

Dividends and Payout Policy

Can the wrong dividend policy bankrupt a firm? The story about Studebaker Corporation suggests that dividend policy can play a role in a company's downfall.

The automobile industry was quite prosperous in the 1920s, but was hit hard by the depression. Studebaker Corporation, which was relatively weak to begin with, suffered more than other automotive manufacturers. Part of the reason for its financial problems was the belief by the firm's president that dividends alone could increase the value of the stock. He implemented a dividend policy that increased the dividend payout ratio from 43 percent in the early 1920s to 91 percent in 1929. However, the dividend was held constant in 1930 and 1931 even as sales and earnings decreased. This led to a payout ratio of 500 percent(!) in 1930 and 350 percent in 1931. In 1932, the company lost \$8.7 million, but still paid \$1 million in dividends! The firm's financial health was damaged significantly by the generous dividend policy and filed for reorganization in March, 1933. Tragically, the firm's president took it very personally and shot himself three months later.

Learning Objectives

- Understand dividend types and how they are paid
- Understand the issues surrounding dividend policy decisions
- Understand the difference between cash and stock dividends
- Understand why share repurchases are an alternative to dividends

Cash Dividends and Dividend Payment

Cash Dividends

- Regular cash dividend – cash payments made directly to stockholders, usually each quarter
- Extra cash dividend – indication that the “extra” amount may not be repeated in the future
- Special cash dividend – similar to extra dividend, but definitely will not be repeated
- Liquidating dividend – some or all of the business has been sold

Cash dividends reduce cash and retained earnings (and liquidating dividends may also reduce paid-in capital)

Standard Method of Cash Dividend Payment

The Board of Directors declares dividends, after which the dividends become a liability of the firm.

Dividend Payment Chronology

- Declaration Date – Board declares the dividend, and it becomes a liability of the firm
- Ex-dividend Date
 - Occurs two business days before date of record
 - If you buy stock on or after this date, you will not receive the dividend
 - Stock price generally drops by about the amount of the dividend
- Date of Record – Holders of record are determined, and they will receive the dividend payment
- Date of Payment – checks are mailed

The ex-dividend date went from four business days prior to the record date to two in June 1995 as a result of a change in settlement requirements.

Declaration date: The date on which the board of directors passes a resolution to pay a dividend.

On January 15, the board of directors passes a resolution to pay a dividend of \$1 per share on February 16 to all holders of record as of January 30.

Ex-dividend date: The date two business days before the date of record, establishing those individuals entitled to a dividend.

To make sure that dividend checks go to the right people, brokerage firms and stock exchanges establish an ex-dividend date. This date is two business days before the date of record (discussed next). If you buy the stock before this date, you are entitled to the dividend. If you buy on this date or after, the previous owner will get the dividend.

Wednesday, January 28, is the ex-dividend date. Before this date, the stock is said to trade “with dividend” or “cum dividend.” Afterward, the stock trades “ex dividend.”

The ex-dividend date convention removes any ambiguity about who is entitled to the dividend. Because the dividend is valuable, the stock price will be affected when the stock goes “ex.” We examine this effect in a moment.

Date of record: The date by which a holder must be on record to be designated to receive a dividend.

Based on its records, the corporation prepares a list on January 30 of all individuals believed to be stockholders. These are the *holders of record*, and January 30 is the date of record (or record date). The word *believed* is important here. If you buy the stock just before this date, the corporation's records may not reflect that fact because of mailing or other delays. Without some modification, some of the dividend checks will get mailed to the wrong people. This is the reason for the ex-dividend day convention.

Date of payment: The date on which the dividend checks are mailed.

The dividend checks are mailed on February 16.

Example

The board of directors of Piquet Inc. has declared a dividend of \$1.00 per share payable on Tuesday, May 30, to shareholders of record as of Tuesday, May 9. Shylock buys 100 shares of Piquet on Tuesday, May 2, for \$150 per share. What is the ex date? Describe the events that will occur with regard to the cash dividend and the stock price.

The ex date is two business days before the date of record, Tuesday, May 9; so the stock will go ex on Friday, May 5. Shylock buys the stock on Tuesday, May 2, so Shylock purchases the stock cum dividend. In other words, Shylock will get $\$1.00 \times 100 = \100 in dividends. The check will be mailed on Tuesday, May 30. Just before the stock does go ex on Friday, its value will drop overnight by about \$1.00 per share.

Would it be advantageous to buy a stock on the day before the ex-dividend date. If you bought the stock prior to the ex-dividend date, you would pay \$10 per share. This would entitle you to receive the \$1 dividend, which will be mailed on the payment date. What is the value of your investment after the stock goes ex-dividend? You have the \$1 dividend plus a share of stock that is now worth \$9. In a perfect world, this would result in a no-arbitrage opportunity. However, you would owe taxes on the dividend received. Consequently, if the stock price falls by the full amount of the dividend, you are worse off because you will have the \$1 dividend + \$9 for the stock – taxes paid on the dividend < \$10. Therefore, if the marginal investor is in a positive tax bracket (which is always the case), then the stock price should fall by less than the dividend amount to compensate the investor for the taxes that must be paid on the dividend.

It was widely reported that in 1988, nearly 13% of the daily average trading volume on the NYSE was attributable to the actions of investors using dividend capture strategies. This involves purchasing a high-dividend stock just before it goes ex-dividend and selling it soon afterwards. If the price of the stock falls by less than the amount of the dividend, and if the purchaser's marginal tax rate is low enough, the strategy represents a real-world arbitrage opportunity. This opportunity derives from the differential tax treatment that investors face. Japanese insurance firms, which were restricted to paying dividends from current income, have engaged heavily in dividend capture strategies since they do not face the same tax structure that we face in the U.S.

Does Dividend Policy Matter?

- Dividends matter – the value of the stock is based on the present value of expected future dividends
- Dividend policy may not matter
 - Dividend policy is the decision to pay dividends versus retaining funds to reinvest in the firm
 - In theory, if the firm reinvests capital now, it will grow and can pay higher dividends in the future

The idea that dividend policy (as opposed to dividends) is irrelevant is difficult for many students to swallow. After all, we spent a whole chapter talking about how the value of the stock is the present value of expected future dividends. And intuitively, they know that higher dividends will make a firm more valuable, all else equal. The difficult part is understanding that “all else equal” means that higher dividends today cannot impact expected dividends in the future, investments, financing or anything else. If we could increase dividends without changing anything else, then the firm would increase in value. However, there is a trade-off between paying higher dividends and doing other things in the firm. The irrelevance argument says that this trade-off is essentially a zero-sum game and that choosing one dividend policy over another will not impact the stock price.

An Illustration of the Irrelevance of Dividend Policy

Consider a firm that can pay out dividends of \$10,000 per year for each of the next two years or can pay \$9,000 this year, reinvest the other \$1,000 into the firm and then pay \$11,120 next year. Investors require a 12% return.

Market Value with constant dividend = \$16,900.51

Market Value with reinvestment = \$16,900.51

If the company will earn the required return, then it doesn't matter when it pays the dividends

Assuming that the second dividend is a liquidating dividend and the firm ceases to exist after period 2:

$$PV = 10,000 / 1.12 + 10,000 / 1.12^2 = 16,900.51$$

$$PV = 9,000 / 1.12 + 11,120 / 1.12^2 = 16,900.51$$

Recall the dividend growth model: $P_0 = D_1 / (R_E - g)$. In the absence of market imperfections, such as taxes, transaction costs and information asymmetry, it can be shown that an increase in the future dividend, D_1 , will reduce earnings retention and reinvestment. This will reduce the growth rate, g . Therefore, both the numerator and the denominator increase and the net effect on P_0 is zero.

Homemade Dividends

Homemade dividends – selling shares in the appropriate proportion to create an equivalent cash flow to receiving the dividend stream you want. If you receive dividends that you don't want, you can purchase additional shares.

Dividend reinvestment plans (DRIPS) allow investors to reinvest dividend income back into the issuing company without paying commissions. Many plans also allow shareholders to buy additional shares directly from the company, often on a set schedule. This again avoids commissions, although in some cases you pay a small service fee. You are still liable for any taxes owed on the dividend payments. This is one way for an investor to use dollar cost

averaging when investing in individual stocks. Some plans even allow you to buy at below market prices.

A Test

- True or False: Dividends are irrelevant (False)
- True or False: Dividend policy is irrelevant (True – absent market imperfections, and maybe even with market imperfections)
- It is important to understand that the only thing that can make dividend policy relevant is if there is some market imperfection that affects investors' desire for dividends now versus later.

Some Real-World Factors Favoring a Low Dividend Payout

Why might a low payout be desirable?

Taxes

Investors that are in high marginal tax brackets might prefer lower dividend payouts. If the firm reinvests the capital back into positive NPV investments, then this should lead to an increase in the stock price. The investor can then sell the stock when she chooses and pay capital gains taxes at that time. Taxes must be paid on dividends immediately, and even though qualified dividends are currently taxed at the same rate as capital gains, the effective tax rate is higher because of the timing issue.

Flotation Costs

If a firm has a high dividend payout, then it will be using its cash to pay dividends instead of investing in positive NPV projects. If the firm has positive NPV projects available, it will need to go to the capital market to raise money for the projects. There are fees and other costs (flotation costs) associated with issuing new securities. If the company had paid a lower dividend and used the cash on hand for projects, it could have avoided at least some of the flotation costs.

Dividend Restrictions

Bond indentures often contain a provision that limits the level of dividend payments

There is a conflict of interest between stockholders and bondholders. As a result, bond indentures contain restrictive covenants to prevent the transfer of wealth from bondholders to stockholders. Dividend restrictions are one of the most common restrictive covenants. They normally require that dividends be forgone when net working capital falls below a certain level or that dividends only be paid out of net income, not retained earnings that existed before the bond agreement was signed.

Some Real-World Factors Favoring a High Payout

Desire for Current Income

Individuals that want current income, i.e., retirees, can either invest in companies that have high dividend payouts or they can sell shares of stock. An advantage to dividends is that you don't have to pay commission.

Trust funds and endowments may prefer current income because they may be restricted from selling stock to meet expenses if it will reduce the fund below the initial principal amount.

- Uncertainty resolution – no guarantee that the higher future dividends will materialize

A fascinating real-world example of the desire for increased dividend payout can be found in Kirk Kerkorian's battle with the management at Chrysler. In late 1994, Mr. Kerkorian demanded that Chrysler use its cash hoard (about \$6.6 billion at the time) to increase the cash dividend on common stock and to institute a stock repurchase program. The management of Chrysler contended that, in the interest of prudent management, they were amassing cash with which to ride out the next cyclical downturn. Unhappy with Chrysler's response, Mr. Kerkorian offered \$55 per share (nearly \$23 billion total) to take over Chrysler. This bid ultimately failed, but Chrysler's management did raise the dividend. Incidentally, Ford and GM subsequently found it necessary to publicly defend their large cash positions in the period after the Chrysler takeover bid.

Tax and Other Benefits from High Dividends

Corporate investors –at least 70% of dividends received from other corporations does not have to be included in taxable income

Tax-exempt investors – tax-exempt investors do not care about the differential tax treatment between dividends and capital gains. And, in many cases, tax-exempt institutions have a fiduciary responsibility to invest money prudently. The courts have found that it is not prudent to invest in firms without an established dividend policy

A Resolution of Real-World Factors?

- Asymmetric information – managers have more information about the health of the company than investors
- Changes in dividends convey information
- Dividend increases
- Management believes it can be sustained
- Expectation of higher future dividends, increasing present value
- Signal of a healthy, growing firm
- Dividend decreases
- Management believes it can no longer sustain the current level of dividends
- Expectation of lower dividends indefinitely; decreasing present value

- Signal of a firm that is having financial difficulties

Information Content of Dividends

Changes in dividends may be important signals if the market anticipates that the change will be maintained through time. If the market believes that the change is just a rearrangement of dividends through time, then the impact will be small. The reaction to the information contained in dividend changes is called the information content effect.

Selling stock to raise funds for dividends also creates a “bird-in-the-hand” situation for the shareholder. Again, we are back to “all else equal.” Can 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 return less to the stockholder in the future. The uncertainty over future income (the firm’s business risk) is not affected by dividend policy.

The Clientele Effect

The clientele effect says that dividend policy is irrelevant because investors that prefer high payouts will invest in firms that have high payouts, and investors that prefer low payouts will invest in firms with low payouts. If a firm changes its payout policy, it will not affect the stock value; it will just end up with a different set of investors. This is true as long as the “market” for dividend policy is in equilibrium. In other words, if there is excess demand for companies with high dividend payouts, then a low payout company may be able to increase its stock value by switching to a high payout policy. This is only possible until the excess demand is met.

- What do you think will happen if a firm changes its policy from a high payout to a low payout?
- What do you think will happen if a firm changes its policy from a low payout to a high payout?

If a firm changes its policy, it will just have different investors. Consequently, dividend policy won’t affect the value of the stock.

- If this is the case, does dividend *policy* matter?

To put the clientele argument into a different light, consider the case of opening a new restaurant. Even though a lot of people like to eat hamburgers and French fries, if McDonald’s already satisfies that clientele, you won’t make a fortune by opening a Burger King next door. In the context of business finance, the moral is that for dividend policy to be relevant, it must meet a currently unmet demand if it is to create value.

The dividend clientele argument suggests that investors that do not need current income will seek low dividend firms (and vice versa). In a similar fashion, many theorists have argued that there is also a clientele for various capital structure policies. Investors in a low tax bracket will prefer highly leveraged firms because the firms are better able to utilize the interest tax shield. While investors in higher tax brackets will borrow on their own and buy firms with less debt. Empirical evidence is mixed; and this may be partially due to the changing nature of the deductibility of interest for individuals.

The dividend yield of DJIA firms fell for many years, although it is up slightly since 2001. Some have suggested that the declining dividend yield was not solely attributable to the market's rise; it might also have been due to declining dividend payouts. For example, in a 1987 article in the Journal of Economic Perspectives, Laurie Bagwell and John Shoven suggest that for the 10-year period ending in 1987, dividend payments were being replaced by non-dividend cash payments. These non-dividend cash payments were primarily in the form of cash paid out in acquisitions and in share repurchases. What could be the reasons for this shift in the policy for returning cash to stockholders? Consider taxes and agency issues. The slight increase in dividend yield during the last couple of years could be due to the change in the taxation of dividends.

Stock Repurchase: An Alternative to Cash Dividends

- Company buys back its own shares of stock
 - Tender offer – company states a purchase price and a desired number of shares
 - Open market – buys stock in the open market
- Similar to a cash dividend in that it returns cash from the firm to the stockholders
- This is another argument for dividend policy irrelevance in the absence of taxes or other imperfections

Cash Dividends versus Repurchase

A firm may choose to buy back outstanding shares instead of paying a cash dividend (or instead of increasing a regular dividend). If we assume no market imperfections, then stockholder wealth is unaffected by the choice between share repurchases and cash dividends.

Real-World Considerations in a Repurchase

- Stock repurchases send a positive signal that management believes the current price is low
- Tender offers send a more positive signal than open market repurchases because the company is stating a specific price
- The stock price often increases when repurchases are announced
- Stock repurchase allows investors to decide if they want the current cash flow and associated tax consequences
- Given our tax structure, repurchases may be more desirable due to the options provided stockholders
- The IRS recognizes this and will not allow a stock repurchase for the sole purpose of allowing investors to avoid taxes

One of the most important market imperfections related to cash dividends versus share repurchases is the differential tax treatment of dividends versus capital gains. When a company does a share repurchase, the investor can choose whether to sell their shares, take the capital gain (loss) and the associated tax consequences. When a company pays dividends, the investor does not have a choice and taxes must be paid immediately.

The IRS understands the tax differences between the two methods for returning cash to stockholders and prohibits stock repurchase plans solely for the purpose of allowing investors to avoid taxes.

Although share repurchases have traditionally been viewed as positive signals from management, not everyone agrees. An article in the November 17, 1997 issue of Forbes magazine suggests that some buybacks are ill-advised.

“In the early 1980s, IBM began a big buyback program. Between 1985 and 1990 it bought back nearly 50 million shares, shrinking its common capitalization by 8%. The buybacks ended with the collapse of IBM’s stock in 1991. Before the decline was over, IBM was down 75% from its high. Why, at a time of huge expansion in the computer industry, didn’t IBM have better uses for its cash?”

The authors go so far as to state that “the [buyback] fad has gotten out of hand” and that, in some cases, buybacks are used to make management “look good for a while.”

A quick search of stock repurchase announcements following the terrorist attacks on September 11 found at least nine companies that specifically cited a desire to support American financial markets and confidence in the long-term prospects of the economy and the company as reasons for the repurchase. Some of these companies were Cisco, E-Trade, and Pfizer. At least fourteen other major companies made repurchase announcements in the week that followed the attacks. These announcements were for new or continuing repurchases without specifically mentioning the attacks or support for the markets. These companies include Intel, Federal Express, and PeopleSoft.

It should be pointed out that distributing cash via share repurchases is desirable from the viewpoint of the investor even in the absence of a capital gains tax differential. Essentially, a repurchase allows the investor to choose whether to take cash now (and incur taxes) or hold on to the stock and benefit from the (unrealized) capital gain. Additionally, empirical evidence indicates that repurchase announcements are often viewed by market participants as favorable signals of future firm prospects and/or as evidence that management believes that shares are undervalued.

“America West Airlines announced that its Board of Directors has authorized the purchase of up to 2.5 million shares of its Class B common stock on the open market as circumstances warrant over the next two years ...” “Following the approval of the stock repurchase program by the company’s Board of Directors earlier today. W. A. Franke, chairman and chief officer said ‘The stock repurchase program reflects our belief that America West stock may be an attractive investment opportunity for the Company and it underscores our commitment to enhancing long-term shareholder value.’

“The shares will be repurchased with cash on hand, but only if and to the extent the Company holds unrestricted cash in excess of \$200 million to ensure that an adequate level of cash and cash equivalents is maintained.”

Share Repurchase and EPS

While EPS rises with a repurchase (there are fewer shares and presumably net income doesn't decrease), the market value of those earnings is the same as with a cash dividend.

What We Know and Do Not Know about Dividends and Payout Policies

- Corporations “smooth” dividends
- Dividends provide information to the market
- Firms should follow a sensible dividend policy:
- Don't forgo positive NPV projects just to pay a dividend
- Avoid issuing stock to pay dividends
- Consider share repurchase when there are few better uses for the cash

Dividends and Dividend Payers

Dividends are large in the aggregate; however, the number of firms that pay a dividend has declined over time. This suggests that dividend payments are concentrated in a relatively small set of (larger, older) firms. This issue remains even after controlling for the increased use of repurchases, although not to the same extent following the tax cut on dividends in 2003.

Corporations Smooth Dividends

Because of the information content of dividend changes, managers may prefer to maintain a more stable dividend policy. This reduces the uncertainty surrounding expected future dividends and should decrease the risk attributed to the cash flows from the stock.

Payouts Provide Information to the Market

In July, 1995, Venture Corporation, a high-volume discount retailer, announced the suspension of its quarterly dividend following a period of poor earnings performance. The price of the stock (which had already fallen over the preceding months) fell by approximately one-third on the day of the announcement. Subsequent quarterly earnings were “disappointing,” and the firm filed for bankruptcy and was liquidated a few years later.

At about the same time, Edison Brothers, also a retailer, announced that its dividend would be reduced in order to “conserve cash for investment opportunities.” The price of the stock fell dramatically, and the dividend was subsequently reduced again about a year later. Eventually the dividend was eliminated, and the firm filed for bankruptcy. In both cases, dividend reductions followed periods of poor earnings performance and were followed by more poor performance. One might say that the “signal” being sent by the dividend cut was completely accurate!

Putting It All Together

This section can be summarized by five primary observations:

- Aggregate payouts (dividends and repurchases) are massive and have increased in absolute terms over the years.
- Dividends are concentrated among a small number of large, mature firms.
- Managers are reluctant to cut dividends, normally doing so only due to firm-specific problems.
- Managers smooth dividends, raising them slowly and incrementally as earnings grow.
- Stock prices react to unanticipated changes in dividends.

Some Survey Evidence on Dividends

Almost 94% of the managers that responded to the survey indicated that they try to avoid reducing the dividends per share.

About 84% of the managers indicate that they try to maintain consistency with historic dividends.

Less than 10% of managers worry about flotation costs.

- Agree or Strongly Agree
 - 93.8% Try to avoid reducing dividends per share
 - 89.6% Try to maintain a smooth dividend from year to year
 - 41.7% Pay dividends to attract investors subject to “prudent man” restrictions
- Important or Very Important
 - 84.1% Maintaining consistency with historic dividend policy
 - 71.9% Stability of future earnings
 - 9.3% Flotation costs to issue new equity

Stock Dividends and Stock Splits

- Pay additional shares of stock instead of cash
- Increases the number of outstanding shares
- Small stock dividend
- Less than 20 to 25%
- If you own 100 shares and the company declared a 10% stock dividend, you would receive an additional 10 shares
- Large stock dividend – more than 20 to 25%

In theory, stock dividends and stock splits are accounting issues and should not impact the value of the firm. Yet, empirical research has documented large stock price gains at the announcement

of a company's decision to issue a stock dividend. Why the apparent discrepancy? A plausible argument is that there exists a signaling effect. You should recognize that the value of the stock dividend is transferred from retained earnings into the common stock and capital in excess of par accounts. Many bond covenants restrict cash dividend payments when retained earnings fall below a minimum level. Only those companies confident of future earnings will be willing to reduce retained earnings through a stock dividend.

Stock dividend – dividend paid in shares of stock rather than in cash. Commonly expressed as a percentage, e.g., a 25% stock dividend means you will receive 1 share for every 4 that you own. As with a cash dividend, the stock price declines proportionally.

Stock split – new outstanding shares issued to existing stockholders, expressed as a ratio, e.g., a 2-for-1 split means you will receive 2 shares for every one that you own. Again, the price drops proportionally. Splits are usually, but not always, larger than dividends and are treated differently for accounting purposes.

Some Details about Stock Splits and Stock Dividends

- Stock dividend – retained earnings transferred to par value and capital accounts
- Stock split – par value adjusted to reflect the split with no effect on retained earnings

Value of Stock Splits and Stock Dividends

Benchmark case – no change in shareholder wealth

Popular trading range – more investors can afford cheaper stocks, so it will increase the value – or so the argument goes

- Stock splits – essentially the same as a stock dividend except expressed as a ratio
- For example, a 2 for 1 stock split is the same as a 100% stock dividend
- Stock price is reduced when the stock splits
- Common explanation for split is to return price to a “more desirable trading range”

Some investors believe that it is desirable to purchase a company's stock prior to the announcement of the stock split. Discuss the accounting treatment of stock splits and show that there is no difference between the stock before and after the split. The cash flows to stockholders do not change and the risk of the stock is unaffected by a stock split, so a stock split should not add value to the firm. However, empirical evidence has indicated that there is unusual stock price behavior around the ex-dividend date for non-taxable stock dividends and stock splits. Grinblatt, Masulis and Titman (Journal of Financial Economics, 1984) documented a 5-day average abnormal return of about two percent surrounding the ex-date. The rationale for this is not fully understood, but it is too large to be due solely to the tax impact.

Reverse Splits

Three popular reasons:

- reduced transaction costs (higher priced stocks have lower commissions on a percentage basis)
- popular trading range – the price has gotten too low and it affects the stock’s liquidity and marketability
- respectability – many people are leery about investing in “penny stocks”

Two technical reasons:

- stock exchanges have minimum listing requirements
- may combine a reverse split and a stock repurchase where the company offers to buy out shareholders that end up owning shares below some minimum number

Anecdotal evidence indicates that the number of reverse splits generally increases in market downturns. The reasoning is that managers of firms whose share price had suffered are more likely to attempt to inflate the price via a reverse split. It is important to note that this is not consistent with an informationally efficient market – by itself, a reverse split is purely cosmetic. It remains to be demonstrated whether the existence of market imperfections and institutional requirements provide an economic rationale for reverse splits.