorth	+1.02	+1.74	+1.41	+1.19	+1.06	+1.01	+1.01	1.01	1.01	1.01
ROE (%)	61.43	60.05	65.64	40.71	39.77	39.3	41.11	35.65	33.8	27.49

Table 5.10: Data of Hindustan Unilever Ltd Industry: Personal Care – Multinational

Years	03/2010	03/2011	03/2012	03/2013	03/2014	03/2015	03/2016	03/2017	03/2018	03/2019
PBIDT/Sales (%)	16.54	15.3	15.91	19.13	18.02	19.84	18.76	19.76	22.1	23.74
Sales/Net Assets	7.04	5.83	5.14	7.07	6.6	6.74	4.61	4.57	4.14	4.02
PBDIT/Net Assets	1.17	0.89	0.82	1.35	1.19	1.34	0.86	0.9	0.91	0.95
PAT/PBIDT (%)	73.14	73.02	72.97	72.75	72.63	66.48	65.85	65.89	67.29	66.52
NetAssets/NetWorth	+1	+1.33	+1.28	+1.44	+1.37	+1.3	+1.16	1.16	1.2	1.24
ROE (%)	94.84	87.99	87.23	103.11	130.01	104.12	82.71	70.33	77.21	81.93

Table 5.11: Data of ICICI Bank Ltd (2010-19) Industry: Banks - Private Sector

Years	03/2010	03/2011	03/2012	03/2013	03/2014	03/2015	03/2016	03/2017	03/2018	03/2019
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PBIDT/Sales (%)	65.14	67.77	71.32	71.32	68.7	67.29	60.59	57.32	53.49	51.02
Sales/NetAssets	+0.27	+0.23	+0.25	+0.28	+0.3	+0.38	+0.41	0.44	0.34	0.36
PBDIT/NetAssets	+0.17	+0.16	+0.18	+0.2	+0.21	+0.25	+0.25	0.25	0.18	0.18
PAT/PBIDT (%)	18.62	23.3	22.09	24.11	26.15	27.11	23.58	23.21	17.5	8.46
Net Assets/Net Worth	2.4	2.53	2.72	2.64	2.48	2.02	1.93	1.75	2.06	2.05
ROE (%)	7.96	9.65	11.2	13.1	14.02	14.55	11.62	10.66	6.81	3.24

Table 5.12: Data of IndusInd Bank Ltd (2010-19) Industry: Banks - Private Sector

Years	03/2010	03/2011	03/2012	03/2013	03/2014	03/2015	03/2016	03/2017	03/2018	03/2019
PBIDT/Sales (%)	66.58	64.84	69.97	69.63	66.75	65.89	63.56	60.35	60.78	59.9
Sales/NetAssets	+0.3	+0.3	+0.42	+0.41	+0.45	+0.51	+0.43	0.49	0.43	0.46
PBDIT/NetAssets	+0.2	+0.2	+0.29	+0.28	+0.3	+0.34	+0.27	0.29	0.26	0.27
PAT/PBIDT (%)	16.14	20.69	18.01	18.26	20.8	22.24	23.71	25.58	26.93	19.75
Net Assets/Net Worth	5.1	3.7	3.37	2.75	2.61	2.34	2.04	1.88	2.19	2.31
ROE (%)	19.49	19.27	19.23	17.78	17.53	18.98	16.59	15.26	16.48	13.25

Table 5.13: Data of Infosys Ltd (2010-19) Industry: Computers - Software – Large

Years	03/2010	03/2011	03/2012	03/2013	03/2014	03/2015	03/2016	03/2017	03/2018	03/2019
PBIDT/Sales (%)	39.4	37.67	39.9	36.22	34.07	37.46	34.67	34.19	34.41	29.44
Sales/NetAssets	+0.96	+1.04	+1.05	+1.02	+1.04	0.98	0.88	0.87	0.97	1.16
PBDIT/NetAssets	+0.38	+0.39	+0.42	+0.37	+0.36	0.37	0.31	0.3	0.33	0.34
PAT/PBIDT (%)	69.67	67.38	67.92	68.46	67.47	68.65	67.82	68.17	75.79	68.3
NetAssets/NetWorth	+1	+1	+1	+1	+1.01	+1	+1	+1	+1	+1
ReturnOE(%)	+29.13	27.69	31.22	27.7	26.09	26.98	23.26	21.41	24.57	23.3

Table 5.14: Data of ITC Ltd (2010-19) Industry: Cigarettes

Years	03/2010	03/2011	03/2012	03/2013	03/2014	03/2015	03/2016	03/2017	03/2018	03/2019
PBIDT/Sales (%)	25.57	26	27.52	27.52	28.86	29.84	29.85	29.91	40.85	43.28
Sales/NetAssets	+1.85	+1.91	+1.85	+1.87	+1.78	+1.63	+1.24	1.22	0.86	0.79

PBDIT/NetAssets	+0.47	+0.5	+0.51	+0.52	+0.51	+0.49	+0.37	0.36	0.35	0.34
PAT/PBIDT (%)	60.48	62.25	63.57	64.03	64.68	63.89	60.16	61.5	61.98	62.91
NetAssets/NetWorth	+1.01	+1.02	+1.01	+1.01	+1.01	1.01	1	1	1	1
ROE (%)	29.33	33.35	35.58	36.21	36.27	33.77	25.79	23.45	23.2	22.8

Table 5.15: Data of Kotak Mahindra Bank Ltd (2010-19) Industry: Banks - Private Sector

Years	03/2010	03/2011	03/2012	03/2013	03/2014	03/2015	03/2016	03/2017	03/2018	03/2019
PBIDT/Sales (%)	50.43	58.56	66.4	67.34	64.42	62.67	60.93	61.32	60.09	61.48
Sales/NetAssets	+0.3	+0.28	+0.33	+0.31	+0.38	+0.39	+0.36	0.45	0.36	0.39
PBDIT/NetAssets	+0.15	+0.17	+0.22	+0.21	+0.25	+0.25	+0.22	0.28	0.22	0.24
PAT/PBIDT (%)	28.65	28.11	22.83	21.96	22.94	25.35	18.06	26.27	28.56	27.72
Net Assets/Net Worth	2.85	2.57	2.76	3.1	2.16	2.11	2.2	1.69	1.76	1.72
ROE (%)	13.29	14.39	14.65	15.6	13.82	14.12	10.97	13.23	12.55	12.18

Table 5.16: Data of Larsen&ToubroLtd (2010-19) Industry:Engineering-Turnkey Services

Years	03/2010	03/2011	03/2012	03/2013	03/2014	03/2015	03/2016	03/2017	03/2018	03/2019
PBIDT/Sales (%)	18.85	16.3	14.47	15.79	16.21	16.14	14.01	14.1	13.17	13.82
Sales/NetAssets	+1.49	+1.51	+1.5	+1.35	+1.26	+1.14	+1.13	1.16	1.24	1.37
PBDIT/NetAssets	+0.28	+0.25	+0.22	+0.21	+0.2	+0.18	+0.16	0.16	0.16	0.19
PAT/PBIDT (%)	62.2	54.82	57.3	59.58	59.27	54.43	55.93	58.35	54.82	55.55
NetAssets/NetWorth	+1.37	+1.34	+1.42	+1.33	+1.35	+1.36	1.34	1.24	1.23	1.2
ROE (%)	21.48	17.7	18.95	16.04	15.55	12.61	11.11	10.81	11.32	13.13

Table 5.17: Data of Mahindra & Mahindra Financial Services Ltd (2010-19) Industry: Finance - Investment / Others

Years	03/2010	03/2011	03/2012	03/2013	03/2014	03/2015	03/2016	03/2017	03/2018	03/2019
PBIDT/Sales (%)	65.8	69.71	73.9	73.76	71.84	67.9	62.97	56.49	71	72.5
Sales/NetAssets	+0.19	+0.16	+0.16	+0.17	+0.17	+0.17	0.16	0.15	0.14	0.14
PBDIT/NetAssets	+0.13	+0.11	+0.12	+0.12	+0.12	+0.12	0.1	0.08	0.1	0.1
PAT/PBIDT (%)	33.2	33.6	30.03	30.23	24.94	21.94	18.09	11.36	22.45	24.38

NetAssets/NetWorth	4.74	5.08	5.88	5.36	5.81	5.74	5.98	6.48	5.17	5.85
ROE (%)	21.43	21.96	22.79	23.84	18.58	15.46	11.44	6.37	13.37	15.17

Table 5.18: Data of Maruti Suzuki India Ltd (2010-2019) Industry: Automobiles - passenger cars

Years	03/2010	03/2011	03/2012	03/2013	03/2014	03/2015	03/2016	03/2017	03/2018	03/2019
PBIDT/Sales (%)	13.93	10.15	8.46	10.27	12.12	13.68	15.9	16.37	17.2	15.76
Sales/Net Assets	2.52	2.84	2.37	2.4	2.1	2.24	2.1	2.03	1.89	1.78
PBDIT/NetAssets	+0.35	+0.29	+0.2	+0.25	+0.25	+0.31	0.33	0.33	0.32	0.28
PAT/PBIDT (%)	56.11	55.18	48.96	47.44	47.02	49.19	51.85	58.1	54.74	55.31
NetAssets/NetWorth	+1.07	+1.04	+1.1	+1.1	+1.11	1.04	1.04	1.04	1.04	1.05
ROE (%)	23.58	17.81	10.06	12.48	12.4	14.52	16.89	17.35	16.37	13.27

Table 5.19: Data of Nestle India Ltd (2010-19) Industry: Food and Dairy Products – Multinational

Year	December 2009	December 2010	12/2011	12/2012	12/2013	12/2014	12/2015	12/2016	12/2017	12/2018
PBIDT/Sales (%)	19.72	19.98	20.09	21.55	21.71	20.89	13.72	21	22.31	25.47
Sales/Net Assets	8.98	7.45	2.46	2.23	1.98	2.4	1.91	1.79	1.77	1.83
PBDIT/Net Assets	1.77	1.49	0.49	0.48	0.43	0.5	0.26	0.38	0.4	0.47
PAT/PBIDT (%)	63.61	64.26	62.18	57.53	54.64	55.72	48.38	50.32	53.89	55.86
Net Assets/Net Worth	1	1	2.46	2.15	2.01	1.5	1.57	1.61	1.68	1.68
ROE (%)	124.22	113.97	90.31	69.52	53.62	45.51	31.32	32.83	36.56	45.3

Table 5.20: Data of NTPC Ltd (2010-19) Industry: Power Generation and Supply

Years	03/2010	03/2011	03/2012	03/2013	03/2014	03/2015	03/2016	03/2017	03/2018	03/2019
PBIDT/Sales (%)	32.91	28.84	26.94	33.06	28.24	24.76	26.98	27.69	31.99	23.03
Sales/NetAssets	+0.46	+0.48	+0.49	+0.47	+0.46	0.43	0.37	0.38	0.37	0.35
PBDIT/NetAssets	+0.15	+0.14	+0.13	+0.15	+0.13	+0.11	+0.1	0.1	0.12	0.08
PAT/PBIDT (%)	56.88	57.02	54.8	57.6	53.5	56.23	56.34	43.31	38.75	56.48

NetAssets/NetWorth	+1.63	+1.69	+1.74	+1.77	+1.84	2.12	2.08	2.17	2.24	2.37
ROE (%)	14.57	13.97	13.07	16.42	13.21	12.29	12.45	10.01	12.41	11.23

Table 5.21: Data of Oil & Natural Gas Corpn Ltd (2010-19) Industry: Oil Exploration / Allied Services

Years	03/ 2010	03/ 2011	03/ 2012	03/ 2013	03/ 2014	03/ 2015	03/ 2016	03/ 2017	03/ 2018	03/ 2019
PBIDT/Sales (%)	43.54	43.53	57.45	46.75	51.11	45.52	46.34	49.58	52.79	53.1
Sales/NetAssets	+0.59	+0.58	+0.55	+0.56	+0.51	+0.48	0.42	0.38	0.35	0.44
PBDIT/NetAssets	+0.25	+0.25	+0.32	+0.26	+0.26	0.22	0.2	0.19	0.19	0.23
PAT/PBIDT (%)	63.96	63.33	56.87	53.73	51.34	46.88	44.8	46.34	44.45	45.88
NetAssets/NetWorth	+1.18	+1.22	+1.23	+1.19	+1.2	1.19	1.11	1.11	1.25	1.23
ROE (%)	20.2	20.48	23.87	17.63	16.92	12.61	11.76	10.19	10.53	13.48

Table 5.22: Data of Power Grid Corporation of India Ltd (2010-19) Industry: Power Generation and Supply

Years	03/ 2010	03/ 2011	03/ 2012	03/ 2013	03/ 2014	03/ 2015	03/ 2016	03/ 2017	03/ 2018	03/ 2019
PBIDT/Sales (%)	86.28	91.19	89.66	90.39	88.16	89.39	91.24	91.55	101.58	82.81
Sales/NetAssets	+0.14	+0.12	+0.12	+0.13	+0.12	+0.12	0.13	0.15	0.15	0.16
PBDIT/NetAssets	+0.12	+0.11	+0.11	+0.12	+0.11	+0.11	0.12	0.13	0.16	0.13
PAT/PBIDT (%)	33.19	35.26	35.72	36.72	33.5	32.43	31.55	31.95	27.27	35.18
NetAssets/NetWorth	+3.13	+3.17	+3.47	+3.79	+3.6	3.66	3.65	3.52	3.53	3.72
ROE (%)	13.17	14.38	14.51	17.03	14.82	13.71	14.51	16.07	15.82	22.04

Table 5.23: Data of Reliance Industries Ltd (2010-19) Industry: Refineries

Years	03/ 2010	03/ 2011	03/ 2012	03/ 2013	03/ 2014	03/ 2015	03/ 2016	03/ 2017	03/ 2018	03/ 2019
PBIDT/Sales (%)	16.49	15.92	11.72	10.45	9.92	11.83	18.77	19.61	19.64	17.58
Sales/Net Assets	1	1.18	1.45	1.47	1.4	1.08	0.69	0.67	0.7	0.68
PBDIT/NetAssets	+0.17	+0.19	+0.17	+0.15	+0.14	0.13	0.13	0.13	0.14	0.12
PAT/PBIDT (%)	49.14	49.26	50.34	54.15	55.22	56.34	58.06	60.47	56.06	51.96

NetAssets/NetWorth	+1.56	+1.5	+1.44	+1.41	+1.46	+1.46	1.43	1.38	1.38	1.41
ROE (%)	13.37	14.78	12.97	12.28	11.69	10.99	11.65	11.59	11.15	9.77

Table 5.24: Data of State Bank of India (2010-19) Industry: Banks - Public Sector

Years	03/2010	03/2011	03/2012	03/2013	03/2014	03/2015	03/2016	03/2017	03/2018	03/2019
PBIDT/Sales (%)	65.71	58.77	62	65.91	63.24	63.14	60.86	58.84	52.47	55.56
Sales/NetAssets	+0.29	+0.32	+0.38	+0.38	+0.38	+0.36	0.33	0.26	0.24	0.28
PBDIT/NetAssets	+0.19	+0.19	+0.24	+0.25	+0.24	+0.22	0.2	0.15	0.13	0.15
PAT/PBIDT (%)	16.23	14.47	15.62	15.77	11.12	11.86	8.52	8.45	-4.71	0.55
Net Assets/Net Worth	4.55	4.62	3.78	3.62	3.44	3.82	4.06	5.16	5.67	5.13
ROE (%)	14.8	12.62	15.72	15.43	10.03	10.62	7.3	6.97	0	0.42

Table 5.25: Data of Sun Pharmaceuticals Industries Ltd (2010-19) Industry: Pharmaceuticals - Indian - Bulk Drugs & Formln Lrg

Years	March 2010	March 2011	March 2012	March 2013	March 2014	March 2015	March 2016	March 2017	March 2018	March 2019
PBIDT/Sales (%)	40.27	48.04	44.16	29.75	-91.55	-4.25	-0.56	8.07	12.83	17.6
Sales/NetAssets	+0.44	+0.47	+0.51	+0.32	+0.24	0.26	0.27	0.28	0.3	0.35
PBDIT/NetAssets	+0.18	+0.23	+0.22	+0.09	-0.22	-0.01	0	0.02	0.04	0.06
PAT/PBIDT (%)	88.18	91.15	94.2	68.94	105.51	424.77	2,488.01	-3.63	26.44	45.03
NetAssets/NetWorth	+1.01	+1.01	+1.02	+1.02	1.67	1.41	1.35	1.34	1.32	1.29
ROE (%)	16.54	22.32	23.32	6.59	-0.78	-9.76	-6.04	-1.24	5.14	8.26

Table 5.26: Data of Tata Steel Ltd (2010-19) Industry: Steel – Large

Years	03/2010	03/2011	03/2012	03/2013	03/2014	03/2015	03/2016	03/2017	03/2018	03/2019
PBIDT/Sales (%)	37.92	39.68	34.95	26.83	29.07	26.8	14.88	21.76	21.77	32.37
Sales/NetAssets	.42	.4	.45	.48	.49	.46	0.5	0.62	0.63	0.66
PBDIT/NetAssets	.16	.16	.16	.13	.14	.12	0.07	0.13	0.14	0.21
PAT/PBIDT (%)	49.74	54.24	51.77	44.59	47.63	51.59	15.04	29.73	31.64	46.09

NetAssets/NetWorth	+1.71	+1.69	+1.59	+1.58	+1.54	+1.52	1.75	1.87	1.52	1.47
ROE (%)	14.19	16.36	13.51	9.43	11.02	7.4	2.22	8.43	11.18	15.45

Table 5.27: Data of Tata Consultancy Services Ltd (2010-19) Industry: Computers-Software-Large

Years	03/ 2010	03/ 2011	03/ 2012	03/ 2013	03/ 2014	03/ 2015	03/ 2016	03/ 2017	03/ 2018	03/ 2019
PBIDT/Sales (%)	29.72	31.62	36.93	34.15	38.11	35.37	35.88	34.15	34.52	34.58
Sales/NetAssets	+1.51	+1.49	+1.52	+1.47	+1.42	+1.59	+1.2	1.18	1.26	1.54
PBDIT/Net Assets	.45	.47	.56	.5	.55	.56	.47	.4	.44	.53
PAT/PBIDT (%)	82.03	81.76	78	77.32	74.95	74	74.89	74.72	75.1	70.59
NetAssets/NetWorth	+1.02	+1.02	+1.02	+1.02	+1.02	+1.02	1.01	1.02	1.01	1.02
ROE (%)	39.5	43.83	49.53	44.63	48.22	43.05	41.81	33.21	32.92	38.91

Table 5.28: Data of Tech Mahindra Ltd (2010-19) Industry: Computers - Software – Large

Years	03/ 2010	03/ 2011	03/ 2012	03/ 2013	03/ 2014	03/ 2015	03/ 2016	03/ 2017	03/ 2018	03/ 2019
PBIDT/Sales (%)	25.96	21.26	15.84	18.05	23.02	18.01	21.32	19.7	23.75	22.52
Sales/Net Assets	.9	.97	0.99	1.0	1.51	1.49	1.24	1.21	1.08	1.21
PBDIT/Net Assets	.23	.21	.16	.18	.35	.27	.26	.24	0.26	0.27
PAT/PBIDT (%)	63.81	66	55.45	60.24	71.58	65.36	70.96	66.76	70.97	71.47
NetAssets/NetWorth	+1.75	+1.51	+1.50	+1.42	+1.25	1.14	1.13	1.13	1.12	1.09
ROE (%)	31.29	22.29	14.98	17.11	42.05	22.74	24.18	19.12	21.93	21.8

Table 5.29: Data of Titan Company Ltd (2010-19) Industry: Diamond Cutting / Jewellery – Large

Years	03/ 2010	03/ 2011	03/ 2012	03/ 2013	03/ 2014	03/ 2015	03/ 2016	03/ 2017	03/ 2018	03/ 2019
PBIDT/Sales (%)	8.47	10.17	10.33	10.89	10.67	10.25	9.16	8.95	11.04	11.07
Sales/Net Assets	6.03	5.78	5.93	5.03	3.22	3.64	2.96	2.07	2.27	2.22
PBDIT/Net Assets	.51	.59	.61	.55	.34	.37	.27	.19	.25	.25
PAT/PBIDT (%)	61.53	64.43	64.74	65.25	63.42	67.25	68.54	65.46	67.29	65.11
NetAssets/NetWorth	+1.1	+1.11	+1.05	+1.02	+1.34	1.07	1.05	1.47	1.32	1.38

ROE (%)	39.25	49.2	48.49	42.47	33.02	29.31	21.05	21.31	24.47	24.16
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Table 5.30: Data of Ultra Tech Cement Ltd (2010-19) Industry-Cement-Major-North India

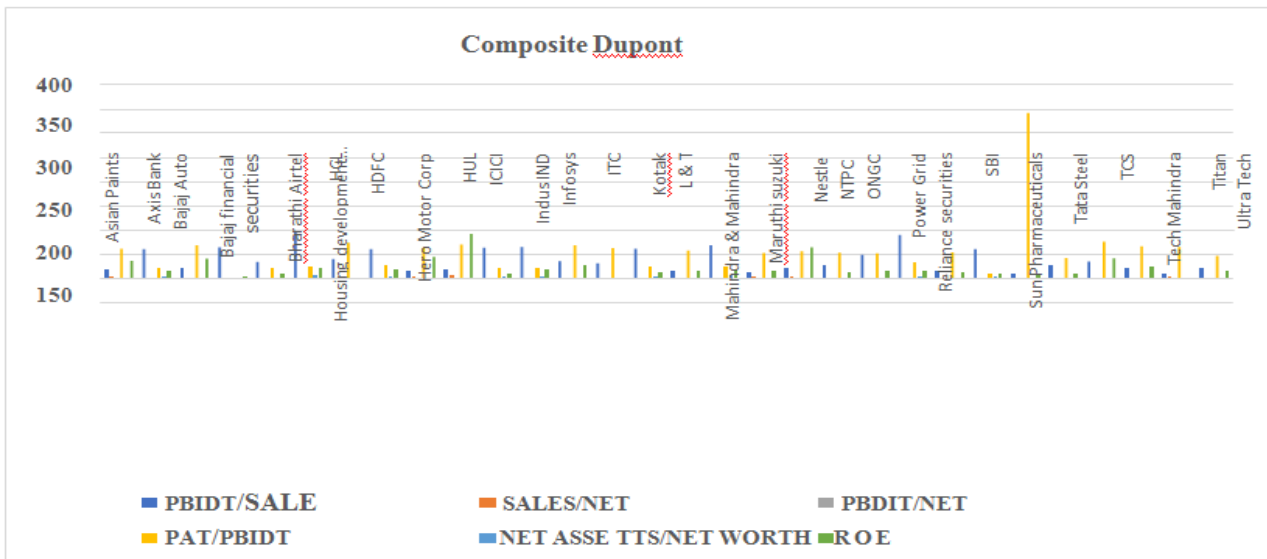
Years	03/2010	03/2011	03/2012	03/2013	03/2014	03/2015	03/2016	03/2017	03/2018	03/2019
PBIDT/Sales (%)	27.08	18.86	21.96	21.78	18.03	17.57	18.95	20.67	20.68	19.58
Sales/Net Assets	1.24	1	1.2	1.1	1.03	0.98	0.89	0.89	0.7	0.77
PBDIT/Net Assets	.34	.19	.26	.24	.18	0.17	0.17	0.18	0.14	0.15
PAT/PBIDT (%)	52.23	49.77	54.13	53.32	51.71	44.12	46.41	46.8	35.66	35.12
NetAssets/NetWorth	+1.35	+1.4	+1.33	+1.36	+1.31	+1.4	1.39	1.27	1.68	1.65
ROE (%)	26.63	18.39	20.8	18.9	13.27	10.33	11.71	11.53	8.95	9.12

Table 5.31: Composite Dupont Analysis of Sensex Companies

SENSEX	PBIDT/SALES	S/NA	Profits before depreciation interest and tax/NA	Profits after Tax/PBIDT	P/NA/NW	Return On Equity
Asian Paints	18.197	2.842	0.506	61.599	1.039	36.325
Axis Bank	60.567	0.335	0.201	20.348	3.097	14.336
Bajaj Auto	22.628	2.171	0.488	68.234	1.08	40.787
Bajaj financial securities	64.12	0.03833333	0.03	- 1.49833333	1	3.301667
Bharathi Airtel	34.352	0.521	0.182	20.35	1.435	10.408
Housing development finance	95.72	0.106	0.102	24.87	7.455	20.38
HCL	40.183	0.873	0.346	73.831	1.105	32.016
HDFC	60.401	0.366	0.22	27.962	2.701	18.312
Hero Motor Corp	15.662	3.806	0.592	62.785	1.147	44.495
HUL	18.91	5.576	1.038	69.654	1.248	91.948
ICICI	63.396	0.326	0.203	21.413	2.258	10.281
Indus IND	64.825	0.42	0.27	21.211	2.829	17.386
Infosys	35.743	0.997	0.357	68.963	1.001	26.135
ITC	30.92	1.5	0.442	62.545	1.007	29.975
Kotak	61.364	0.355	0.221	25.045	2.292	13.48
L & T	15.286	1.315	0.201	57.225	1.318	14.87

Mahindra & Mahindra	68.587	0.161	0.11	25.022	5.609	17.041
Maruthi Suzuki	13.384	2.227	0.291	52.39	1.063	15.473
Nestle	20.644	3.28	0.667	56.639	1.666	64.316
NTPC	28.444	0.426	0.121	53.091	1.965	12.963
ONGC	48.971	0.486	0.237	51.758	1.191	15.767
Power Grid	90.225	0.134	0.122	33.277	3.524	15.606
Reliance securities	15.193	1.032	0.147	54.1	1.443	12.024
SBI	60.65	0.322	0.196	9.788	4.385	9.391
Sun Pharmaceu ticals	10.436	0.344	0.061	342.86	1.244	6.435
Tata Steel	28.603	0.511	0.142	42.206	1.624	10.919
TCS	34.503	1.425	0.493	76.336	1.017	41.561
Tech Mahindra	20.943	1.162	0.243	66.26	1.306	23.749
Titan	10.1	3.915	0.393	65.302	1.193	33.273
Ultra Tech	20.516	0.98	0.202	46.927	1.414	14.963

Chart 5.1 Chart of composite Dupont analysis of Sensex companies (2010-19)



Interpretation:

From the above understanding of above composite graph, The Dupont-model of the Nestle company is good in its financial position and the least company financial position is housing and development finance corporation and the duration for this analysis is 10 years i.e., from 2010-2019.

FINDINGS

1. Housing Development Finance Corporation has more PBIDT/Sales and it is the top most in the Sensex companies.
2. The Asian paints has more Sales/Net assets compared to other Sensex companies
3. In the Sensex companies the PBDIT/Net Assets is more in the Nestle company.
4. The profits in the Sensex company the PAT/PBIT is more in the TCS company
5. The Housing Development finance corporation has maintained the net assets more compared to other Sensex companies
6. The HUL has maintained good ROE among the other Sensex companies.

CONCLUSION

An attempt was made to analyze the performance of SENSEX 30 companies using DuPont model and the results revealed that all the companies showed a positive trend in ROE, PAT, PBIDT, Sales and Assets turnover. In terms of ROE, HUL ranked 1 in attaining highest ROE compared to other companies and Housing Development Finance Corporation maintained high net assets, TCS gained higher profits and Asian paints achieved high sales target.

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