Signalling Power of Dividend on Firms' Future Profits
A Literature Review

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ABSTRACT

Since decades, many researchers have argued that the dividend policy decisions of firms are very important mainly due to the signaling effect they have on the firm's future performance. The paper presents empirical findings on the signaling effect of dividends while taking into account the different theories on dividend policy.

Keywords: Dividend ; Dividend Policy ; Dividend and Taxation ; Signalling Mechanism ; Agency Theory

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1. Introduction

Dividends are a distribution of a company's profits. The amount received as dividends depend on the number of shares one holds. Firms issue equity which takes the form of either common shares or preferred shares. Each preferred share is normally paid a fixed annual dividend. In contrast, dividends obtained from common shares may fluctuate with the firm's profits. Hence a company must determine the amount of profits to be distributed as dividends to its shareholders and this procedure is more commonly referred as the dividend policy of the firm. This paper is a literature review on the different theories related to dividend policy and it supports the hypothesis that dividend changes convey information about a firm's future profits.

2. Corporate Dividend Policy Decisions

The dividend policy decision for a firm is very important and thus, the way managers go about making dividend policy decisions and whether or not they follow a precise set of guidelines or specific strategies to make these decisions will impact on the value of the firm. It can also have an impact on the future performance of the firm. Lintner (1956) carried out a research to determine how senior managers (top management level) proceed to formulate the dividend policy decisions. He estimated a model which consisted of the following variables: earnings stability, plant and equipment expenditures, willingness to use external financing, firm size, ownership by control groups and use of stock dividends. A sample of 600 listed companies was used in this study. He made use of interviews to collect the data and it is understood that not all the 600 firms' manager(s) were interviewed in this study. From his findings, he explains that managers mostly looked at current earnings and target level of dividend payout to make the dividend decision. Marsh and Merton (1987) summarised the other findings of Lintner (1956) on how managers determine the level of dividend payout as follows:

1. Managers tend not to make dividend decisions that might have to be reversed in the near future.

2. The current year's dividend payout will not be affected by the profitability level of the same period (T) but can have an impact on the profitability level of the next period (T+1)

3. Managers place their main focus on the change in existing dividend payout level rather than absolute level.

4. Firms have longer dividend payout ratios.

5. Firms repurchase stocks when they have accumulated a large amount of unwanted cash or wish to change their capital structure.

Based on his findings, Lintner (1956) developed a dividend model. The dividend model described the relationship between the previous period's dividend, the current period's dividend and the future targeted dividend payout in the next period. The estimated equation the model is as follows:

$$DIV_t - DIV_{t-1} = adj \times (DIV_{t+1} \times EPS_t - DIV_{t-1})$$

where:

DIV_t is the dividend for the current period,

DIV_{t-1} is the dividend for the previous period,

Adj is the adjustment rate

DIV_{t+1} is the target dividend ratio and

EPS_t is the earning per share for the current period.

However, from a more recent literature, namely Kumar and Lee (2001), the authors claimed to have developed an empirical model which was more efficient than Lintner's model. However, it must be noted that not much researchers have tested the model of Kumar and Lee (2001) and hence, cannot really be argued to be a better model.

With regards to the impact of dividend policy decision on investment, it is understood that firms should take all projects with a Net Present Value (NPV). However, an issue is that if management put more emphasis on dividend policy to such an extent that it eventually dominates investment policy decisions, it could be argued that NPV projects or projects creating firm value be cancelled or delayed for a later time. By cancelling or delaying positive NPV projects, this will obviously have an adverse effect on the future expected profits of the company. Fama (1974) carried out a research on the relationship between investment decisions and dividend decisions. His findings revealed that investment decisions and dividend decisions are not correlated; that these two types of decision making do not affect each other.

3. Dividend Irrelevance Proposition

Modigliani and Miller (1958, 1961), hereafter referred to as MM, put forward the irrelevance theorems, more commonly known as the MM theorems and these form the foundation of modern corporate finance theory. The two main conclusions that are drawn from the MM theorems are that firm value is dependent on its current and future free cash flow. Secondly, the level of dividends (or dividend policy) does not affect firm value given that firms maximise their value through investment. The difference between equity issued and payouts of the firm is equal to its free cash flow. Hence, dividend policy is irrelevant when it comes to affecting firm value.

The studies carried out by Black and Scholes (1974) and Miller and Scholes (1982) are in line with the propositions of the MM theorem. Those opposing the propositions can be classified into two groups. For instance, one group would be those who argue that a high dividend payment increases share price which in turn increases firm value and therefore decreases the cost of equity (for example, Graham and Dodd, 1951). The other group gave evidence that higher dividend payout lead to higher required rate of returns which adversely impacts on share price (for example, Blume, 1980).

In many cases, the MM theorems have been argued to be irrelevant mainly because of the assumptions based on a perfect world without taxes and no market imperfections. However, in the real world, these assumptions do not hold. For example, companies pay corporate taxes and there are many imperfections which provides arbitrage opportunities. Various theories have been developed with the relaxation of MM assumptions. The theories had with main objective to explain why companies pay dividends. Black (1976) argued that their may be infinite reasons of paying dividends. According to this researcher, dividends may simply represent the return to the investor who faces a particular level of risk when investing in the company. Also, he mentioned that companies pay dividends as a means of rewarding existing shareholders but the main argument was that dividends were paid so that the company is seen as a worthwhile investment. In this case, investors will be willing to acquire the firm's shares even if they are sold at a higher or premium price.

4. Dividends and Taxation

Taxation is one the critical factors that affect firm value and future expected profits. For example, discounted expected after-tax cash flows can be used as a determinant for the market value of a firm. In this respect, differential tax treatment of capital gains relative to the dividends can influence the after-tax returns of investors and in turn affect the willingness of investors to receive dividends (demand for dividends). Economists have concluded that personal investment decisions and corporate dividend decisions are both affected or influenced by taxes. Brennan (1970) was the first researched who investigated the relationship between dividend yields and risk adjusted returns in the context of taxation. He proved that using the Capital Asset Pricing Model (CAPM), the pre tax excess return on a security is positively and linearly related with the dividend returns and systematic risk of the security. In other words, the tax disadvantages of dividends faced by investors in general is compensated by higher pre-tax returns. These findings were further supported by Litzenberger and Ramaswamy (1979). However, the correlation of share returns and dividend yields is very complex and cannot be explained solely by tax effects (Blume, 1980). On the other hand, Blume (1980) also explained that dividend payouts have a positive impact on a company's future profits.

As a whole, some empirical evidences in this section reveal that there exists a positive relationship between dividend yields and stock returns while other literature oppose this argument. However, the findings remain subjective to one's own understanding. It can be said that capital gains face a lower tax rate as compared to dividend yields. Moreover, capital gains are only taxed when they are realised. Consideration should also be placed on the fact that it cannot be determined that the relationship between dividend yields and stock returns may also be affected by various forms of market imperfections such as taxation, transaction costs and heterogeneous investors who do not necessarily share the same ideas, opinions and investment strategies.

5. Signalling Mechanism

Modigliani and Miller (1961) argued that dividend may have a signalling effect. The top management of a firm has more information about the strategy of the firm and can also forecast future earnings of the company. Therefore, people working in the firm have more information as the other investors and the market in general. Thus this leads to the problem of information asymmetry. Hence, firms can use dividends as a signalling mechanism which sends information to investors in the market or to its shareholders. The information may reflect the strategies that the firm is employing in the short run or long run. Managers of the firm can change the expectations of people with regards to its future earnings through dividends. A firm has several ways is sending information to the market. This can include costly methods which will prevent smaller firms from imitating the signal. The methods refer to increasing the price of dividend; that is increasing dividend payout. However, the firm must also be able to sustain the costs of conveying the information.

Miller and Rock (1985) discussed that dividends indeed have a signalling role but there are 'dissipative' costs that are involved and these are the firms' investment decisions. As mentioned previously, a firm who must pay a level of dividend which is high enough to avoid smaller firms to imitate the same strategy. The increase in dividend should eventually lead a share price increase and similarly, a decrease in the dividend should cause the price of the share to fall. Due to the subjective nature of dividend payout, some studies have actually found out that the relationship between dividend and share price provides support to the hypothesis that dividends do carry information to the market about future expected profits (Griffin, 1976). However, though managers use dividend to convey information, dividend changes may not be the perfect signal. According to Easterbrook (1994), dividend increase may be an ambiguous signal unless the market can distinguish between growing firms and disinvesting firms.

6. Agency Theory

Dividends can be seen as a tool to reduce agency costs. Agency problem simply refers to the principal-agent problem where the principle is the holder of the stocks or shareholders and the agent is the manager. The main duties of the manager would be to run the firm effectively and efficiently so as to maximise firm value and also maximise returns to the shareholders. However, agency problem arises when managers' and shareholders' interests are not in line with each other. This may arise since the manager is not acting in the interest of the shareholders, for example, the manager is not investing in projects that the shareholders consider to be worth investing. Hence the cost of monitoring the managers is referred to as the agency costs. However, another problem that exists in this case is that the managers are involve in the daily running of the business and they are more aware about which investment should bring higher positive returns. However, in past literature, it has been observed that if managers are not monitored properly, they tend to surround themselves with luxury products and also tend to pursue their personal interests which in most cases would be to maximise their wages instead of returns to shareholder (Jensen and Ruback, 1983).

Hence one method which can be argued to help overcome the agency problem is through dividend payouts. It can be said that firms would have to stay in capital markets to keep raising funds. Funds raised are mostly through loans from banks, insurance companies and other credit institutions. These institutions will be acting as a control since, by giving credit, they would be able to monitor the activities of the company to determine whether the company is being able to repay its debt obligations. In this case, Easterbrook (1984) argued that since the credit institutions are actually monitoring the firm, shareholders accept to pay higher tax rates as they do not incur or incur less costs in monitoring the activities of the managers to ensure that firm value is being maximised. On the other hand, with such monitoring, the firm will have to produce positive cash flows thereby generating profits. Hence it can be said that dividend payout not only reduce the agency problem but also convey some information about future earnings.

7. Bird-in-Hand Theory

This theory simply explains why a firm should pay dividends to its shareholders. Gordon (1963) states that shareholders prefer cash dividends. Moreover when making dividend payouts, the firm gets a higher rating from rating agencies as compared to a firm not making any dividend payout. With a better rating, the firm will be able to raise finance more easily from capital markets since credit institutions will be willing to give loans to the firm since the payout of dividends shows that the firm has the ability to meet its obligations. Moreover, in some cases, the firm will be able to borrow at preferential rates and enjoy better facilities. Gordon (1963) further argues that firms making dividend payouts tend to have an increase in the value of the firm.

On the other hand, Bhattacharya (1979) explains that there is a certain level of risk which is associated with dividends. This risk is based on the micro and macro environment of the firm; that is the business line the firm operates, the location of the business, labour power, human capital, competitive forces, etc. The risk adjusted discount rate takes into account this risk.

8. Clientele Effect

The clientele effect is a theory which describes the intention of investors to invest in firms which suits their factor endowments; among the most common ones is their tax circumstance. It can be said that there is an inverse relationship between stock returns (dividends) and tax levels. For instance, an investor in a high tax bracket would prefer to invest in stock giving a low rate of return so as to pay less tax. On the other hand, an investor in a low tax bracket would definitely invest in stocks with higher returns as he currently does not have a large tax liability. Pettit (1977) showed that older investors (retired persons) were more likely to hold high dividend shares because they pay lower income tax. In this case we call it the tax clientele effect. Hence the clientele effect refers to firms making their dividend policy decision based the customers they would like to attach to themselves (Litzenberger and Ramasawmy, 1979).

9. Share Repurchase

Share repurchasing can arguably be seen as signalling mechanism. Vermaelen (1981) studied the information that share repurchasing conveyed and he has concluded that the information conveyed by increase or decrease in dividend payout does not carry the same information as a share repurchasing. Commonly, the management of a firm can choose to make a stock repurchase as a result of lack of profitable investment opportunities. As a result, if the firm is has not been able to invest in worthwhile projects with positive NPV, it can be expected that there will be a fall in future expected profits and this information is given by share repurchasing. Also, share repurchasing can have an adverse impact on the company as this might lead to a change in the capital structure. If we assume that a firm has bought back all its shares, in this case, the company will be fully financed through debt. This will dramatically increase the leverage thereby increasing the risk of going bankrupt (Jensen and Meckling, 1976).

10. Conclusion

This paper provides evidence based on past literature that changes in dividend payout convey information to the market about future profits. The paper builds on the irrelevancy propositions and the different theories of dividend policy to show the richness of information contained in dividend payouts. Baker and Powell (1999), through a survey on past literature, identified four possible reasons to explain why firm pay dividends and these are the signalling effects of dividend payout, the reduction of the agency problem, the tax preference of investors which can be related to the clientele effect and the bird-in-hand theory. the review of literature carried out in this paper is in line with Baker and Powell (1999). Taxation gives information about the share purchasing behaviour of investors which is further explained in the clientele effect. The agency theory gives information on how dividends can be used as a method to deal with the principal agent problem to reduce agency costs, thereby leading to an increase in firm value and possible increase in future profits. The signalling effect and share repurchasing gives an indication on the future strategies of the company. If an investor is able to understand the signals, he will eventually be able to maximise his returns. Dividend payout, for several reasons, is very important to investors as well as shareholders to assist them in making their investment decisions.

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