# TREND ANALYSIS OF DIVIDEND PAYOUT RATIO

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**ABSTRACT:** Dividend policy constitutes major part of the financial management decisions of the firm. There are more researches required in the fertilizer sector as the economy of India is directly related to agriculture. Most of the population is involved in agriculture either directly or indirectly. The current study focuses on the percentage increase or decrease of few variables like profitability, earnings and dividend of top five companies based on market capitalization and their effect on the payout ratio to see a trend for the period from 2009 to 2018.

KEYTERMS: Fertilizer sector, Payout ratio, profitability, earnings, trend.

#### I. INTRODUCTION

Dividend is a part of company's earning which is distributed to its shareholders and is decided by company's Board of Directors. Dividend in a developing economy like India varies dependent on the industry and sometimes has higher dividend than a developed economy. Dividend payout ratio is the fraction of earnings paid to the shareholders to the total earning of the company. Payout ratio is important because it can give indication about the sustainability of the company's dividend and growth. There are several factors that are taken into consideration while deciding the dividend payout ratio. The important part with dividend policy is that it determines the amount of earnings to be distributed among shareholders and the amount that should be retained in the firm mainly for internal financing. The Fertilizer sector in India is one of the allied sectors of the agriculture sphere. India being agriculture-based economy provides employment to a large section of the country's population. The investment demand of fertilizer sector is increasing as the capital demand is increasing. India's food grain requirement to feed the calculable population of 1400 million by 2025 will be three hundred million tonnes. The Make in India initiative is encouraging the production of fertilizer in India to an extent to eliminate imports of urea by 2021. The fertilizer industry has experienced a massive growth and currently India is the third largest fertilizer producer of the world. This research study aims at finding the factors that affects the dividend payout ratio and could help the board of directors making dividend decision in the fertilizer sector of India. On the basis of market capitalizations we have taken top five companies listed on the National Stock Exchange of India. It is noticed that this field is not well established in the financial literature. In the context of India, a few empirical studies analyzed the dividend policy of listed companies in National Stock Exchange. However, it is not clear as to what specific financial factors lead to affect the dividend payout policy of listed fertilizer companies of National Stock Exchange.

## II. REVIEW OF LITERATURE

1. Hari Babu Singu & Nancy Sahni (2014). Determinants of dividend payout ratios: A study with reference to Indian banking sector.

In their study they find that there is a difference in determinants of dividend payout ratio among public and private sector banks, except the cash flow. The study conducted has contrasting views with determinants such as liquidity, current earnings, cash flow and capital expenditure. (Singu, 2014)

# 2. Kanwal Anil & Sujata Kapoor, (2008). Determinants of Dividend Payout Ratios: A Study of Indian Information Technology Sector.

They have conducted their study at the recessionary and booming phase of Indian Information technology sector. The period of study was 2001 to 2008. Their study examines the that only liquidity and beta is noteworthy determinants of dividend payout ratio in the Information Technology sector of India. They have also found that return in this industry was scanty and dividend was at the bottom of the list prior to 2003. From 2003 Information Technology Sectors witnessed exponential growth. For the analysis correlation matrix was conducted and the technique of multiple linear regression analysis was used. (Anil & kapoor, 2008)

3. Dr.T.Sobha Rani & Mr. S.Patha Sarathi, (2013). Determinants of Dividends in Indian Pharmaceutical Companies.

In this particular study they have found the annual compound growth rate of dividend per share for the selected pharmaceutical companies varies from 0.035% to 0.20%. The dividend per share had increased from 0.6099crs in 2002 to 0.499crs in 2011. According to their findings: the interest depicts a high effect on the net profit of the companies, the interest rates are negatively correlated with Dividend per share and dividend decision are taken based on previous year's dividend per share. (Rani & Sarathi, 2013)

4. Calistus Weksea Waswa, (2006). Analysis of Determinants of dividend payout by agricultural firms listed on the Nairobi Security Exchange.

This study examined that the profitability, size and liquidity are positively related to the dividend payout. Whereas growth has a negative impact on the dividend payout ratio. Liquidity has positive and significant effect on payout. Constructing correlation matrix and multiple regression equation did the analysis. (Waswa, 2006)

5. A.Ajanthan, (2013). The Relationship between Dividend Payout and Firm Profitability: A Study of Listed Hotels and Restaurant Companies in Sri Lanka.

The research conducted has concluded that there is a significant relationship between total asset and the net profit. There is a significant impact of dividend payout, revenue and total assets on net profit. The limitation of this study was that the time horizon for this study short compared many other samples in research. They have the effect of dividend payout, revenue and total assets on net profit. (Ajanthan, 2013)

# **3. RESEARCH DESIGN**

## **3.1 Scope of study:**

For the purpose of this we are considering five Indian companies in the fertilizer sector based on market capitalization listed on the National Stock Exchange.

- Coromandel International Ltd.
- Chambal Fertilisers.
- Gujarat Narmada Valley Fertilizer Company Ltd. (GNFC).
- Gujarat State Fertilizer & Chemicals (GSFC).
- Rashtriya Chemicals.

A time span of ten financial years, 1<sup>st</sup> April 2008 to 31<sup>st</sup> March 2018 is considered for determine the determinants for payout ratio.

#### **3.2 Statement of Problem:**

Dividend Decision of a firm is of key importance to the financial manager of the company. Generally, dividends are dispensed out of profits earned by the company. The alternative to the payment of dividends is the retention of earnings/profits, which is called the Retained Earnings. There always exists a reverse relationship between retained earnings and cash dividends: larger retention, lesser dividends paid smaller retention, larger dividends paid. As a result, the alternative uses of the net earning by the corporation are competitive and conflicting. In this fallback it is indispensable to identify, do the companies maintain stable dividend policy?

#### **3.4 Source of data**

We have used secondary data to extract data for our research work.

From company annual report :

- Profit After Tax
- Earnings per Share
- Dividend per Share

From website sources:

• Market capitalization (Money control)

Links:

- <u>https://www.moneycontrol.com</u>
- https://www.in.finance.yahoo.com
- <u>https://www.investello.com</u>
- •

## **3.4 Objective of the study:**

- 1. To find the trend of dividend payout ratio based on profitability.
- 2. To find the trend of dividend payout ratio based on EPS and DPS.

## **3.5 Limitation of the study:**

1. As the study is based on only top five companies based on market capitalization therefore, the result is not conclusive of the entire fertilizer sector.

2. The conclusion is not derived based on all the variables that would affect the payout policy. Variables like EBIT, growth rate, liquidity and free cash flow is not taken into consideration.

## III. METHODS OF ANALYSIS

## **Compound Annual Growth Rate**:

Annual Compound Growth Rate is the year-over-year growth rate of an investment over a specified period of time. It is calculated by taking the root of the total percentage growth rate, where the number of years in the period is being considered.

CAGR= 
$$\left(\begin{array}{c} \underline{\text{Ending Value}}\\ \text{Beginning Value} \end{array}\right)^{\left(1/(\# \text{ of yrs})\right)} -1$$

CAGR is not the actual return in reality. It is imaginary number that describes the rate at which an investment would have grown if it grew at a steady rate.

## **Profit Before Interest and Tax (PBIT):**

Profit before Interest and taxes (PBIT) or operating income is an investment formula to measure of a corporation's profitability before the payment of any interest and taxes over a specified period of time. It is normally seen in income statement.

## **Profit After Tax (PAT):**

Profit After Tax is the net profit of an organization after deduction of tax and interest related cost. It can be calculated by subtracting tax and interest expenses from PBIT.

## **Earnings Per Share (EPS):**

Earning Per Share is the component of the profit that is assigned to each share of the company's common stock. It is calculated by dividing outstanding common stock by net earnings.

#### **Dividend Per Share (DPS):**

Dividend per share it's the value declared by the company to every ordinary share outstanding.

#### **Dividend Payout Ratio (DPR):**

Dividend Payout ratio is the ratio of the total dividend paid to the shareholder from the net income of the company. The formula to measured DRP is by dividing the total dividend over the net income.

#### IV. DATA ANALYSIS AND INTERPRETATION.

S.NO	Company	PBIT	CAGR of PBIT	
		Beginning year (2009)	Ending year (2018)	(in %)
1	Coromandel	808	1003	2.185
2	Chambal Fertilizer	318	720	8.517
3	GNFC	354	1162	12.631
4	GSFC	740	491	-4.024
5	Rashtriya Chemicals	326	128	-8.901

TABLE NO.4.1 Compound Annual Growth Rate of PBIT (in%)

#### **INTREPRETATION:**

From the above table the compound annual growth rate of PBIT ranges from -8.901% to 12.631% for the selected Fertilizer companies. Coromandel International has a growth rate of 2.185% from 2009 to 2018. The Gujarat Narmada Valley Fertilizer Company Ltd had the highest growth rate of 12.631%. Rashtriya Chemicals had the least or negative growth rate of -8.901% among the companies selected.

S.NO	Company	PAT	CAGR of	
		Beginning year (2009)	Ending year (2018)	PAT (in %)
1	Coromandel	496	659	2.88
2	Chambal Fertilizer	231	480	7.61

TABLE NO.4.2 Compound Annual Growth Rate of PAT (in%)

3	GNFC	228	790	13.25
4	GSFC	449	476	0.57
5	Rashtriya Chemicals	212	79	-9.40

#### **INTREPRETATION:**

From the above table 4.2 the compound annual growth rate of profit after tax (PAT) from the year 2008 to 2018 ranges from -9.4% to 13.25% for the selected Fertilizer Companies. The Gujarat Narmada Valley Fertilizer Company Limited has the highest annual compound growth rate of 13.25% and its PAT ranges from 228 crores to 790 crores from the year 2008 to 2018. Rashtriya Chemicals has the least or negative PAT growth rate -9.4% and it has 212 crores PAT in 2008 and 79 crores PAT in 2018. Coromandel International and Gujarat State Fertilizer and Chemicals Limited have a low PBT growth rate of 2.88% and 0.57% respectively. Chambal Fertilisers has a moderate growth rate of 7.53%.

S.NO	Company	EPS	CAGR	
		Beginning year (2009)	Ending year (2018)	of EPS (in %)
1	Coromandel	17.74	22.57	2.44
2	Chambal Fertilizer	5.54	11.45	7.53
3	GNFC	14.64	50.8	13.25
4	GSFC	62.66	11.94	-15.28
5	Rashtriya Chemicals	0.85	1.43	5.34

TABLE NO. 4.3 Compound Annual Growth Rate of EPS (in %)

## **INTERPRETATION:**

From the above table 4.3 there is a negative compound annual growth rate of EPS for Gujarat State Fertilizer and Chemicals Limited of -15.28%. Chambal fertilizers and Rashtriya Chemicals have a moderate growth rate of 7.53% and 5.34% respectively. Coromandel International has a growth rate of 2.44% and its EPS increased from Rs.17.74to Rs.22.57 from the year 2008 to 2018. Gujarat Narmada Valley Fertilizer Corporation EPS increased from Rs.14.64 to Rs.50.80 and it has the highest EPS growth rate of 13.25%.

S.NO	Company	DPS	CAGR of	
		Beginning year (2009)	Ending year (2018)	DPS (in %)
1	Coromandel	10	6.5	-4.22
2	Chambal Fertilizer	1.8	1.9	0.54
3	GNFC	3.25	7.5	8.72
4	GSFC	4.5	2.2	-6.91
5	Rashtriya Chemicals	1.2	0.6	-6.70

TABLE NO.4.4 Compound Annual Growth Rate of DPS (in %)

#### **INTERPRETATION:**

From the above table there is negative compound annual growth rate of dividend per share for the companies like Coromandel International, Gujarat State Fertilizer and Rashtriya Chemicals are -4.22%, -6.91% and -6.70% respectively. Chambal Fertilizer has a very minor growth in Dividend Per Share of 0.54% from Rs.1.8 in 2009 to Rs.1.9 in 2018. Gujarat Narmada Valley Corporation Limited has the highest growth in DPS of 8.72% from Rs.3.25 in 2009 to Rs.7.5 in 2018. The highest dividend per share doesn't mean that companies are performing well in all the areas. It depends on board member's decisions, dividend payout ratio and various other factors.

S. NO.	Company	Dividend p	CAGR in % of	
		Beginning	Ending value	DPR
		value (2009)	(2018)	
1	Coromandel	56	29	-6.37
2	Chambal	32	17	-6.13
3	GNFC	22	15	-3.76
4	GSFC	7	18	9.90
5	Rashtriya	31	42	3.08

TABLE NO. 4.5 Compound Annual Growth Rate of DPR (in %)

#### **INTERPRETATION:**

From the table 4.5 it is seen that companies with higher market capitalization has negative growth in the dividend payout ratio like Coromandel, Chambal, GNFC with compounded annual growth rate of - 6.37%, -6.31%, -3.76% respectively from 2009 to 2018. GSFC with lower capitalization has the highest growth in rate of 9.90%. Rashtriya Chemicals also has growth of low but positive dividend payout ratio though its market capitalization is much lower than the rest of the companies present.

S. NO.	Company	CAGR of	CAGR of	CAGR of	CAGR of	CAGR
		PBIT (in %)	PAT (in %)	<b>EPS</b> (in %)	DPS (in	of DPR
					%)	(in %)
1	Coromandel	8.52	7.61	7.53	0.54	-6.37
2	Chambal	2.19	2.88	2.44	-4.22	-6.13
3	GNFC	12.63	13.25	13.25	8.72	-3.76
4	GSFC	-4.02	0.57	-15.28	-6.91	9.90
5	Rashtriya	-8.90	-9.40	5.34	-6.70	3.08

TABLE NO. 4.6 Compound Annual Growth Rate of PBIT, PAT, EPS, DPS & DPR

## V. FINDINGS

The compound annual growth rate of select fertilizer companies was increased from the year 2009 to 2018 in their PBIT. GNFC has the highest growth rate and GSFC and Rashtriya Chemicals Limited has a negative growth of -4.024% and -8.901% respectively. Chambal Fertilizer has a medium growth rate of 8.517%. The annual compound growth rate of Profit after tax (PAT) ranges from -9.40% to 13.25% from 2009 to 2018 for the selected fertilizer companies. Coromandel International has a growth rate of 2.88% and Rashtriya Chemicals has a negative growth rate of -9.40%. Chambal Fertilizer has a medium growth rate of 7.61% and GNFC has the highest growth rate of 13.25%. Compound annual growth rate of EPS is highly negative for GSFC with -15.28% and the highest is of GNFC with 13.25% indicating there is a large increase in the EPS

of GNFC from 2009 to 2018. Companies like Chambal Fertilizers and Rashtriya Chemicals has medium growth rate of 7.53% and 5.34% respectively. Compound annual growth rate of DPS of only GNFC has the highest of 8.72% Companies like Coromandel, GSFC and Rashtriya Fertilizer has negative growth in DPS of -4.22%, -6.91% and -6.70 respectively. The dividend decision is taken based on the previous year's Dividend per share Earnings per share.

## VI. CONCLUSION

This study examines the trend analysis as to how dividend is affected by factors like Profit before Interest and Tax (PBIT), Profit after Tax (PAT), Earnings Per Share (EPS), and Dividend Per Share (DPS) of previous year. It can be concluded that there is a positive relationship between the profitability i.e. PBIT and PAT and the dividend payout ratio as seen above in table 5. Market capitalization does not have direct relationship with the dividend policy as we see here Coromandel International has largest market capitalization but the dividend paid is highest of GNFC. Growth of the firm has a negative impact on the dividend payout ratio, as companies would increase retained earnings, which will reduce the dividend payment. This study came up with findings that are of salient importance to the investors.

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