## Dividends and Dividend Policy

## Chapter 16

## A) Cash Dividends and Dividend Payment:

A dividend is a cash payment, made to stockholders, from earnings. If the payment is from sources other than current earnings, it is called a distribution or a liquidating dividend. The basic types of cash dividend are:

1) Regular cash dividend
2) Extra dividend
3) Liquidating dividends

Typically, a corporation pays a regular cash dividend four times a year. An extra cash dividend may also be paid periodically. Such a dividend is identified extra, so that shareholders realize the extra dividend may not continue in the future. A liquidating dividend results from the liquidation of all or part of the corporation.

## B) Standard Method of Cash dividend Payment:

A cash dividend can be expressed as either dollars per share (dividends per share), a percentage of market price (dividend yield), or as a percentage of earnings per share (dividend payout).

Dividend Payment: A chronology:
The chronology of a dividend payment involves the following four dates:

1) The declaration date, the ex-dividend date, the date of record, and the date of payment. On the declaration date, the board of directors announces the amount of the dividend and the date of record. The dividend is paid to shareholders who are holders of record as of the date of record. The dividend cheques are mailed to these owners on the date of payment.

If you buy the stock the day before the date of record, this fact would not be reflected in the corporation's records on the date of record because of processing delays; the previous owner would be the shareholder of record. To avoid inconsistencies created by such delays, brokerage firms set the exdividend date four business days prior to the record date. Anyone purchasing a share on or after the ex-dividend date does not receive the dividend. Prior to the ex-dividend date, the stock is said to be trading cum dividend (with dividend); subsequently, it trades ex dividend.

## C) Does Dividend Policy Matter

A firm's dividend policy determines the pattern of dividend payment over time. A firm can pay a large percentage of earnings as dividends, or choose to pay a small percentage and reinvest the rest in
other projects. The issue of dividend policy concerns the question of whether one or the other of these approaches is more advantageous to the stockholders.

## A illustration of the irrelevance of dividend policy

The basic argument for dividend irrelevance can be illustrated with a single numerical example. consider a corporation with one hundred shares outstanding with will have a certain cash flow of $\$ 110$ at date 1, and will liquidate for a certain $\$ 242$ at date 2. If $10 \%$ is the required rate of return, then the total value of the firm is:
$\$ 110 / 1.10+\$ 242 /(1.10)^{2}=\$ 300$
Each share is worth $(\$ 300 / 100)=\$ 3$
One possible dividend policy is to pay $\$ 110$ at date 1 and $\$ 242$ at date 2 .
Suppose that, instead the stockholders prefer a $\$ 200$ dividend at date 1 . In order to pay this amount, the firm could sell $\$ 90$ worth of new stock at year's end and pay out a total of $\$ 200$. What dividend would be paid to the old stockholders at date 2 .

There is $\$ 242$ available at date 2 . The new stockholder require a $10 \%$ return, so they would have to be paid $(\$ 90 \times 1.10)=\$ 99$, leaving $(\$ 242-\$ 99)=\$ 143$ for the old stockholders. The present value of the dividends the old stockholders receive is:
$\$ 200 / 1.10+\$ 143 /(1.10)^{2}=\$ 300$
The present value of this dividend policy is therefore identical to the present value of the previous policy. In fact, no matter how the available cash is paid out as dividends, the present value is always $\$ 300$.

## Homemade dividends

Suppose you own ten shares of stock in the company described above, and the firm has decided to pay out $\$ 110$ and $\$ 242$ at date 1 and date 2 respectively; you will therefore receive $\$ 11$ and $\$ 24.20$, respectively. Also, suppose that you would rather receive $\$ 20$ and $\$ 14.30$ respectively. Given the firm's dividend policy, you can create the cash flows you prefer by selling enough shares at the end of the first year to receive the extra $\$ 9$. In doing so, you forfeit $(\$ 9 \times 1.10)=\$ 9.90$ at date 2 . Thus, you will receive $(\$ 24.20-\$ 9.90)=\$ 14.30$, effectively creating a new dividend policy or homemade dividend.

Some corporations assist their stockholders by offering Automatic dividend reinvestment plans (DRIPs) where the stockholder has the option to automatically reinvest some or all of their cash dividend in shares acquired at a small discount. Investment dealers have also created homemade dividends (or homemade capital gains) called Stripped Common Shares which entitle holders to receive either all
the dividends of one or a group of well known companies which packages any capital gain in the form of a call option. The investor has the right to buy the underlying shares at a fixed price so that the option becomes valuable if the shares appreciate beyond that price.

## D) Real-World Factors Favoring A Low Payout

a) Taxes:

When the marginal tax rate for individuals exceeds that for businesses, investors may prefer businesses to retain earnings rather than pay them out as dividends as a strategy to reduce taxes.

Expected return, dividends, and personal taxes - when dividends are taxes at higher rates than capital gains for individuals, there is an argument that the higher a firm's dividends, the higher its cost of capital (and lower its stock value) to make the after-tax returns equal between firms of the same risk. However, if investors self-select into clienteles on the basis of their tax rates, and the clienteles are satisfied, it is not clear dividend policy affects expected returns.
b) Flotation costs:

Firms that pay high dividends and simultaneously sell stock to fund growth will have higher flotation costs then comparable firms with low payouts.
c) Dividends Restrictions:

Most bond indentures limit the dividends a firm can pay.

## E) Real-World Factors Favoring A High Payout

a) Desire for current income:

Transaction costs may hamper homemade dividends. But the desire for high current income is not universal. If investors self-select into clienteles according to income desires, and the clienteles are satisfied, it is not clear a firm can gain by paying higher dividends.
d) Uncertainty resolution:

Selling stock now also creates a bird in the hand just like a dividend payment. Again, we are back to other things are the same. can paying a higher dividend make a stock more valuable. If a firm must sell more stock or borrow more money to pay a higher dividend now, it must necessarily return less to current stockholders in the future. Finally, the uncertainty over future income, i.e., the firm's business risk, is not changed by its dividend policy.

## c) Tax and legal benefits from high dividends:

There is a 1005 exclusion from taxable income of dividends received by one corporation from another.

## F) Stock Repurchase : An alternative to cash dividends

As an alternative to paying cash dividend, a firm can pay cash to its shareholders by a repurchase of its own stock from the shareholders.

## Cash dividend versus repurchase:

In the absence of taxes and transactions costs, a share repurchase has the same effect on stockholders as a dividend payment of the same dollar amount.

Consider the following firm:
Market Value_Balance_Sheet

| Excess Cash .... $\$ 60000$ | Debt....... $\$ 0$ |
| :--- | :--- |
| Other Assets ... $\$ 240000$ | Equity ..... $\$ 300000$ |
| Total ............ $\$ 300000$ | Total ....... $\$ 300000$ |

The firm has 6000 shares outstanding, so the market value per share is $\$ 300000 / 6000=\$ 50$
The firm is considering the following alternative uses of the excess cash: (1) pay a dividend of $\$ 60000 / 6000=\$ 10$ per share, or (2) repurchase $\$ 60000 / \$ 50=1200$ shares of its common stock. The firm's balance sheet and the impact on an individual stockholder are the same for these two alternatives.

For the first alternative, the firm's balance sheet appears as follows after paying the dividend:

## Market Value Balance Sheet

| Excess Cash ... $\$ 0$ | Debt....... $\$ 0$ |
| :--- | :--- |
| Other Assets .... $\$ 240000$ | Equity ...... $\$ 240000$ |
| Total ........... $\$ 240000$ | Total ....... $\$ 240000$ |

For a stockholder who owns 200 shares of stock, the market value prior to the dividend payment is $(\$ 50 \times 200)=\$ 10000$. After the dividend is paid, each share of stock has a value of $(\$ 240000 / 6000)=$ $\$ 40$.

Consequently, the stockholder who owns 200 shares now owns stock whose value is $(\$ 40 \times 200)=$ $\$ 8000$; in addition, she receives dividends of $(\$ 10 \times 200)=\$ 2000$. The total value of the position is unaffected by the dividend payment.

If instead the firm repurchases 1200 shares, the firm's market value balance sheet is identical to its appearance after the dividend payment. There would be $(6000-1200)=4800$ shares outstanding, each with a market value of $(\$ 240000 / 4800)=\$ 50$. Assuming stockholders keep their shares, the market value of their position is unchanged after the same share repurchase.

The investor has 200 shares with a total value of $(\$ 50 \times 200)=\$ 10000$. Selling all 200 shares would also leave the investor with $\$ 10000$ cash. Alternatively, the investor could sell a portion of the shares,
creating homemade dividends. If 40 shares were sold, for example, the homemade dividends would be $(\$ 50 \times 40)=\$ 2000$. The remaining stock would be worth $(\$ 50 \times 160)=\$ 8000$. In other words, the value of the position is still $\$ 10000$.

## G) Stock Dividends and Stock Splits

A stock dividend is paid in the form of additional shares of stock. A $10 \%$ stock dividend, for example, increases by $10 \%$ the number of shares held by each stockholder. Suppose an individual owns 200 shares of the common stock of a firm which has 1000 shares outstanding. If a $10 \%$ stock dividend is declared, this stockholder receives an additional (. 10 times 200) $=20$ shares. Since all stockholders receive the same $10 \%$ stock dividend, the number of shares outstanding increases to (1.10 times 1000) $=1100$. Stockholders who owned 200 shares prior to the $10 \%$ stock dividend, owned $(200 / 1000)=20 \%$ of the outstanding shares; after the stock dividend, they still own $(220 / 1100)=20 \%$ of the outstanding shares. The total value of the firm does not change when a stock dividend is declared; since there are no cash flows associated with a stock dividend, the total value of the firm is not affected by a stock dividend. Consequently, the investor who owned $20 \%$ of the firm prior to the stock dividend still owns $20 \%$ of the firm after the stock dividend; since the value of the firm is unchanged, the value of the individual's holdings is also unchanged by the stock dividend.

A stock split is essentially equivalent to a stock dividend, except that a split is expressed as a ratio rather than as a percentage. Under the TSE, the maximum stock dividend is $25 \%$, anything larger is considered a stock split. For example, a five-for-four stock split gives a stockholder five shares for every four owned prior to the split. Since a five-for-four stock split results in the distribution of one additional share for every four the stockholder owns, it is equivalent to a $(1 / 4)=25 \%$ stock dividend. Stock splits and stock dividend are, for the most part, just paper transactions which do not change either the total value of the firm nor the value of the stockholder's position.

## Value of stock splits and stock dividends

Consider the earlier example of a $10 \%$ stock dividend declared by a firm with 1000 shares outstanding. If the market value of a share prior to the stock dividend is $\$ 22$, then the total market value of the firm's equity is $(\$ 22 \times 1000)=\$ 22000$. After the $10 \%$ stock dividend, the 1100 outstanding shares must have the same market value because the value of the firm can not change by simply sending pieces of paper (additional stock certificates) to the stockholders. Therefore, each of the 1100 shares must now have a market value of $\$ 20$, so the total value of the firm is still $(\$ 20 \times 1100)=\$ 22000$. Consider, also, the stockholder with 200 shares prior to the stock dividend; the value is $(\$ 22 \times 200)=\$ 4400$. After the stock
dividend, 220 shares with a total value of $(\$ 20 \times 220)=\$ 4400$; clearly, the value of the holdings has not changed.

A reverse split, when a firm's number of shares outstanding is reduced. In a one-for-three reverse split, each investor exchanges three old shares for one new shares.

## Further Notes on Dividend Policy

## A) Ways of Returning Cash to Stockholders

Dividends have traditionally been considered the primary approach for publicly traded firms to return cash or assets to their stockholders, but they comprise only one of the many ways available to the firm to accomplish this objective. Firms can return cash to stockholders through equity repurchases, by which the cash is used to buy back outstanding stock in the firm and reduces the number of shares outstanding, or through forward contracts, by which the firm commits to buying back its own stock in future periods at a fixed price.

## 1) The process of Equity repurchase:

That depends on whether the firm intends to repurchase stock in the open market, at the prevailing market price, or to make a more formal tender offer for its shares. There are three widely used approaches to buying back equity
a) Repurchase Tender Offers:that is when a firm specifies a price at which it will buy back shares, the number of shares it intends to buy and the period of time of which it will keep the offer open, and invites stockholders to submit their shares for purchases.
b) Open Market purchases: this is an offer to buy shares in the market at the prevailing market price.
c) Privately Negotiated Repurchases: that is when firms buy back shares from a large stockholder in the company at a negotiated price.

## Reasons to use equity repurchases:

a) Unlike regular dividends, equity repurchases are viewed primarily as one-time returns of cash. Firms with excess cash flows, which are uncertain about their ability to continue generating these cash flows in future periods, should repurchase stocks rather than pay dividends.
b) Equity repurchases may offer tax advantages to stockholders, since dividends are taxed at ordinary tax rates, whereas the price appreciation that flows from equity repurchases is taxed at capital gains rate.
c) Equity shares may provide a way of increasing insider control in firms, for they reduce the number of shares outstanding.
d) Finally, equity repurchases may provide firms with a way of supporting their stock prices, when they are under assault. For instance, after the crash of 1987, many firms initiated stock buyback plans to keep stock prices from falling further.

## 2) Forward contracts to buy equity

Firms can enter into a forward contract to acquire stock at fixed price. Because these contracts are legal commitments the firm is forced to repurchase the shares at that price. The market will view the action as a commitment and react accordingly.

The advantage of forward contract is that unlike the regular equity repurchases in which the number of shares that will be bought back in future periods is unknown because the stock price will be different, the number of shares that will be bought back in a forward contract is known because the purchases are at a fixed price.

This certainty comes at a price, however. By agreeing to buy back shares at a fixed price, the firm increases its risk exposure, because it commits to paying this price even if the stock price drops. Although it may gain an offsetting advantage if stock prices go up, the commitment to pay a higher price to buy stocks when stock prices are lower can be a burden, especially if the stock price dropped as a consequence of lower earnings or cash flows.

## 3) Stock Dividends and Stock Splits

A stock dividend involves issuing to existing stockholders additional shares in the company at not cost. Thus, in a $5 \%$ stock dividend, every existing stockholder in the firm receives new shares equivalent to $5 \%$ of the number of shares currently owned. Many firms use stock dividends to supplement cash dividends.

A stock split, is just a large stock dividend, for it too increases the number of shares outstanding, but it does so by a much larger factor. Thus, a firm may have a two-for-one stock split, whereby the number of shares in the firm is doubled.

The mechanics of a stock split or dividend are simple: the firm issues additional shares in the firm and distributes them to existing stockholders in proportion to their original holdings in the firm. Thus, stock splits and dividends should not alter the proportional ownership of the firm on the part of the existing stockholders.

Because stock dividends and stock splits have no real effect on cash flows but change only the number of shares outstanding, they should not affect the cash flows of the firm, and thus should not increase the value of equity, in the aggregate. Rather, the share price will decline to reflect the increased number of shares.

If the effect on stockholders wealth is in fact neutral, why do firms pay stock dividends or announce stock splits in the first place? Some firms view stock dividends as a way of fooling stockholders: thus a firm that is in trouble and unable to pay its regular cash dividend may announce that is "substituting" an equivalent stock dividend. Other firms view stock dividends as a supplement to cash dividends and use them in periods in which they have posted good results.

An additional reason given especially for stock splits is the desire of some firms to keep their stock
prices within specified trading range. Consequently, if the stock price rises above the range, a stock split may be used to bring the price back down. The rationale behind keeping the price within a range, is that some firms that do have a desired range argue that, given restrictions on buying shares in even lots (e.g., 100 shares), a price that is too high reduces the potential market for the stock to wealthier investors and institutional investors. Bringing the price down increases the number of potential buyers for the stock, leading to a higher stock price.

## 4) Divestitures, Spin Offs, Split Ups, and Split Offs

Those are all methods or options for returning non-cash assets to stockholders. Consider a company with operations in multiple business lines, some of which are being systematically undervalued; the whole firm is therefore worth less than its parts. This firm has four options:
a) Divest the undervalued business and pay a liquidating dividend: One way in which this firm can deal with its predicatment is through divestiture, which involves selling those parts that are being undervalued by the market for their true market value and then paying out the cash to stockholders in the form either of equity repurchases or dividends.
b) Spin off the undervalued businesses: An alternative is to spin off or create a new class of shares in the undervalued business line and to distribute these shares to the existing stockholders. Because the shares are distributed in proportion to the existing share ownership, it does not alter the proportional ownership in the firm
c) Split up the entire firm: In a split up, the firm splits itself off into different business lines, distributes these shares to the original stockholders in proportion to their original ownership in the firm, and then ceases to exist.
d) Split off the undervalued business: A split off is similar to a spinoff, insofar as it creates new shares in the undervalued business line. In this case, however, the existing stockholders are given the option to exchange their parent company stock for these new shares, which changes the proportional ownership in the new structure.

In the case of divestiture, the firm sells the assets to the higher bidder and then uses the cash generated by the sale to pay a special dividend or to buy back stock. In the case of spin offs and split ups, the existing shareholders receive the new shares of stock in proportion to their existing holdings, whereas in the case of split offs, the firm offers stockholders the option to convert their existing shares for the new shares in the subsidiary.

The broad determinants of which approach a firm should use to return cash to stockholders include the tax implications of each approach, the effect on a firm's flexibility on future actions, and the signaling benefits (or price effect) that may accrue from each of the actions. In addition, firms often consider how
ratings agencies and analysts will view these actions, and the restrictions imposed by existing bond covenants in making their final decisions.

## B) Payment Procedures

Dividends are normally paid quarterly, and, if conditions permit, the dividend is increased once each year. For example, Katz Corporation paid $\$ 0.50$ per quarter in 1997 , or at an annual rate of $\$ 2.00$. In common financial parlance, we say that in 1997 Katz's regular quarterly dividend was $\$ 0.50$, and its annual dividend was $\$ 2.00$. In late 1997, Katz's board of directors met, reviewed projections for 1998, and decided to keep the 1998 dividend at $\$ 2.00$. The directors announced the $\$ 2.00$ rate, so stockholders could count on receiving it unless the company experiences unanticipated operating problems.

The actual payment procedure is as follows:
a) Declaration date. On the declaration date - say, on November 10 - the directors meet and declare the regular dividend, issuing a statement similar to the following: "On November 10, 1997, the directors of Katz Corporation met and declared the regular quarterly dividend of 50 cents per share, payable to holders of record on December 12, payment to be made on January 2, 1998". For accounting purposes, the declared dividend becomes an actual liability on the declaration date. If a balance sheet were constructed, the amount ( $0.50 \$$ ) times (Number of shares outstanding) would appear as a current liability and retained earnings would be reduced by a like amount.
b) Holder-of-record date. At the close of business on the holder-of-record date, December 12, the company closes its stock transfer books and makes up a list of shareholders as of that date. If Katz Corporation is notified of the sale before 5.PM on December 12, then the new owner receives the dividend. However, if notification is received on or after December 13, the previous owner gets the dividend check.
c) Ex-dividend date. Suppose that Jean Buyer buys 100 shares of stock from John Seller on December 8. Will the company be notified of the transfer in time to list Buyer as the new owner and thus pay the dividend to her?. To avoid conflict, the securities industry has set up a convention under which the right to the dividend remains with the stock until four business days prior to the holder-ofrecord date; on the fourth day before that date, the right to the dividend no longer goes with the shares. The date when the right to the dividend leaves the stock is called the ex-dividend date. In this case, the ex-dividend date is four days prior to December 12, or December 8 .

Dividend goes with stock- $=============$ December 7 Buyer would receive the dividend

[^0]December 9
December 10
December 11
December $12========$ Holder-of-record date
Therefore, if Buyer is to receive the dividend, he must buy the stock on or before December 7. If he buys it on December 8 or later, Seller will receive the dividend because he will be the official holder of record.

Katz's dividend amounts to $\$ 0.50$, so the ex-dividend date is important. Barring fluctuations in the stock market, one would normally expect the price of a stock to drop by approximately the amount of the dividend on the ex-dividend date. Thus, if Katz closed at $\$ 30(1 / 2)$ on December 7, it would probably open at about $\$ 30$ on December 8 .
d) Payment Date: the company actually mails the checks to the holders of record on January 2, the payment date.

## C) Summary of factors influencing dividend policy

Factors that affect the dividend policy may be grouped into four categories (1) constraints on dividends payments, (2) investment opportunities, (3) availability and cost of alternative sources of capital, and (4) effects of dividend policy on the cost of capital.

1. Bond indentures: debt contracts often limit dividends payment to earnings generated after the loan was granted.
2. Preferred stock restrictions: typically, common dividends cannot be paid if the company has omitted its preferred dividend. The preferred rearranges must be satisfied before common dividends can be resumed.
3. Impairment of capital rule: Dividend payments cannot exceed the balance sheet item "retained earnings". This legal restriction, known as the impairment of capital rule, is designed to protect creditors. Without the rule, a company that is in trouble might distribute most of its assets to stockholders and leave its debtholders out in the cold.
4. Availability of cash: cash dividends can be paid only with cash. Thus, a shortage of cash in the bank can restrict dividend payments, however, the availability to borrow can offset this factor.
5. Possibility of accelerating or delaying projects: the ability to accelerate or to postpone projects will permit a firm to adhere more closely to a stable dividend policy.
6. Cost of selling new stock: If a firm needs to finance a given level of investment, it can obtain equity by retaining earnings or by issuing new common stock. If flotation cost are high, that will increase the cost of capital, making it better to set a low pay-out ratio and to finance through retention rather
than through sale of new common stock. On the other hand, a high dividend payout ratio is more feasible for a firm whose flotation costs are low.
7. Ability to substitute debt for equity: A firm can finance a given level of investment with either debt or equity. If the firm can adjust its debt ratio without raising costs sharply, it can pay the expected dividend, even if earnings fluctuate, by using a variable debt ratio.
8. Control: If management is concerned about maintaining control, it may be reluctant to sell new stock, hence the company may retain more earnings than it otherwise would. However, if stockholders want higher dividends and a proxy fight looms, then the dividend will be increased.

[^0]:    Ex-dividend date $==================$ December 8 Seller would receive the dividend

