IMPACT OF DIVIDEND PAYOUT ON INDIAN FMCG EQUITY

NEHARIKA PATNI[1]   BASIL M RAFI[2]

BCom (International Finance), Department of Professional Studies, Christ University, Bengaluru

Dr. Budha Anuradha

Department of Professional Studies, Christ University, Bengaluru

Abstract

In this research paper, the dividend payout policy of different companies has been used to establish a relationship between the announcement and distribution of dividend followed by change in their equity stock prices. This paper is only focused on 9 companies under the FMCG (Fast moving consumer goods) industry and the dividend payout policy and the equity stock prices of Hindustan Unilever Ltd., Colgate Palmolive, Emami Ltd., Indian Tobacco Company (ITC) Ltd., Nestle India Ltd., Britannia Industries Ltd., Asian Paints Ltd., Godrej Consumer Products Ltd., and Dabur. This research is undertaken to analyze the market trends and anomalies that occur when a company takes its dividend policy decision on the basis of equity stock prices.

Keywords: Dividend Payout Policy, Equity stock prices, FMCG sector, Stock price Volatility, Dividend announcement date

I. Introduction

The choice to part profits as dividends is one of the essential monetary choices of a corporate firm. However, to this day, it is still a most discussed issue all over the finance world. There are comprehensive writings, speculations, and models for dividend decisions and the rapidly growing finance world is accepting new written works/models each year from the analysts/researchers either in the new researches or extension of existing models. After the Modigliani-Miller (1961) paradigms on firms' approach to profits and their reasonable valuations, there have been impressive discussions, both in hypothetical and empirical researches about the idea of relationship that exists between a company's decision of dividend distribution policies and it's fairly estimated worth. There has been multiple debates and discussions on whether the impact on a firm's value and shareholders' return is impacted by 100% dividend payout, or 100% retention of dividends, or if it is in fact, a ratio of both that makes the most difference.

Numerous research articles help to identify on what seems to be an ideal dividend policy for a specific company, but there is insufficient data that shows the dividend payout ratio and retention ratio choices of firms. The related task is to therefore identify why companies follow certain strategies for their dividend policies and how does it affect their business.

The Indian financial market is liberalized. The economy of India is characterized by different varieties of businesses and corporates, and these entities differ on sizes, registered or unregistered, listing statuses, ownership structures, and other criteria. Due to the varying nature of each business, their dividend decision also differs accordingly. An ideal dividend distribution strategy is taken on some important factors- shareholders' return, growth of a firm, and the value of a firm. Besides, there are other criteria such as the

investment opportunities that the company seeks, it's financial needs, shareholders' expectations, constraints on paying dividends, loans taken, inflation and market trends, financial condition, finances available for operating activities, access to capital markets, etc.

II.   Review of Literature

1. **Dividend Policy and Volatility of Common Stock**
   This research paper was one of the initial researches that studied dividend policy as a contributing factor of return volatility. To study this, it analyzed dividend policy both as a direct factor and indirect indicator of other factors. As per this study, it was clear that there existed a definite influence of dividends on stock price, however their correlation varied from company to company. The researcher employs the use of the Gordon model and Miller-Modigliani model to arrive at different conclusions. Gordon's model suggests that larger the dividend, lower the risk; whereas Miller-Modigliani model explains that dividend policy is irrelevant in an efficient capital market. (Jonathan, 1989)

2. **Dividend Policy and Share Price Volatility: UK Evidence**
   This paper shines light on the association between dividend policy and share price changes in the UK stock market. The authors have used intensive testing such as multiple regression analyses to identify the association between share price changes and both dividend yield and dividend payout ratio. This research paper therefore finds a positive relation between dividend yield factors and stock price changes, and a negative relation between payout ratio and share price. (Hussainey & Mgbame, 2011)

3. **Dividend Policy and Share Price Volatility: Evidence from Pakistan**
   This research article was selected due to the similarity of financial reporting and market environment of Pakistan to that of India. The primary objective of this study is to show the relationship between dividend policy and stock market volatility in Pakistan. However, this paper also suggested similar results to that of the UK evidence, the dividend yield and share prices have a positive correlation, whereas payout ratio and stock prices are inversely related. (Habib, Kiani, & Khan, 2012)

4. **Do Stock Prices Move too much to be justified by subsequent changes in Dividends?**
   Shiller's research uses mathematical tools and techniques to show that, contrary to popular belief, behavior of stock market and equity share prices are not always erratic and therefore can be predicted to an extend if there are not too many variable factors. The paper develops the efficient markets model and is restated in innovation form which allows a better understanding of the limits on stock price volatility imposed by the model. In other words, this paper helps to better rationalize subsequent dividends and its' impact on company stock prices. (Shiller, 1980)

5. **Dividend Policy and Stock Price Volatility in the US Equity Capital Market**
   The above research paper studies what factors affect the volatility of a stock's price over a period, Profilet attempts to identify the impact of certain financial variables on the volatility on stock price, and this mainly includes dividend policy. The study helps to identify those financial variables that have proven historically significant in explaining stock price volatility. According to Profilet's research, large dividend paying shares are actually at a low risk for ownership as investment. The data is obtained from Value Line Investment Survey Database, a sample of 599 firms that was tested to assess the effect of selected financial variables on overall volatility and stock price fluctuations. (Profilet, 2013)

III.　Research Design

Scope of study

We have considered the equity stock prices and the dividend announcement date and effective date of the below mentioned 9 companies under the FMCG industry to conduct a research on the correlation between their dividend payout policy and their equity stock prices.

S. No	Company Name
1	Hindustan Unilever Ltd
2	Colgate Palmolive
3	Emami Ltd.
4	Indian Tobacco Company (ITC) Ltd.
5	Nestle India Ltd.
6	Britannia Industries Ltd.
7	Asian Paints Ltd.
8	Godrej Consumer Products Ltd.
9	Dabur

Statement of Problem

The purpose of this research paper is to fill the research gap concerning the impact of dividend policies in different FMCG companies in India on their respective equity stock prices. In the existing body of research, there is no particular information about how dividend policies affect stock prices in FMCG companies particularly in the Indian economy. Using the data available in different sources about when the dividends were announced or distributed, and the change in the stock prices because of that, conducting this research would help us analyze a trend in the stock market and fill a research gap simultaneously.

Objective of the study

To determine the correlation between the declaration of dividend and the changes in the stock price of 9 FMCG companies operating in India.

Sources of Data

Secondary data has been taken from a diverse source of documents or electronically stored information to develop this research paper.

The historical stock data has been collected from the following website:
* https://www.nseindia.com

Hypothesis

H0: There is no significant relationship between dividend payout policy and the equity stock prices of different FMCG companies in India.

H1: There is a significant relationship between dividend payout policy and the equity stock prices of different FMCG companies in India.

Data Analysis Tools

This research employs the usage of IBM SPSS Statistics Software to analyze and interpret historical data. The data is studied, and a paired sample t-test is conducted, the analysis results are interpreted further below.

Expected outcome

The proposed research paper represents a relationship between the effect of dividend payout policy on the equity stock prices. Overall, this study will also help us understand the trends in the market and in some cases, market anomalies that take place in respect to the announcement of dividends by different FMCG companies in India. This research paper will also fill a research gap and help us better understand the stock market. Ultimately, it will help us determine if there is a significant impact of dividend payout policy on the stock prices by running the Paired Sample T-Test.

Limitations of the Study

- Only 9 random companies have been selected to study the trend and relation between dividend payout policy and equity stock prices.
- The study only focuses on the FMCG industry.
- The time frame of historical data is 12 months which does not give a complete picture of the correlation of dividend payout policy and equity stock prices.
- The results are probabilities and not certain.

IV.　　Data Analysis and Interpretations

The following historical data was collected for analyzing significance of dividend policy on stock price:
- Date of dividend announcement and share price on that day.
- Historical stock price data of up to 30 days before dividend announcement
- Historical stock price data of up to 30 days after dividend announcement

The following is a sample from the data sheets collected for Hindustan Unilever:

Date	Close Price	Day	Date	Close Price	Day
28-Mar-18	1,333.35	-30	15-May-18	1,515.50	1
02-Apr-18	1,351.30	-29	16-May-18	1,574.10	2
03-Apr-18	1,348.40	-28	17-May-18	1,569.80	3
04-Apr-18	1,357.45	-27	18-May-18	1,605.80	4
05-Apr-18	1,382.20	-26	21-May-18	1,578.65	5
06-Apr-18	1,374.80	-25	22-May-18	1,574.30	6
09-Apr-18	1,391.60	-24	23-May-18	1,568.10	7
10-Apr-18	1,391.50	-23	24-May-18	1,561.10	8
11-Apr-18	1,409.15	-22	25-May-18	1,575.75	9
12-Apr-18	1,412.75	-21	28-May-18	1,582.85	10
13-Apr-18	1,410.55	-20	29-May-18	1,572.70	11
16-Apr-18	1,419.50	-19	30-May-18	1,585.80	12
17-Apr-18	1,445.55	-18	31-May-18	1,611.45	13
18-Apr-18	1,450.50	-17	01-Jun-18	1,588.85	14
19-Apr-18	1,454.20	-16	04-Jun-18	1,563.20	15
20-Apr-18	1,467.80	-15	05-Jun-18	1,562.80	16
23-Apr-18	1,452.75	-14	06-Jun-18	1,571.15	17

24-Apr-18	1,459.65	-13	07-Jun-18	1,603.05	18
25-Apr-18	1,459.20	-12	08-Jun-18	1,595.60	19
26-Apr-18	1,491.25	-11	11-Jun-18	1,601.40	20
27-Apr-18	1,473.95	-10	12-Jun-18	1,638.45	21
30-Apr-18	1,508.90	-9	13-Jun-18	1,621.20	22
02-May-18	1,471.95	-8	14-Jun-18	1,609.60	23
03-May-18	1,452.20	-7	15-Jun-18	1,621.30	24
04-May-18	1,464.20	-6	18-Jun-18	1,608.55	25
07-May-18	1,497.90	-5	19-Jun-18	1,601.00	26
08-May-18	1,496.05	-4	20-Jun-18	1,602.40	27
09-May-18	1,496.00	-3	21-Jun-18	1,593.45	28
10-May-18	1,486.50	-2	22-Jun-18	1,608.10	29
11-May-18	1,504.10	-1	25-Jun-18	1,615.15	30
14-May-18	1,503.55	0			

Paired Sample T-Test

The paired sample *t*-test, often known as the dependent sample *t*-test, is a statistical tool used to examine if the mean difference between two sets of observations is zero. In a paired sample *t*-test, each subject or entity is measured twice, resulting in *pairs* of observations. Common applications of the paired sample *t*-test include case-control studies or repeated-measures designs. (Solutions, 2019)

Assumptions

As a parametric system (a technique which gauges obscure parameters), the paired sample t-test makes a few assumptions. In spite of the fact that t-tests are very efficient, it is great practice to assess the level of deviation from these assumptions so as to survey the nature of the outcomes. The paired sample t-test has four principle assumptions:

- The dependent variable is assumed to be continuous, i.e., interval or ratio
- All observations recorded are independent from each other
- The dependent variable is normally distributed
- The dependent variable lacks outliers, outliers are uncommon values in the data that are far away from the majority of data available, this creates a sudden biasing in the test and can even lead to incorrect results if not handled properly.

Procedure

The following is the symbols used in the procedures and calculations of a paired sample t-test:

- D = Differences between two paired samples
- d_i = The i_{th} observation in D
- n = The sample size
- d^- = The sample mean of the differences
- $\sigma^\wedge$ = The sample standard deviation of the differences
- T = The critical value of a *t*-distribution with $(n - 1)$ degrees of freedom
- t = The *t*-statistic (*t*-test statistic) for a paired sample *t*-test
- p = The p-value (probability value) for the *t*-statistic.

The procedure for calculating a sample t-test is as follows:

- Calculate the sample mean
- Calculate the sample standard deviation

- Calculate the test static
- Calculate the degree of freedom, and significance. (Solutions, 2019)

V. Findings and Suggestions

1. Hindustan Unilever Ltd.

Paired Samples Test

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Close Price - V3	1513.11311	69.13636	8.85200	1495.40647	1530.81976	170.935	60	.000

- The average value of stock price during the period is **1513.11311**
- The significance *p*-value is **0.000** which is less than 0.05, therefore there is a significant impact seen here.
- This proves that the **null hypothesis is invalid** in this scenario, therefore, **alternative hypothesis prevails.**
- H_1: There is **significant** impact of dividend payment policy on the equity share prices of Hindustan Unilever Ltd.

2. Colgate Palmolive Ltd.

Paired Samples Test

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Close Price - V3	1165.29508	49.24809	6.30557	1152.68206	1177.90810	184.804	60	.000

- The average value of stock price during the period is **1165.29508**
- The significance *p*-value is **0.000** which is less than 0.05, therefore there is a significant impact seen here.
- This proves that the **null hypothesis is invalid** in this scenario, therefore, **alternative hypothesis prevails.**
- H_1: There is **significant** impact of dividend payment policy on the equity share prices of Colgate Palmolive Ltd.

3. Emami Ltd.

Paired Samples Test

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Close Price - V3	1074.63033	51.64185	6.61206	1061.40424	1087.85642	162.526	60	.000

- The average value of stock price during the period is **1074.63033**
- The significance *p*-value is **0.000** which is less than 0.05, therefore there is a significant impact seen here.

- This proves that the **null hypothesis is invalid** in this scenario, therefore, **alternative hypothesis prevails**.
- H_1: There is **significant** impact of dividend payment policy on the equity share prices of Emami Ltd.

4. Indian Tobacco Company (ITC)

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Close Price - V3	269.97902	11.70398	1.49854	266.98149	272.97654	180.161	60	.000

Paired Samples Test

- The average value of stock price during the period is **269.97902**
- The significance *p*-value is **0.000** which is less than 0.05, therefore there is a significant impact seen here.
- This proves that the **null hypothesis is invalid** in this scenario, therefore, **alternative hypothesis prevails.**
- H_1: There is **significant** impact of dividend payment policy on the equity share prices of Indian Tobacco Company (ITC).

5. Nestle India Ltd.

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Close Price - V3	9023.83197	655.86908	83.97543	8855.85610	9191.80784	107.458	60	.000

Paired Samples Test

- The average value of stock price during the period is **9023.83197**
- The significance *p*-value is **0.000** which is less than 0.05, therefore there is a significant impact seen here.
- This proves that the **null hypothesis is invalid** in this scenario, therefore, **alternative hypothesis prevails**.
- H_1: There is **significant** impact of dividend payment policy on the equity share prices of Nestle India Ltd.

6. Britannia Group Ltd.

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Close Price - V3	5576.21721	297.34472	38.07109	5500.06369	5652.37073	146.469	60	.000

Paired Samples Test

- The average value of stock price during the period is **5576.21721**
- The significance *p*-value is **0.000** which is less than 0.05, therefore there is a significant impact seen here.

- This proves that the **null hypothesis is invalid** in this scenario, therefore, **alternative hypothesis prevails.**
- H_1: There is **significant** impact of dividend payment policy on the equity share prices of Britannia Group Ltd.

7. Asian Paints Ltd.

Paired Samples Test

| | | Paired Differences | | | | | | | |
| | | | | | 95% Confidence Interval of the Difference | | | | |
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Close Price - V3	1229.11639	50.05614	6.40903	1216.29642	1241.93637	191.779	60	.000

- The average value of stock price during the period is **1229.11639**
- The significance *p*-value is **0.000** which is less than 0.05, therefore there is a significant impact seen here.
- This proves that the **null hypothesis is invalid** in this scenario, therefore, **alternative hypothesis prevails.**
- H_1: There is **significant** impact of dividend payment policy on the equity share price of Asian Paints Ltd.

8. Godrej Consumer Products

Paired Samples Test

| | | Paired Differences | | | | | | | |
| | | | | | 95% Confidence Interval of the Difference | | | | |
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Close Price - V3	1132.33443	33.53690	4.29396	1123.74523	1140.92362	263.704	60	.000

- The average value of stock price during the period is **1132.33443**
- The significance *p*-value is **0.000** which is less than 0.05, therefore there is a significant impact seen here.
- This proves that the **null hypothesis is invalid** in this scenario, therefore, **alternative hypothesis prevails.**
- H_1: There is **significant** impact of dividend payment policy on the equity share prices of Godrej Consumer Products.

9. Dabur Ltd.

Paired Samples Test

| | | Paired Differences | | | | | | | |
| | | | | | 95% Confidence Interval of the Difference | | | | |
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Close Price - V3	358.58525	6.82107	.87335	356.83829	360.33220	410.587	60	.000

- The average value of stock price during the period is **358.58525**
- The significance *p*-value is **0.000** which is less than 0.05, therefore there is a significant impact seen

here.

- This proves that the **null hypothesis is invalid** in this scenario, therefore, **alternative hypothesis prevails**.
- H_1: There is **significant** impact of dividend payment policy on the equity share prices of Dabur Ltd.

VI.   Conclusion

The FMCG sector's major companies are all very competitive in nature and therefore almost all of them subscribe to a dividend policy. This has helped the research in obtaining a common time frame where all nine companies have announced the payment of dividends, i.e., the month of May. It is evident from the above analysis that dividend pay-out policy and its announcement has a significant impact on the share prices of the company. As calculated using SPSS, the *p*-value which denotes significance is lesser than 0.05 in all the nine companies that were taken. This therefore confirms that the significance exists but can be either a negative or positive impact on the company's equity share price. Thus we see with the help of data analytical tools that the dividend policy plays a vital role in the share price and growth of a company, especially in the FMCG sector where the competitive nature of the industry prevents a company from being ignorant of dividend policy when all its other competitors have pledged it.

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