

Do Higher Dividend Payouts Signifies Higher Operating Profits and How Does It Impact MPS of the Firm: An Intriguing study of Microsoft Corporation

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Abstract

The term dividend refers to distribution of profits among the shareholders or the owners of the organization. The dividend decision is included among the three basic decisions which a financial manager has to critically analyze and assess. After satisfying all the external obligations of the firm (i.e. to the creditors, lenders, Govt. etc), earnings remained can be distributed as dividends or can be retained for growth prospects in future. The expected level of cash dividend, from the perspective of equity shareholders is the key variable using which stakeholders / investors can ascertain the Valuation of Entity. Hence, the dividend decision is of utmost importance. So, the first question arises, whether the firm should pay dividend? If the firm chooses to pay dividend, then, the next question arises: "how much should be the dividend payout ratio (D/P Ratio)?" keeping in mind the shareholder's expectations, previous year dividends (if any), current market trends, investment & growth prospects and so on. If dividend is paid by the firm, then the cash flow position would be affected but at the same time, it generates goodwill for the investors, who as a result are encouraged to provide additional funds for the future growth of the organization. Given the firm's investment and financing decisions, how market share price is manipulated by the firm's dividend policies? Does higher dividend payout decrease, increase or not affect at all the share price of the firm. So, over the years this decision has been a debating issue for the management and is stated as a dividend puzzle. In our research paper, we have focused our aim to observe the impact of all the above factors concerning dividend decisions on the market price or share price (i.e. MPS) and profitability of the firm (i.e. EPS). The analysis is done using some well known models: - "WALTER'S MODEL, GORDON'S MODEL & MODIGLIANI-MILLER APPROACH". To give this study a more practical approach, we have taken the case study of "MICROSOFT COMPANY". We have gone through the dividend policies of the firm in the past & recent years and its impact on the Valuation of Entity.

Keywords: Dividends, Shareholders, Dividend Policies, EPS, MPS, Value of Firm

INTRODUCTION

The term Dividend refers to distribution of profits among the shareholders or the owners of the organization. This is a way of sharing company's wealth which is generated from the business. Any entity can pay dividend yearly, quarterly or monthly. They can be paid in three forms i.e. Cash dividend, Stock dividend, & Repurchase option. Companies have variable dividend policies that lead to different dividend amounts. Whenever a company pays dividends, several outcomes are possible. Initially there are three ways in which a company can treat its PAT (profit after taxes)-

- Distribute Dividends
- Retained Earnings
- Special dividends

Now, when dividends are paid it have several implications. Firstly, it affects the list price of the security and various items attached to it. Secondly, the amount paid out as dividends no more belongs to the company and is reflected by lowering company's reserves. Thirdly, whenever an investor purchase shares when the dividend date expires, such person cannot have any claim over such dividend. This is reflected by a downward shift in the share price.

Dividends are generally paid by mature businesses because they generate a lot of cash and they find it more reasonable to pay higher dividends instead of retaining profits. However, there is no such obligation for the same. So, investors need to be prepared that companies paying dividends earlier can stop paying it in the future anytime without intimation. A company generally not follows the same dividend policy over the years. It keeps on changing. At times, the company finds it better to reinvest the amount in their core operations.

So, for a firm it's always a tough decision of choosing to pay or not to pay dividend. Many theories relating to relevance and irrelevance of dividend are already discussed by Modigliani, Gordon & Walter.

Valuation of Firm and Dividend Policy

Should we pay cash dividends right now or should we distribute higher profits at a future date or to distribute profits by way of bonus shares is a matter of major concern.

In order to maximize the share valuation, a crucial question arises in front of company's management:
- Given the firm's investment and financing decisions, how market share price is manipulated by the firm's dividend policies?

Does a higher dividend payment decrease, increase or doesn't affect at all the market share price?

Dividend decision had been a debating issue for the financial managers always. It seems to be a puzzle for them. There have always been two schools of thought regarding relevance and irrelevance of dividends. Where, according to one, dividends are irrelevant and have no affect on the valuation of the entity (MM APPROACH), whereas, certain theories, (WALTER, GORDON etc.) advocates that dividend decision is relevant to the valuation of the entity. [1] Our objective in this paper is to ascertain whether dividend policy has any manipulation in the MPS of the firm or not.

LITERATURE REVIEW

Some of the theories regarding relevance & irrelevance of dividends are discussed here:

Dividend irrelevance theory:

Modigliani & Miller (1961)

According to MM, dividend policy of a firm is irrelevant as it doesn't affect the wealth of the shareholders. They advocate that the valuation of the entity and MPS is affected by the firm's profits and pattern of income distribution has no say in such valuation. Thus dividend policy decision has no relevance for the valuation of the entity. [2]

Assumptions:

Following assumptions are followed by MM Theory-[3]

- The firms are operating in perfect capital market.
- Taxes don't exist.
- Defined investment policy exists in the firm.
- Risk of uncertainty doesn't exist.
- Transaction cost and time lag is zero.
- Securities can be divided into fractions.

The model:

In this model, MM argues that there would be no adverse effect on the firm or the shareholders, if the organization pay or does not pay any dividend. They use the process of arbitrage to claim its irrelevance. This model clearly mentions that a firm will finance its given investment opportunities by either ploughing back profits or if it decides to pay dividend then it will raise an equal amount by issuing new shares in the market. The benefit of increased market value will be offset by decrease in terminal value of share [4]. So, the shareholders will be indifferent between the dividend payments or retaining the profits. For this MM have presented the following valuation model:

$$P_0 = 1 / (1+k_e) \times (D_1 + P_1)$$

Where,

P_0 = present market price of the share

k_e = cost of equity share capital

D_1 = expected dividend at the end of the year

P_1 = expected market price of the share at first year end

Now, if company has "n" number of equity shares outstanding then the valuation of the entity is n times P_0 , or

$$nP_0 = 1 / (1+k_e) \times (nD_1 + nP_1)$$

Now, the company can finance its investment proposal either by retained earnings or by sale of new shares. So after issuing equity shares of 'm' number of the new Valuation of Entity would be like,

$$nP_0 = 1 / (1+k_e) \times [nD_1 + nP_1 + mP_1 - mP_1]$$

$$nP_0 = 1 / (1+k_e) \times [nD_1 + (n+m) P_1 - mP_1]$$

It may be observed from the above equations that mP_1 is equal to that amount of funds raised by the firm by issue of new shares at first year end. This is also equal to the total investment at first year end less amount of retained earnings, or

$$mP_1 = I - (E - nD_1)$$

$$= I - E + nD_1$$

Where, I = total investment to be made at year 1

E = total earnings of the firm

So it is clear from the above equations that to meet its investment requirements (less retained profits) firm must issue fresh capital of the same amount.

But amount of retained profits depends upon amount of dividend paid i.e. nD_1 .

By replacing the value of mP_1 in previous equation, we get

$$nP_0 = 1 / (1+k_e) \times [nD_1 + (n+m) P_1 - I + E - nD_1]$$

$$nP_0 = 1 / (1+k_e) \times [(n+m) P_1 - I + E]$$

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Since, D_1 is not found in the final equation and all other variables are also independent of D , MM concludes that valuation of entity (nP_0) is not dependent upon the dividend decision and hence the **dividend policy is irrelevant**.

Dividend relevance theory:

Walter's model:

Walter J.E supports the perspective that the policy on dividend has an impact on the share price and has established a model to justify the relevance of dividend policy for valuation of entity, following the assumptions given below:

- All investment proposals are financed internally through retained earnings only.
- The business risk remains the same for all the projects.
- EPS and DPS will remain constant.
- The firm has an infinite life.

This model considers the dividend decision and investment decision are both inter-related. The firm's decision of paying or not paying dividend totally depends on the fact that it has suitable investment proposals to invest retained earnings or not.

According to this model, the firm's policy on dividend depends upon the relationship between r & k_e where, r is rate of return and k_e refers to cost of capital.

Table 1: Relation between Valuation of Entity and Dividend Decision [4]

Relation Between r & k_e	Increase in Dividend Payout	Decrease in Dividend Payout
$r > k_e$	Valuation of Entity decreases	Valuation of Entity increases
$r < k_e$	Valuation of Entity increases	Valuation Of Entity decreases
$r = k_e$	No change in the Valuation of Entity	No change in the Valuation Of Entity

To justify the above, WALTER has suggested a mathematical model i.e.

$$P = D/k_E + (r/k_e)(E - D)/k_e$$

Where,

P = MPS

D = DPS

r = rate of return on investment

k_e = cost of equity capital

E = EPS

Thus, the WALTER'S formula shows that the share's market price (MPS) is the **present value of the expected stream of dividends and return from retained earnings**.

Gordon's Model

Myron Gordon has also propounded a model that suggests that the dividend policy is relevant for ascertaining the *Valuation of Entity* [5]. This theory is also known as BIRD-IN-THE-HAND theory. This model follows similar assumptions as WALTER'S however GORDON has made two additional assumptions too: -

- Growth rate " g " of the firm is the multiplication of the retention ratio " b " and its rate of return " r ", i.e. $g = br$
 - Cost of capital is constant and always greater than the growth rate i.e. $k_e > g$
- GORDON claims that the stakeholders have an inclination towards current dividends and the dividend policy and share's market value are directly correlated. This theory advocates that the policy on dividend payout and relationship between ' r ' and ' k ' influences the MPS of the firm. [6]

"r" and "k" Relationship	Increase in D/P
$r > k$	Share Price Decreases
$r < k$	Share Price Increases
$r = k$	Share Price Remains Constant

The Model and Formula for Calculation

GORDON'S formula for calculation of MPS is given by: -

$$P = \frac{[EPS \times (1-b)]}{(k-g)}$$

Where,

P = Market price per share (MPS)

EPS = Earnings per share

b = retention ratio

(1-b) = payout ratio

k = cost of capital

g = growth rate ($b \times r$)

Valuation of share is the total sum of the present values of infinite future dividends to be declared. So, it is clearly evident from his theory that dividend payout policy is truly relevant for MPS of the firm. Out of numerous theories, one of the major theories is Gordon's dividend theory for the valuation of the company. There are certain limitations, even though this is a popular model to ascertain share price using the expected/future dividends. [7]

PRACTICAL CASE STUDY: MICROSOFT CORPORATION- ITS DIVIDEND POLICIES AND CHANGES IN ITS MPS OVER THE YEARS

Origin of Microsoft

Microsoft is a multinational computer technology corporation. The word Microsoft is made up of "Microcomputer" and "Software". It started working on April 4, 1975, launched by Bill Gates and Paul Allen in Albuquerque. In 1980, Microsoft formed a partnership with IBM. In 1986, the company went public to raise \$61 million capital. In 1996, it entered into the internet segment and numerous corporate acquisitions have been signed, their largest acquisition was of LinkedIn for \$26.2 billion in December 2016 and acquisition of Skype Technologies for \$8.5 billion in May 2011. [8]

Dividend Policy of Microsoft

Microsoft has not paid dividend for 28 years and believed in ploughing back its profits into its Research & Development projects. In 2003 the company declared its first ever dividend for common stock. From 2003 to 2010, cash dividends have been paid and buyback of shares have been undertaken by the corporation.

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Table 2: Financial Particulars of Microsoft Corporation [9]
 Year Ended June 30 each year
 (Currency - \$, Amount in millions, except per share values)

Particulars	1996	1997	2001	2002	2003	2004	2018	2019
Operating income	3,078.00	5,130.00	11,720.00	8,272.00	9,545.00	9,034.00	35,058.00	42,959.00
Retained earnings	3,984.00	5,288.00	18,899.00	12,997.00	15,678.00	18,429.00	13,682.00	24,150.00
Earnings per share (EPS)	1.71	2.63	0.66	0.48	0.69	0.75	2.13	5.06
Common stock dividends	-	-	-	-	857.00	1,729.00	12,916.00	14,107.00
Dividend per share (DPS)*	-	-	-	-	0.08	0.16	1.68	1.84
Market price per share (MPS)	7.54	15.12	31.27	27.27	26.10	27.12	101.034	130.382

*Microsoft Corporation (<https://www.microsoft.com/en-us/Investor/dividends-and-stock-history.aspx>)

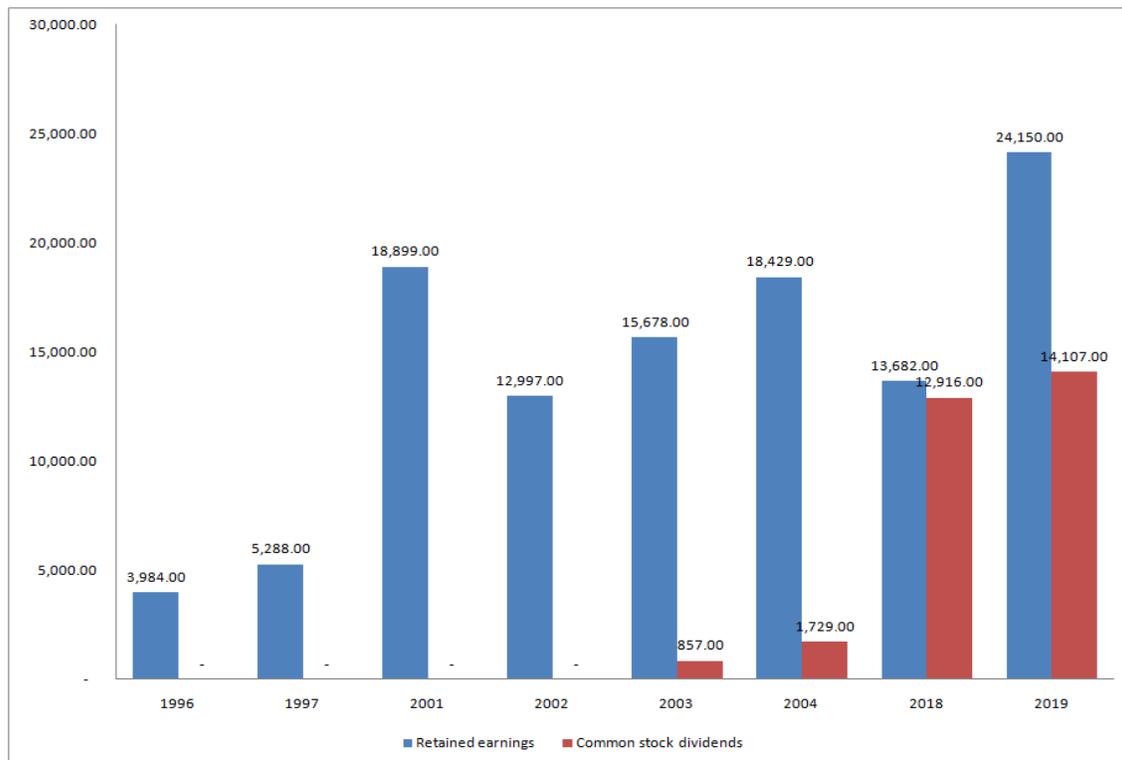


Figure 1: Showing Trends of Retained Earnings & Common Stock Dividends
 (Amount in millions, currency \$, except per share value)*

This chart clearly depicts the changing trends of retained earnings and common stock dividends from both pre & post dividend declaration periods. It is observed that before the company declared dividend in 2003 its retained earnings suddenly increased in 2001 as \$18,899.00 million and surprisingly it kept on increasing even after declaring dividends in 2003. It was highest in the last 23 years in the year 2019 with an amount of \$24,150.00 million in spite of declaring dividends [10]. It is because of high operating profits during the years 2018-19, the Corporation was able to maintain high retained earnings even after paying dividends.

So, we cannot ignore the amount of operating income during these years. The following Figure 2 showing the trends of operating income and retained earnings clears the whole picture.

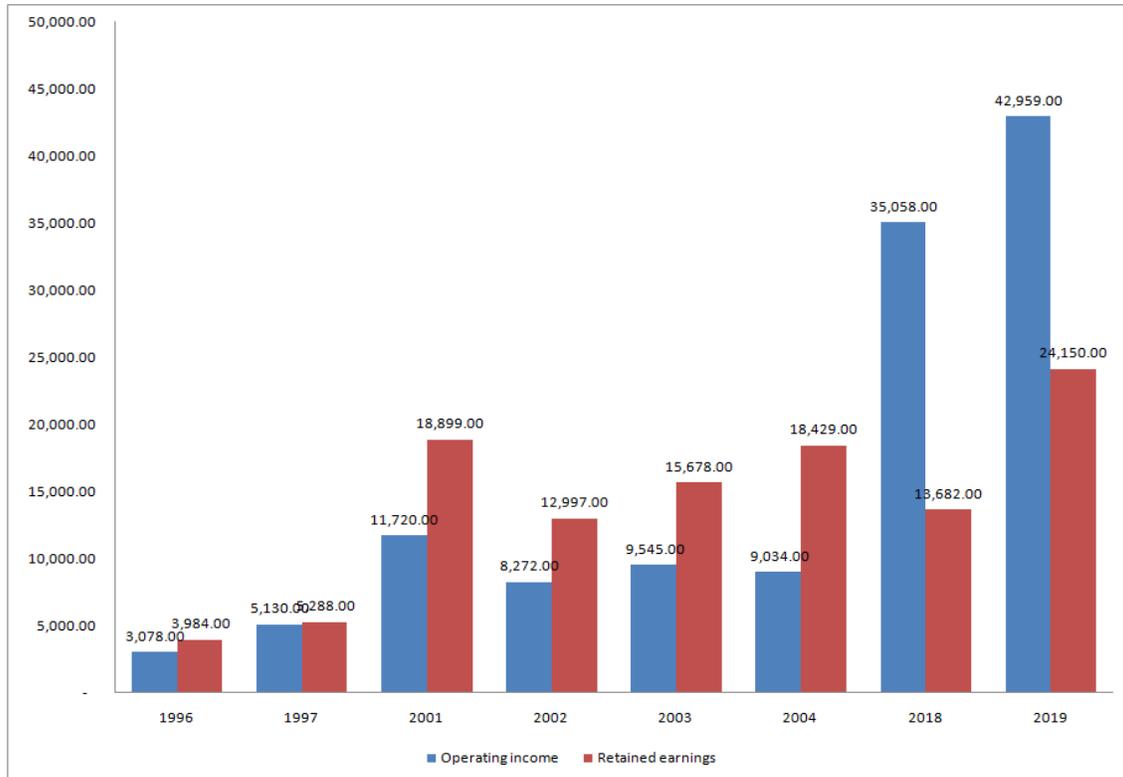


Figure 2: Showing the trends of operating income and retained earnings
*(Amount in millions, currency \$, except per share value)**

It's visible from the chart that although the company's operating income during pre dividend years is low still the company managed to maintain its retained earnings, however its operating income rose to \$35,058.00 million in the year 2018 and it took a jump of \$7901.00million in the year 2019. Trend of retained earnings has also taken a new shift; from \$18,429.00 million in 2004 it has come a long way to \$24,150.00 million in 2019 [11].

After declaring dividend in 2003 for the first time, the company hasn't enjoyed any visible favorable outcome; it only took a slight shift from \$0.69 to \$0.75 in EPS. The trends in DPS and EPS after declaring the dividend has been shown in the following Figure 3.

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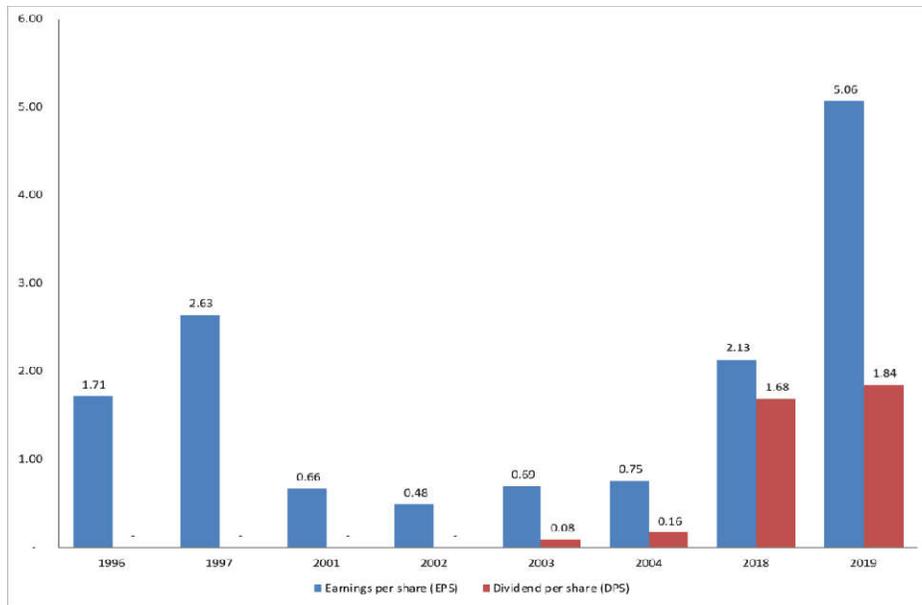


Figure 3: Showing the trends in DPS and EPS after declaring the dividend (Amount in millions, currency \$, except per share value)*

In 2018, EPS was \$2.13 where DPS was only \$1.68 which increased to \$1.84 in 2019. But EPS showed a drastic jump by reaching to \$5.06 in 2019 [12]. We can observe that EPS was rising in 1996-1997, even though there was no dividend in that period and further EPS was also rising in 2018-19 with declaration of dividend, so we cannot establish a cause & effect relationship between EPS and DPS.

The following Figure 4 reveals the real story as it depicts the relationship between DPS and MPS of the firm during the years.

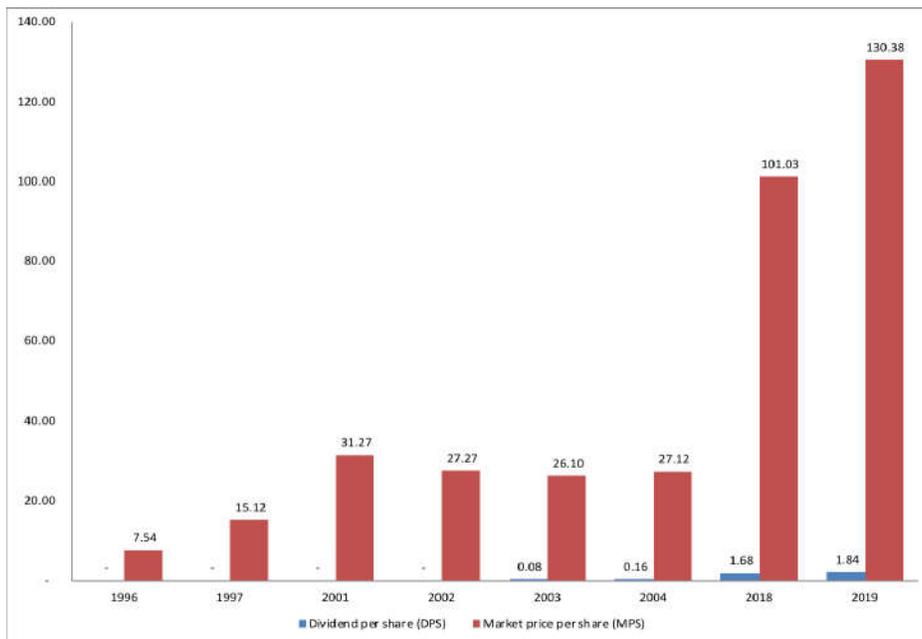


Figure 4: Showing relationship between DPS and MPS of the firm during the years (Amount in millions, currency \$, except per share value)*

From the chart [13] we can clearly ascertain the growth of MPS pre & post dividend declaration. It kept on increasing from 1996 until recent. However it was stable during the year 2002-03 and 2003-04 the year in which the company first declared its dividend. After that it took the never ending pace.

Here the important point to discuss is that the MPS doesn't get affected by DPS or we can say that the DPS or policy on dividend payout has no impact on MPS of the firm.

CONCLUSION

There is no doubt that the dividend decision had been a puzzle to the entity always. Various models and dividend theories argued about the relevance and irrelevance of dividends in affecting the value or MPS of the firm. By our study and observation it is evident that the dividend decision has no vital role to play in deciding the value or MPS of the firm. Microsoft Corporation, a well established entity hasn't paid any dividend for the first 23 years of its origin and still managed to maintain a reasonable EPS and MPS over the years. However even after declaring dividend, its MPS stays visibly unaffected. Hence, whether a firm pays higher dividends or lower dividends or no dividends at all, this doesn't impact MPS or Valuation of Entity. Also higher operating profits don't promise higher dividend payouts and vice-versa as in our case study, Microsoft while earning higher operating income haven't paid any dividend for the first 23 years, instead it plough back its profits in the investment projects for growth prospects.

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