Dividend Policy

Financial Management
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What is Dividend

- Dividend is the part of profit distributed to shareholders
- Dividend to preference shareholders is given at a fixed rate
- Dividend of equity shareholders depends on the dividend policy of the company and the current profits of the firm

What is Dividend Policy

Dividend policy is concerned with taking a decision regarding paying cash dividend in the present or paying an increased dividend at a later stage. The firm could also pay in the form of stock dividends which unlike cash dividends do not provide liquidity to the investors, however, it ensures capital gains to the stockholders. The expectations of dividends by shareholders helps them determine the share value, therefore, dividend policy is a significant decision taken by the financial managers of any company.

Concept

Coming up with a dividend policy is challenging for the directors and financial manager of a company, because different investors have different views on present cash dividends and future capital gains. Another confusion that pops up is regarding the extent of effect of dividends on the share price. Due to this controversial nature of a dividend policy it is often called the dividend puzzle.

- Various models have been developed to help firms analyze and evaluate the perfect dividend policy. There is no agreement between these schools of thought over the relationship between dividends and the value of the share or the wealth of the shareholders in other words.
- One school consists of people like James E. Walter and Myron J. Gordon , who believe that current cash dividends are less risky than future capital gains. Thus, they say that investors prefer those firms which pay regular dividends and such dividends affect the market price of the share. Another school linked to Modigliani and Miller holds that investors don't really choose between future gains and cash dividends

Factors affecting dividend policy

1. Liquidity
2. Fresh Investment Plans
3. Shareholders Expectations
4. Restrictive Contracts
5. Taxation Policy

DIVIDEND POLICY MODELS

To establish relationship between price of share (value of firm)and dividend policy

Two Approaches are :

- Relevance Approach
- Irrelevance Approach

Relevance of dividend policy

- Dividends paid by the firms are viewed positively both by the investors and the firms. The firms which do not pay dividends are rated in oppositely by investors thus affecting the share price. The people who support relevance of dividends clearly state that regular dividends reduce uncertainty of the shareholders i.e. the earnings of the firm is discounted at a lower rate, k_e thereby increasing the market value. However, its exactly opposite in the case of increased uncertainty due to non-payment of dividends.
- Two important models supporting dividend relevance are given by Walter and Gordon

Walter's model

- Walter's model shows the relevance of dividend policy and its bearing on the value of the share.

Assumptions of the Walter model

- Retained earnings are the only source of financing investments in the firm, there is no external finance involved.
- The cost of capital, k_e and the rate of return on investment, r are constant i.e. even if new investments decisions are taken, the risks of the business remains same.
- The firm's life is endless i.e. there is no closing down.
- Basically, the firm's decision to give or not give out dividends depends on whether it has enough opportunities to invest the retain earnings i.e. a strong relationship between investment and dividend decisions is considered.

Model description

- Dividends paid to the shareholders are re-invested by the shareholder further, to get higher returns. This is referred to as the opportunity cost of the firm or the cost of capital, k_e for the firm. Another situation where the firms do not pay out dividends, is when they invest the profits or retained earnings in profitable opportunities to earn returns on such investments. This rate of return r, for the firm must at least be equal to k_e. If this happens then the returns of the firm is equal to the earnings of the shareholders if the dividends were paid.

  Thus :

  If $r>k_e$, the firm should have zero payout and make investments.

  If $r<k_e$, the firm should have 100% payouts and no investment of retained earnings.

  If $r=k_e$, the firm is indifferent between dividends and investments

Walter's formula to calculate the market price per share (P) is:

$$P = D/k + \{(r/k) *(E-D\}/k,$$

where:

P = market price per share
D = dividend per share
E = earning per share
r = rate of return of the firm
k = cost of equity capital of the firm

Gordon's Model

Myron J. Gordon has also supported dividend relevance and believes in regular dividends affecting the share price of the firm

The Assumptions of the Gordon model

- Gordon's assumptions are similar to the ones given by Walter. However, there are two additional assumptions proposed by him :
- The product of retention ratio b and the rate of return r gives us the growth rate of the firm g.
- The cost of capital k_e, is not only constant but greater than the growth rate i.e. $k_e > g$.

Model description : Investor's are risk averse and believe that incomes from dividends are certain rather than incomes from future capital gains, therefore they predict future capital gains to be risky propositions. They discount the future capital gains at a higher rate than the firm's earnings thereby, evaluating a higher value of the share. In short, when retention rate increases, they require a higher discounting rate. Gordon has given a model similar to Walter's where he has given a mathematical formula to determine price of the share.

Gordon's model for calculating price of shares

$P = \{E(1-b)\}/k-g$

where :

p =price of the share
E=Earning per share
k=cost of equity capital
g=growth rate of firm
b= retention ratio
Note : g =b*r where r is the rate of return on investment for the firm

Irrelevance of dividend policy

- The Modigliani and Miller school of thought believes that investors do not state any preference between current dividends and capital gains. They say that dividend policy is irrelevant and is not deterministic of the market value. Therefore, the shareholders are indifferent between the two types of dividends. All they want are high returns either in the form of dividends or in the form of re-investment of retained earnings by the firm. There are two conditions discussed in relation to this approach :
- decisions regarding financing and investments are made and do not change with respect to the amounts of dividends received.
- when an investor buys and sells shares without facing any transaction costs and firms issue shares without facing any floatation cost, it is termed as a perfect capital market.
- Two important theories discussed relating to the irrelevance approach, the residuals theory and the Modigliani and Miller approach.

Residuals theory of dividends

- One of the assumptions of this theory is that external financing to re-invest is either not available, or that it is too costly to invest in any profitable opportunity. If the firm has good investment opportunity available then, they'll invest the retained earnings and reduce the dividends or give no dividends at all. If no such opportunity exists, the firm will pay out dividends.
- If a firm has to issue securities to finance an investment, the existence of floatation costs needs a larger amount of securities to be issued. Deciding how much dividends to be paid is not the concern here, in fact the firm has to decide how much profits to be retained and the rest can then be distributed as dividends. This residual decision is distributed in three steps:

- evaluating the available investment opportunities to determine capital expenditures.
- evaluating the amount of equity finance that would be needed for the investment, basically having an optimum finance mix.
- cost of retained earnings<cost of new equity capital, thus the retained profits are used to finance investments. If there is a surplus after the financing then there is distribution of dividends.

Modigliani-Miller theorem

- The Modigliani–Miller theorem states that the division of retained earnings between new investment and dividends do not influence the value of the firm. It is the investment pattern and consequently the earnings of the firm which affect the share price or the value of the firm.

Assumptions of the MM theorem

- The MM approach has taken into consideration the following assumptions:
- There is a rational behavior by the investors and there exists perfect capital markets.
- Investors have free information available for them.
- No time lag and transaction costs exist.
- Securities can be split into any parts i.e. they are divisible
- No taxes and floatation costs.
- The investment decisions are taken firmly and the profits are therefore known with certainty. The dividend policy does not affect these decisions.

Model description

- The dividend irrelevancy in this model exists because shareholders are indifferent between paying out dividends and investing retained earnings in new opportunities. The firm finances opportunities either through retained earnings or by issuing new shares to raise capital. The amount used up in paying out dividends is replaced by the new capital raised through issuing shares. This will affect the value of the firm in an opposite ways. The increase in the value because of the dividends will be offset by the decrease in the value for new capital raising.

Formula used by MM apporach calculate current price of share is :

$$P0 = \frac{D1 + P1}{1 + ke}$$

Where

P0= current market price of share

D1=dividend at he end of current year

P1=price at the end of current year

Ke =cost od equity capital

Along with this the students are provided with a PDF for comprehensive understanding of the topic