## A Comparative Study on Industry Wise Stock Performance of companies Listed in New York Stock Exchange and National Stock Exchange.

Shivani Agarwal Research Scholar, PAHER University, Udaipur

**Prof. Krishnakant Dave** President, PAHER University, Udaipur

### Abstract

This study is carried out for investigating the industry wise stock performance through proportional Debt Equity Ratio, Dividend Payout Ratio and Free Cash Flow to Equity. There is significant relationship between industry wise firm's market price and proportional Debt Equity Ratio, Dividend Payout Ratio and Free Cash Flow to Equity. These three factors explain what proportions of debt and equity, at what proportion dividend to be paid out and what level Free Cash Flow to Equity to be maintained to finance the firm's assets. By adjusting these ratios, firm can influence their stock performance.

The prime objective of this study is to determine the industry wise stock performance of companies listed in New York Stock Exchange and National Stock Exchange. Also, to discriminate important factors of companies listed in New York Stock Exchange and National Stock Exchange with respect to their value (market price) and firm's Debt Equity Ratio, Dividend Payout Ratio and Free Cash Flow to Equity. Sampling Method of this study is non-probability convenience sampling method and sample size i.e. 5 listed companies (highest market capitalization) from New York Stock Exchange and 5 listed companies (highest market capitalization) from National Stock Exchange of the year 2011 to 2020. Excel and SPSS are used for analyzing the data. Multiple correlation and linear regression techniques are used in this paper. This paper is explaining valuation method appropriate with respect to firm's Debt Equity Ratio, Dividend Payout Ratio and Free Cash Flow to Equity or either new concept is required for estimation of market price. Researchers are trying to find out the concept behind stability and predictability of the market price of the firm.

**Keywords:** New York Stock Exchange, National Stock Exchange, Market Price of Share, Debt Equity Ratio, Dividend Payout Ratio and Free Cash Flow to Equity.

### Introduction

Free cash flow to equity is a measure of how much cash is available to the equity shareholders of a company after all expenses, reinvestment, and

debt are paid. Free cash Flow to the Equity (FCFE) is the cash available to the equity shareholders after meeting all obligations to the company i.e. all operating expenses, working capital investment, fixed capital and payment made to debt holders including interest cost and principle amount.

Companies that have high free cash flow are likely to attract investors that look for efficient opportunities to invest their additional resources in the market. Creditors and investors are willing to invest in companies that have high free cash flows because the strength of debt kickback and the definition of financial flexibility of the company are the means for assessing these companies. In addition, cash profits and debts reduction are not possible without possession of cash paying.

The studies that investigated the relationship between FCF and the financial indicators increased in developed countries, but such studies came late in undeveloped countries that need these kinds of studies. This study examined the effect on free cash flow on the financial leverage and dividend payout in the industries that are top 5-5 companies which are listed in NYSE and NSE, based on the data available for these companies in this market.

Importance of Equity Valuation: The whole system of stock markets is based upon the idea of equity valuation. The stock markets have a wide variety of stocks on offer, whose perceived market value changed every minute because of the change in information that the market receives on a real time basis. Equity valuation therefore is the backbone of the modern financial system. It enables companies with sound business models to command a premium in the market. On the other hand, it ensures that companies whose fundamentals are weak witness a drop in their valuation. The art and science of equity valuation therefore enables the modern economic system to efficiently allocate scare capital resources amongst various market participants.

In the Equity Valuation method, there are three types of method and these are such as Balance Sheet Method, Earning Multiple Method and Discounted Cash Flow Method.

#### Importance of the Study

Free cash flow is important because it allows a company to pursue opportunities that enhance shareholder value.

Without cash, it's tough to develop new products, make acquisitions, pay dividends and reduce debt.

#### Rationale of the study

- 1. This study shows the comparison between market price of share and free cash flow to equity.
- 2. Free cash flow considers all financial ratios where market value of a firm can be calculated.
- 3. Free cash flow gives big picture in the estimation of valuation of the company.

### Scope of the Study

 Free cash flow measures the ease with which businesses can grow and pay dividends to shareholders. Even profitable businesses may have negative cash flows. Their requirement for increased financing will result in increased financing cost reducing future income.

## **Objectives of the Study**

- a) To compare the valuation industry wise of companies listed in New York Stock Exchange and National Stock Exchange.
- b) To find out the value of firm by applying three methods Debt Equity Ratio, Dividend Payout Ratio and Free Cash Flow to Equity.
- c) To create a model to find out the real estimated market price of the top listed companies on New York Stock Exchange and National Stock Exchange.

## **Review of Literature**

**Lizna Sebastian (December 2018),** worked on "Impact on free cash flow on profitability of firms" and the objective was to study the effect of free cash flow on the profitability of firms listed in the National Stock Exchange (NSE). Outcomes of the study can be of interest to investors are concerned about the value of the firm as FCFs provides a fundamental basis for the valuation of share prices.

**Yeo Hee-Jung (June 2018),** researched on "Role of Free Cash Flows in Making Investment and Dividend Decisions: The Case of the Shipping Industry" investigates how cash flow influences the levels of investment and dividends in the shipping industry. The paper verifies that the agency

theory can explain behavior of managers with respect to the investment strategy.

Khatik, S.K. (March 2018), worked on "Company Valuation using free cash flow technique: A case study of National Thermal Power Corporation Limited" and he took this topic to observe constant growth and multistage method for valuing free cash flow to firm and free cash flow to equity.

**Mohammad Irfan (June 2016),** investigate on "Valuation of Shariah Compliant Stocks Using the DCF Technique: Evidence from India" The main objective of this study was to estimate the valuation of Shariah compliant companies, which are listed on the S&P BSE 500 Shariah. The result explained the significant relation between intrinsic value and market value of shares. The relationship is supported to FCFE of Shariah compliant stocks.

## **Research Methodology**

The study has used a conclusive casual method under applied method of research as it establishes a cause and effect relationship between the variables Market Price of share (MPS) with debt equity ratio, dividend payout ratio and Free Cash Flow to Equity (FCFE). The study has taken up a mixed approach of research comprising of quantitative and qualitative data. For this study, formal causal research design is used and under this, Matching Design method is used. In this, the before and the after effect is analyzed on the same group. Here the sample is the treatment group and the treatment provided is the free cash flow over the years. Here the probability method of sampling technique is used. And the sample for the research includes a heterogeneous group of industries from National Stock Exchange and New York Stock Exchange so that the cluster represents the whole of the population. The sample size for this study was taken on the basis of prior studies. The variables of the study are as follows:

- Independent Variable- Debt Equity, Dividend Payout and Free Cash Flow to Equity (FCFE)
- Dependent Variable- Market Price of Share (MPS)
- Mediating Variable- Financial capacity of a firm
- Extraneous Variable- Market share, Cost of production, Competition

**Scope of the Paper: -** The paper has taken into account the FCFE, dividend payout, debt equity and market value of firm industry wise 5-5 publically traded companies listed on the National Stock Exchange (Nifty50) and New York Stock Exchange which include:

Industry	National Stock Exchange	New York Stock Exchange
Pharmaceutical Sector	Sun Pharmaceutical	Pfizer
IT Sector	Infosys	Microsoft
FMCG Sector	ITC Ltd.	Procter & Gamble
Auto manufacturing Sector	Maruti Suzuki	Tesla
Oil & Natural Gas Sector	ONGC	Exxon Mobil

## Table no. 1

## National Stock Exchange And New York Stock Exchange Companies

Sun Pharmaceutical:-Sun Pharmaceutical Industries Limited is an Indian multinational pharmaceutical company headquartered in Mumbai, Maharashtra, which manufactures and sells pharmaceutical formulations and active pharmaceutical ingredients (APIs) primarily in India and the United States. The company offers formulations in various therapeutic areas, such as cardiology, psychiatry, neurology, gastroenterology and diabetology. Sun Pharmacy turnover and net income were 3, 34,734 million and 37,649 million respectively.

Pfizer: Pfizer Inc is an American multinational pharmaceutical and biotechnology corporation headquartered on 42nd Street in Manhattan, New York City. The company was established in 1849 in New York by two German immigrants, Charles Pfizer (1824–1906) and his cousin Charles F. Erhart (1821–1891). Pfizer develops and produces medicines and vaccines for immunology, oncology, cardiology, endocrinology, and neurology. The company has several blockbuster drugs or products that each generates more than US\$1 billion in annual revenues.

Infosys: Infosys Limited is an Indian multinational technology company that provides business consulting, information technology and outsourcing services. The company's headquartered in Bangalore, Karnataka, India. Infosys is the second largest Indian IT company after Tata Consultancy Services by 2017 revenue figures and 596th largest public company in the world based on revenue. On 29th March 2019, its market capitalization was \$46.52 billion.

Microsoft: Microsoft Corporation is an American multinational technology company which produces computer software, consumer electronics, personal computers and related services. Founders are Bill Gates and Paul Allen. Microsoft headquarters in one Microsoft way Redmond, Washington, U.S. its chairman and CEO is Satya Nadella. President and technical advisor is Brad Smith and Bill Gates respectively. Its Revenue was US\$143 billion, operating income was US\$53 billion, net income was US \$44.3 billion and total equity was US\$118.3 billion at the end of the year 2020. And subsidiary companies are LinkedIn, Skype Technologies and GitHub.

ITC Ltd: ITC Limited is an Indian multinational conglomerate company headquartered in Kolkata, West Bengal. ITC has diversified presence across industries such as cigarettes, FMCG, hotels, packaging, paperboards and specialty papers and agribusiness. ITC initially formerly as Imperial Tobacco Company of India Limited from 1910-1970 then its changed to India Tobacco Company Limited from 1970-1974 and again changed to I.T.C. limited from 1974-2001 and after this it changed again ITC Limited and since 2001 its going on presently.

Procter & Gamble: The Procter & Gamble Company (P&G) is an American multinational consumer goods corporation headquartered in Cincinnati, Ohio, founded in 1837 by William Procter and James Gamble. It specializes in a wide range of personal health/consumer health, and

personal care and hygiene products; these products are organized into several segments including Beauty; Grooming; Health Care; Fabric & Home Care; and Baby, Feminine, & Family Care. Before the sale of Pringles to Kellogg's, its product portfolio also included food, snacks, and beverages. P&G is incorporated in Ohio. In 2014, P&G recorded \$83.1 billion in sales.

Maruti Suzuki: Maruti Suzuki India Limited, formerly known as Maruti Udyog Limited, is a subsidiary of the Japanese automotive manufacturer Suzuki. It was founded on 24th February 1981; 40 years ago and owned by Government of India between 1981 until 2003. It's headquartered situated in New Delhi, India. It was sold to Suzuki Motor Corporation by Government of India in 2003. Chairman is R.C. Bhargava. Managing Director and CEOs is Kenichi Ayukawa.

Tesla: Tesla, Inc is an American electric vehicle and clean energy company based in Austin, Texas. Tesla designs and manufactures electric cars, battery energy storage from home to grid-scale, solar panels and solar roof tiles, and related products and services. Tesla is one of the world's most valuable companies and remains the world's most valuable automaker with a market capitalization of nearly US\$1 trillion. Founded in July 2003 by Martin Eberhard and Marc Tarpenning as Tesla Motors, the company's name is a tribute to inventor and electrical engineer Nikola Tesla. In February 2004, via a \$6.5 million investment, X.com cofounder Elon Musk became the largest shareholder of the company and its chairman. He has served as CEO since 2008.

ONGC: The Oil and Natural Gas Corporation (ONGC) is an Indian government-owned crude oil and natural gas corporation. Its registered office is in New Delhi. The operations are overseen by the Ministry of Petroleum and Natural Gas. It is the largest government-owned-oil and gas exploration and production corporation in the country, and produces around 70% of India's crude oil (equivalent to around 57% of the country's total demand) and around 84% of its natural gas. In November 2010, the Government of India conferred the Maharatna status to ONGC. Exxon Mobil: Exxon Mobil Corporation, stylized as ExxonMobil, is an American multinational oil and gas corporation headquartered in Irving, Texas. It is the largest direct descendant of John D. Rockefeller's Standard Oil, and was formed on November 30, 1999, by the merger of Exxon (formerly the Standard Oil Company of New Jersey) and Mobil (formerly the Standard Oil Company of New York). ExxonMobil's primary brands are Exxon, Mobil, Esso, and ExxonMobil Chemical. ExxonMobil is incorporated in New Jersey. One of the world's largest companies by revenue, ExxonMobil from 1996 to 2017 varied from the first to sixth largest publicly traded company by market capitalization.[6][7] The company was ranked third globally in the Forbes Global 2000 list in 2016.

## Hypothesis to be tested

**Ho:** There is no correlation Between Market price of Share (MPS) with debt equity ratio, dividend payout ratio, Free Cash Flow to Equity in the industries.

**Ha:** There is correlation between Market price of Share (MPS) with debt equity ratio, dividend payout ratio, Free Cash Flow to Equity in the industries.

## **Sources of Information:**

- Primary Source i.e. Investors
- (Researcher will first analyze and compare both the market and will try to get answer from domestic investor about know-how of international method of valuation on NYSE listed companies)
- Secondary source i.e. Websites of NYSE and NSE.
- Other sources-

Journals

## Articles

Financial text books Research Methodology book

## **Data collection method:**

**Secondary method-** Data which are not originally collected but rather obtained from published or unpublished sources are known as secondary data.

Sampling Method: Non Probability Convenience Sampling method

**Sample Size:** Top 5 listed companies in New York Stock Exchange and top 5 listed companies in National Stock Exchange.

Tools and Techniques of research: The Data Analysis tools used for this paper comprises of Linear Regression Model and Correlation. These two tools have been employed using SPSS (Statistical Package for Social Sciences).

• Sources of Data: The sample has taken from: https://www.nseindia.com

https://www.nyse.com

The annual reports 5 years have been extracted from: https://www.moneycontrol.com

https://www.macrotrends.net/

• **Expected Outcome:** The expected outcome of this research paper is to prove that there is a positive impact between Debt Equity Ratio, Dividend Payout ratio, Free Cash Flow to Equity and Market Price of Share. This study is also aimed at establishing a negative impact of external financing of a firm's value.

## Observed Data of Selected Companies from National Stock Exchange and New York Stock Exchange Sun Pharmaceuticals (Table no. 2.1)

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Debt/Equity Ratio	0.17	0.24	0.26	0.22	0.25	0.3	0.13	0.01	0.02	0.04
Dividend Payout Ratio	0.18	0.15	0.16	0.09	0.13	0.13	0.03	0.22	0.11	0.24
FCFE	23958	39223	63430	117115	129851	155900	198165	211880	210618	227327
Market Price of Share	443	570	819	575	1024	820	688	495	479	352

#### Sun Pharmaceuticals (Table no. 2.1)

## Pfizer (Table no. 2.2)

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Debt/Equity Ratio	1.28	1.28	1.25	1.34	1.58	1.87	1.4	1.5	1.64	1.43
Dividend Yield	0.04	0.04	0.03	0.03	0.03	0.04	0.04	0.03	0.04	0.04
FCFE	21529	35435	54385	72651	82952	100608	114574	129825	138477	151847
Market Price of Share	22	25	31	31	32	32	36	44	39	37
Infosys (Table no. 2.3)	1			1				1		
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Debt/Equity Ratio	0	0	0	0	0	0	0	0	0	0
Dividend Payout Ratio	0.45	0.30	0.23	0.30	0.38	0.46	0.43	0.42	0.79	0.49
FCFE	15558	20335	25524	32601	38699	45839	54610	65830	78226	91922
Market Price of Share	3241	2843	2889	3283	2218	1218	1022	1132	744	642
Microsoft (Table no. 2	.4)									
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Debt/Equity Ratio	0.75	0.77	0.8	0.9	1.35	2.26	2.27	1.81	1.57	1.34
Dividend Yield	2.52	3.03	2.61	2.34	2.41	2.47	1.90	1.63	0.95	0.99
FCFE	34890	64211	92324	125803	158707	194777	262577	291952	326212	365928
Market Price of Share	26	27	37	46	55	62	85	102	158	222
ITC Ltd. (Table no. 2.	5)	I		I				I		
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Debt/Equity Ratio	0.01	0	0	0.01	0.01	0	0	0	0	0
Dividend Payout Ratio	0.60	0.50	0.49	0.48	0.47	0.48	0.60	0.46	0.45	0.42
FCFE	5320	8834	13280	17728	24257	31731	39223	49517	58924	71170
Market Price of Share	182	227	39	353	326	328	280	256	300	172
Procter & Gamble (Table no. 2.6)										
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Debt/Equity Ratio	1.07	1.08	1.04	1.1	1.07	1.18	1.31	1.27	1.43	1.47
Dividend Yield	3.16	3.14	2.98	2.96	3.52	3.09	2.96	3.5	2.52	2.19
FCFE	22993	36642	46670	57596	71592	85848	94460	108078	121765	138629
Market Price of Share	67	68	81	91	79	84	92	92	125	139

## Maruti Suzuki (Table no. 2.7)

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Debt/Equity Ratio	0.02	0.08	0.08	0.09	0.01	0	0.01	0	0	0
Dividend Payout Ratio	0.06	0.08	0.06	0.07	0.12	0.09	0.10	0.21	0.23	0.26
FCFE	8366	8667	10631	25178	56053	113021	180394	259257	276542	277130
Market Price of Share	1262	1288	1281	1972	3697	3716	6016	8861	6673	4288
Tesla (Table no. 2.8)	1									
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Debt/Equity Ratio	2.18	7.94	2.62	5.4	6.45	3.09	4.47	4.17	3.6	1.26
Dividend Yield	0	0	0	0	0	0	0	0	0	0
FCFE	-204	-534	-511	151	-1324	-1011	-1019	-933	467	765
Market Price of Share	6	7	30	44	48	43	62	67	84	706
ONGC (Table no. 2.9)										
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Debt/Equity Ratio	0.05	0.11	0.13	0.26	0.29	0.23	0.38	0.5	0.47	0.5
Dividend Payout Ratio	0.17	0.16	0.17	0.16	0.17	0.14	0.25	0.17	0.18	0.19
FCFE	442914	804300	1069016	1699558	1890227	2321648	2611772	2912792	3243527	3744450
Market Price of Share	291	268	311	319	306	214	185	178	160	68
Exxon Mobil (Table no	o. <b>2.1</b> 0)									
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Debt/Equity Ratio	1.06	0.95	0.92	0.93	0.91	0.9	0.79	0.74	0.82	1.03
Dividend Yield	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.04	0.05	0.09
FCFE	41267	64014	75591	93417	105273	123258	137982	154468	166874	187438
Market Price of Share	85	87	101	92	78	90	84	68	70	41

The above table from Table no. 2.11 to 2.10 shows ten years of key data of the Indian and New York companies and comparison by industry wise. There are three popular methods for the valuation of companies i.e. overall cost of capital, dividend payout and Free Cash Flow to Equity (FCFE). The researcher has taken all three variables together to find out value of a company.

# Data Analysis and Interpretation

				A 1° / 1	Std. Error		Ch	ange Statist	ics	
Sector	Model	R	R Square	Adjusted R Square	of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
	Sun Pharmacy	.815ª	.665	.497	147.66747	.665	3.965	3	6	.071
Pharmacy Sector	Pfizer	.957a	.915	.873	2.30527	.915	21.641	3	6	.001
	Infosys	.913a	.833	.786	497.92358	.833	17.512	2	7	.002
IT Sector	Microsoft	.970a	.940	.910	19.04342	.940	31.454	3	6	.000
	ITC Ltd.	.452a	.204	193	103.97362	.204	.514	3	6	.688
FMCG Sector	Procter & Gamble	.980a	.960	.939	5.71900	.960	47.465	3	6	.000
	Maruti Suzuki	.896a	.803	.704	1420.91688	.803	8.131	3	6	.016
Automobil e Sector	Tesla	.654a	.428	.264	180.99020	.428	2.614	2	7	.142
Oil &	ONGC	.886a	.785	.678	46.94189	.785	7.311	3	6	.020
Natural Gas Sector	Exxon Mobil	.887a	.787	.681	9.49690	.787	7.396	3	6	.019

# Table no. 3.1Model Summary

## Table no. 3.2

Sector	Company's Name		Constant	Debt Equity Ratio	Dividend Payout Ratio	FCFE
		Coefficient	167.762	1951.602	-342.248	.001
	Sun Pharmacy	Std.Error	299.870	684.104	885.034	.001
Sector	DC	Coefficient	36.239	-1.598	-379.388	.000
Pfizer		Std.Error 7.509 4.715		4.715	151.113	.000
		Coefficient	3934.384	0	-888.266	035
	Infosys	Std.Error	487.224	0	1442.743	.009
IT Sector		Coefficient	54.655	-40.637	-12.279	.001
	Microsoft	Std.Error	90.519	18.743	31.148	.000
		Coefficient	157.449	9733.316	10.349	.002
	ITC Ltd.	Std.Error	381.860	8298.144	687.842	.002
FMCG	Dreator 6-	Coefficient	176.498	-24.689	-30.584	.000
Sector	Gamble	Std.Error	56.653	41.195	7.260	.000

Sector	Company's Name		Constant	Debt Equity Ratio	Dividend Payout Ratio	FCFE
	Momiti	Coefficient	2871.750	-7341.402	-16500.789	.028
	Suzuki	Std.Error	1432.860	18177.675	16035.528	.012
Automobile		Coefficient	295.915	-31.020	0	.141
Sector	Tesla	Std.Error	136.136	32.927	0	.096
		Coefficient	434.776	306.123	-413.268	.000
Oil &	ONGC	Std.Error	99.194	343.732	588.001	.000
Sector	<b>E</b>	Coefficient	161.817	-51.518	-300.613	.000
	Mobil	Std.Error	77.008	73.779	580.212	.000

#### Table no. 3.3

Sector	Company Name	Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
		MPS	443	570	819	575	1024	820	688	495	479	352
	Sun Pharmacy	Estimated MPS	473.41	640.29	708.66	725.53	788.25	920.89	678.42	401.07	454.56	473.92
Pharmacy		MPS	22	25	31	31	32	32	36	44	39	37
Sector	Pfizer	Estimated MPS	22.34	25.54	30.26	31.31	33.05	32.40	36.44	40.43	38.42	39.65
		MPS	3241	2843	2889	3283	2218	1218	1022	1132	744	642
	Infosys	Estimated MPS	2992.90	2959.79	2841.28	2532.66	2249.25	1929.56	1650.78	1268.96	508.64	298.19
		MPS	26	27	37	46	55	62	85	102	158	222
IT Sector	Microsoft	Estimated MPS	13.09	22.70	42.63	60.94	60.51	43.32	88.50	127.22	164.82	196.27
		MPS	182	227	39	353	326	328	280	256	300	172
	ITC Ltd.	Estimated MPS	270.06	177.68	185.15	289.96	300.98	216.49	230.50	246.59	262.52	283.08
FMCG		MPS	67	68	81	91	79	84	92	92	125	139
Sector	Procter & Gamble	Estimated MPS	64.22	70.99	81.57	85.83	76.01	93.13	97.94	88.80	121.24	138.26
		MPS	1262	1288	1281	1972	3697	3716	6016	8861	6673	4288
	Maruti Suzuki	Estimated MPS	1966.09	1203.91	1588.21	1751.83	2367.42	4510.33	6133.95	6571.87	6719.58	6240.80
		MPS	6	7	30	44	48	43	62	67	84	706
Automobile Sector	Tesla	Estimated MPS	199.57	-25.57	142.69	149.67	-90.58	57.71	13.78	35.19	250.00	364.54
		MPS	291	268	311	319	306	214	185	178	160	68
	ONGC	Estimated MPS	332.54	316.46	290.18	266.80	251.49	199.46	168.95	206.60	157.98	109.55
Oil &		MPS	85	87	101	92	78	90	84	68	70	41
Natural Gas Sector	Exxon Mobil	Estimated MPS	91.62	92.05	90.56	85.94	82.37	79.16	81.16	79.40	70.18	41.87

Sun Pharmaceutical: From the correlation table 3.1 R is 0.815 that mean it is highly positive correlation of FCFE, Debt Equity Ratio and Dividend Payout Ratio with the market price of share (MPS). So we reject the null hypothesis which states that FCFE, Debt Equity Ratio and Dividend Payout Ratio are not directly correlated with the market price of share (MPS). The above table 3.3 shows a

comparison between observed value and estimated value of firm.

Pfizer: From the correlation table 3.1 R is 0.957 that mean it is highly positive correlation of FCFE, Debt Equity Ratio and Dividend Payout Ratio with the market price of share (MPS). So we reject the null hypothesis which states that FCFE, Debt Equity Ratio and Dividend Payout Ratio are not directly correlated with the market price of share (MPS). The above table 3.3 shows a comparison between observed value and estimated value of firm.

Infosys: From the correlation table 3.1 R is 0.913 that mean it is highly positive correlation of FCFE, Debt Equity Ratio and Dividend Payout Ratio with the market price of share (MPS). So we reject the null hypothesis which states that FCFE, Debt Equity Ratio and Dividend Payout Ratio are not directly correlated with the market price of share (MPS). The above table 3.3 shows a comparison between observed value and estimated value of firm.

Microsoft: From the correlation table 3.1 R is 0.970 that mean it is highly positive correlation of FCFE, Debt Equity Ratio and Dividend Payout Ratio with the market price of share (MPS). So we reject the null hypothesis which states that FCFE, Debt Equity Ratio and Dividend Payout Ratio are not directly correlated with the market price of share (MPS). The above table 3.3 shows a comparison between observed value and estimated value of firm.

ITC Ltd.: From the correlation table 3.1 R is 0.452 that mean it is positive low correlation of FCFE, Debt Equity Ratio and Dividend Payout Ratio with the market price of share (MPS). So we reject the null hypothesis which states that FCFE, Debt Equity Ratio and Dividend Payout Ratio are not directly correlated with the market price of share (MPS). The above table 3.3 shows a comparison between observed value and estimated value of firm.

Procter & Gamble: From the correlation table 3.1 R is 0.980 that mean it is highly positive correlation of FCFE, Debt Equity Ratio and Dividend Payout Ratio with the market price of share (MPS). So we reject the null hypothesis which states that FCFE, Debt Equity Ratio and Dividend Payout Ratio are not directly correlated with the market price of share (MPS). The above table 3.3 shows a comparison between observed value and estimated value of firm.

Maruti Suzuki: From the correlation table 3.1 R is 0.896 that mean it is highly positive correlation of FCFE, Debt Equity Ratio and Dividend Payout Ratio with the market price of share (MPS). So we reject the null hypothesis which states that FCFE, Debt Equity Ratio and Dividend

Payout Ratio are not directly correlated with the market price of share (MPS). The above table 3.3 shows a comparison between observed value and estimated value of firm.

Tesla: From the correlation table 3.1 R is 0.654 that mean it is positive correlation of FCFE, Debt Equity Ratio and Dividend Payout Ratio with the market price of share (MPS). So we reject the null hypothesis which states that FCFE, Debt Equity Ratio and Dividend Payout Ratio are not directly correlated with the market price of share (MPS). The above table 3.3 shows a comparison between observed value and estimated value of firm.

ONGC: From the correlation table 3.1 R is 0.886 that mean it is highly positive correlation of FCFE, Debt Equity Ratio and Dividend Payout Ratio with the market price of share (MPS). So we reject the null hypothesis which states that FCFE, Debt Equity Ratio and Dividend Payout Ratio are not directly correlated with the market price of share (MPS). The above table 3.3 shows a comparison between observed value and estimated value of firm.

Exxon Mobil: From the correlation table 3.1 R is 0.887 that mean it is highly positive correlation of FCFE, Debt Equity Ratio and Dividend Payout Ratio with the market price of share (MPS). So we reject the null hypothesis which states that FCFE, Debt Equity Ratio and Dividend Payout Ratio are not directly correlated with the market price of share (MPS). The above table 3.3 shows a comparison between observed value and estimated value of firm.

## **Findings and Suggestion**

This analysis of estimated Market Price of Share (MPS) is helpful to the investors, who want to know how MPS moves in the Stock Market. As it is known that valuation of company depends on Debt Equity Ratio (Cost of Equity), Dividend Payout Ratio and Free Cash Flow to Equity (FCFE). Here it is analyze by taking these entire three variables to find out the exact valuation of company. Here researcher tried to observe the movement of market price with all three variables. By applying linear regression and pre-assuming the Market Price of Share (MPS) is dependable variable on these three variables viz. Debt Equity Ratio (Cost of Equity), Dividend Payout Ratio and Free Cash Flow to Equity (FCFE) for last ten years.

By applying test, results in regression coefficient in the equation, the predicted Market Price of Share (MPS) is shown in the table which shows very less residuals. The study shows that if all three variables are considered for the valuation of company, the predicted value comes at par with market price which is really beneficial for the investors to find out real Market Price of Share. It is a big achievement done by the researcher considering all three variables together Debt Equity Ratio (Cost of Equity), Dividend Payout Ratio and Free Cash Flow to Equity (FCFE) to obtain predicted value of market price irrespective of any volatility.

By this research, company also gets benefit to increase market value and value of the firm by controlling all three variables increase or decrease in Debt Equity Ratio (Cost of Equity), Dividend Payout Ratio and Free Cash Flow to Equity (FCFE). Top management of the company may know when to increase the value of firm by controlling all these independent variables simultaneously.

## Conclusion

The whole research was conducted to shed light on to the relation between the Free Cash Flow and the firm's performance on the datasets of listed companies on National Stock Exchange and New York Stock Exchange. Here the Debt Equity Ratio (Cost of Equity), Dividend Payout Ratio and Free Cash Flow to Equity (FCFE) were considered as the independent variable and the Market Price of Share is dependent variable for valuation of the company. There were several control variables which were constant for both of the models. The outcome of the research based on panel data linear regression and the fixed effect model of the hypothesis shows a positive relationship between the Debt Equity Ratio (Cost of Equity), Dividend Payout Ratio and Free Cash Flow to Equity (FCFE) with Market Price of Share.

Suppose the management of Reliance wants to increase Market price of Share (valuation of firm), these implications can be help:

Debt Equity ↑	Dividend ↑	FCFE ↑	$\mathrm{MPS}\uparrow$
Debt Equity ↓	Dividend ↓	FCFE ↓	$\mathrm{MPS}\downarrow$
Debt Equity ↑	Dividend ↓	$FCFE\downarrow$	$\mathrm{MPS}\uparrow$
Debt Equity ↑	Dividend ↓	FCFE ↑	${\rm MPS}\uparrow$
Debt Equity ↓	Dividend ↑	FCFE ↑	MPS ↓

This can also be a guideline for the managers to better use their resources for the ultimate betterment of the firm and the shareholders. After analyzing the result researcher concluded that the more accuracy is observed in New York Stock Exchange companies and can be predicted perfectly by taking into consideration of all these three variables Debt Equity Ratio (Cost of Equity), Dividend Payout Ratio and Free Cash Flow to Equity (FCFE) together. New York Stock Market is more transparent and developed because it is fully controlled by regulatory bodies and more trustworthy in compare to developing countries like India.

## **Bibliography**

#### A) Literature Referred

• Lizna Sebastian (December 2018), "Impact on free cash

flow on profitability of firms", Journal of Management Research and Analysis (JMRA), ISSN: 2394-2770, Impact Factor: 4.878, Volume 05 Issue 4(1), Pages: 58-64.

- Yeo Hee-Jung (June 2018), "Role of Free Cash Flows in Making Investment and Dividend Decisions: The Case of the Shipping Industry", the Asian Journal of Shipping and Logistics, Volume 34, Issue 2, Pages 113-118.
- Khatik, S.K. (March 2018), "Company Valuation using free cash flow technique: A case study of National Thermal Power Corporation Limited", Journal of Advance Management Research, Vol.06 Issue-03, Impact Factor: 4.73, ISSN: 2393-9664.

- Achjen Lachheb (May 2017), "The impact of free cash flow and agency costs on firm's performance", Proceedings of ISER 56th International Conference, Rome, Italy
- Sheela Thiruvadi (June 2016), "Free Cash Flow and Debt Monitoring Hypotheses: Evidence from Material Internal Control Weakness Disclosure", Journal of Forensic & Investigative Accounting, Volume 8: Issue 1, January–June, 2016.

## **B)** Books Referred

• M Y Khan, P K Jain (2008), Financial Management, Fifth Edition, Tata McGraw- Hill Publishing Company Limited, Delhi (India), ISBN13: 978-0-07-065614-7, ISBN10: 0-07-065614-2.

- I M Pandey (2015), Financial Management, Eleventh Edition, Vikas Publishing House Pvt. Ltd. Noida (India), ISBN: 978-93259-8229-1.
- George C. Christy (2009), Free Cash Flow, John Wiley & Sons Inc. New York, (US) ISBN10: 0470391758, ISBN13: 9780470391754.

#### C) Website Referred

https://www.nseindia.com/

https://www.nyse.com/index