

dividend policy

Dividends represent the primary means by which invested capital is returned to common stockholders. In this article we summarize the development of academic thinking on dividend policy, focusing on three primary perspectives: (a) the effect of dividend policy on common stock value and firm performance, (b) the determinants of dividend policy, and (c) macroeconomic trends in the propensity of firms to pay dividends.

There are two major ways in which a firm can distribute cash to its common stockholders. The firm can either declare a cash dividend which it pays to all its common stockholders or it can repurchase shares. Stock repurchases may take the form of registered tender offers, open market purchases, or negotiated repurchases from a large shareholder. In a share repurchase, shareholders may choose not to participate. In contrast, dividends are direct cash payments to shareholders and are distributed on a pro rata basis to all shareholders.

Most firms pay cash dividends on a quarterly basis. The dividend is declared by the firm's board of directors on a date known as the 'announcement date'. The board's announcement states that a cash payment will be made to stockholders who are registered owners on a given 'record date.' The dividend checks are mailed to stockholders on the 'payment date,' which is usually about two weeks after the record date. Stock exchange rules generally dictate that the stock is bought or sold with the dividend until the 'ex-dividend date', which is a few business days before the record date. After the ex-dividend date, the stock is bought and sold without the dividend.

Dividends may be either labelled or unlabelled. Most dividends are not given labels by management. Unlabelled dividends are commonly referred to as 'regular dividends'. When managers label a dividend, the most common label is 'extra'.

An historical perspective

Prior to 1961, academic treatments of dividends were primarily descriptive, as, for example, in Dewing (1953). To the extent that economists considered corporate dividend policy, the commonly held view was that investors preferred high dividend payouts to low payouts (see, for example, Graham and Dodd, 1951). The only question was how much value was attached to dividends relative to capital gains in valuing a security (Gordon, 1959). This view was concisely summarized with the saying that a dividend in the hand is worth two (or some multiple) of those in the bush. The only question was: what is the multiple?

In 1961, scientific inquiry into the motives and consequences of corporate dividend policy shifted dramatically with the publication of a classic paper by Miller and Modigliani. Perhaps the most significant contribution of the Miller and Modigliani paper was to spell out in careful detail the assumptions under which their analysis was to be conducted. The most important of these include the assumptions that the firm's investment policy is fixed and known by investors, that there are no taxes on dividends or capital gains, that individuals can costlessly buy and sell securities, that all investors have the same information, and that investors have the same information as the managers of the firm. With this set of assumptions, Miller and Modigliani demonstrate that a firm's stockholders are indifferent among the set of fea-

sible dividend policies. That is, the value of the firm is independent of the dividend policy adopted by management.

Because investment policy is fixed in the Miller–Modigliani set-up, all feasible dividend policies involve the distribution of the full present value of the firm’s free cash flow (that is, cash flow in excess of that required for investment) and are, therefore, equally valuable. If internally generated funds exceed required investment, the excess must be paid out as a dividend so as to hold investment constant. If internally generated funds are insufficient to fund the fixed level of investment, new shares must be sold. It is also possible for managers to finance a higher dividend with the sale of new shares.

The key insight from the Miller–Modigliani analysis is that investors will be indifferent among the feasible dividend choices because they can costlessly create their own dividend stream by buying and selling shares. If investors demand higher dividends than the amount paid by the firm, they can sell shares and consume the proceeds, leaving themselves in the same position as if the firm had paid a dividend. Alternatively, if shareholders prefer to re-invest rather than to consume, they can choose to purchase new shares with any dividends paid. In this instance, shareholders would be in the same position that they would have been in had no dividends been paid. Thus, regardless of corporate dividend policy, investors can costlessly create their own dividend position. For this reason, stockholders are indifferent to corporate dividend policy, and, as a consequence, the value of the firm is independent of its dividend policy.

After a brief flurry of debate, the Miller–Modigliani irrelevance proposition was essentially universally accepted as correct under their set of assumptions. There nevertheless remained an underlying notion that dividend policy must ‘matter’ given that managers and security analysts spend time worrying about it. If so, and if the Miller–Modigliani proposition is accepted, it must be due to violation of one or more of the Miller–Modigliani assumptions in the real world.

Since the early 1960s, the dividend debate has been lively and interesting. Economists have analysed theoretically whether the relaxation of the various Miller–Modigliani assumptions alters their irrelevance proposition. In addition, economists have analysed the data from several perspectives. First, they have undertaken an array of analyses to determine the effect, if any, of dividend policy on stock value and firm performance. Second, they have sought to identify the characteristics associated with dividend payments (or the lack thereof) by individual firms. Third, they have attempted to characterize macroeconomic trends in the level and propensity of firms to pay dividends, and in the form of the payout. Our discussion of these issues focuses primarily (though not exclusively) on studies of US firms since these are the studies most accessible to us.

Relaxing the Miller–Modigliani assumptions

Taxes

Perhaps the obvious starting point for an investigation into the effect of relaxing the Miller–Modigliani assumptions is to introduce taxes. In the United States, dividend payments by a corporation do not affect that firm’s taxes. However, at least historically, dividends have been taxed at a higher rate than capital gains at the personal level. Thus, superficially, the US tax code appears to favour a low dividend payout policy, with payouts occurring primarily through share repurchases.

Under the assumption that dividends and capital gains are taxed differentially, Brennan (1970) derives a model of stock valuation in which stocks with high payouts have higher required before-tax returns than stocks with low payouts. As a counterpoint to this proposition, Miller and Scholes (1978) argue that under the US tax code there exist sufficient loopholes so that investors can shelter dividend income from taxation, thereby driving the effective tax rate on dividends to zero. Early studies of the association between stock returns and dividend yield (for example, Black and Scholes, 1974; Litzenberger and Ramaswamy, 1979; Miller and Scholes, 1982) yielded mixed results using different definitions of dividend yield. Subsequent studies indicated that the correlation between dividend yield and stock returns (if any) appeared to be due to omitted risk factors that were correlated with dividend yield. For example, Chen, Grundy and Stambaugh (1990) report that dividend yield and risk measures are cross-sectionally correlated. Similarly, Fama and French (1993) show that, when a three-factor model for expected returns is used, there is no significant relation between dividend yields and stock returns.

Other studies have analysed the potential effects of the differential taxation of dividends and capital gains by studying the behaviour of stock prices and trading volume around ex-dividend days. The logic of these studies is that, in order for investors to be indifferent between selling a stock just before it goes ex dividend and just after, stocks should be priced so that the marginal tax liability would be the same for each strategy. Thus, if dividends are taxed more heavily than are capital gains, stock prices should fall by less than the size of the dividend on the ex-dividend day. Evidence consistent with a tax effect in stock price behaviour around ex-dividend days is provided in Elton and Gruber (1970), Eades, Hess and Kim (1984), Green and Rydqvist (1999), Bell and Jenkinson (2002), and Elton, Gruber and Blake (2005). In addition, evidence of tax-motivated trading around ex-dividend days is provided in Lakonishok and Vermaelen (1986), Michaely and Vila (1995) and Green and Rydqvist (1999).

Collectively, the evidence in these studies indicates that the differential taxation of dividends and capital gains affects both ex-dividend day stock returns and trading activity. This conclusion has been reinforced in studies that examine changes in tax laws (for example, Poterba and Summers, 1984; Barclay, 1987; Michaely, 1991). Nonetheless, the fact that individual investors in high tax brackets receive large amounts of taxable dividends each year (Allen and Michaely, 2003) casts doubt on taxes being a first-order determinant of dividend policy.

Agency costs

A second real-world violation of the Miller–Modigliani assumptions is the existence of agency costs associated with stock ownership. In particular, managers of firms maximize their own utility, which is not necessarily the same as maximizing the market value of common stock. The costs associated with this potential conflict of interest include expenditures for structuring monitoring and bonding contracts between shareholders and managers, and residual losses due to imperfectly constructed contracts (Jensen and Meckling, 1976).

Several authors have argued that dividends may be important in helping to resolve manager–shareholder conflicts. If dividend payments reduce agency costs, firms may pay dividends even if these payments are taxed disadvantageously.

Easterbrook (1984) and Rozeff (1982) argue that establishing a policy of paying dividends enables managers to be evaluated periodically by the capital market. By paying dividends, managers are required to tap the capital market more frequently to obtain funds for investment projects. Periodic review by the market is one way in which agency costs are reduced, which in turn, raises the value of the firm. Similarly, Jensen (1986) argues that establishing a policy of paying dividends reduces agency problems of overinvestment by reducing the amount of discretionary cash controlled by managers.

An implication of the agency models is that dividends will be more valuable in mature firms with substantial cash flow and poor investment opportunities. Early tests of this implication focused on the stock price reaction to dividend change announcements and produced mixed results. Lang and Litzenberger (1989) find that firms with less valuable growth opportunities exhibit a larger stock price reaction to dividend increase announcements than firms with more valuable growth opportunities. Although this finding is consistent with the agency cost hypothesis, Denis, Denis and Sarin (1994) find that, when they control for other factors, particularly the change in dividend yield, they find no difference in the stock price reaction to dividend changes between firms with good growth opportunities and those with poor growth opportunities. Moreover, they find no evidence that increases in dividends reduce corporate investment.

More recent tests of the agency models have focused on the cross-sectional determinants of dividend policy. Fama and French (2001) find that the propensity to pay dividends is positively related to firm size and profitability, and negatively related to the value of future growth opportunities. DeAngelo, DeAngelo and Stulz (2006) find that the propensity to pay dividends is strongly associated with the proportion of the firm's equity that comes from retained earnings. These findings support the primary prediction of the agency models that dividends are more valuable for mature firms with high cash flow and poor growth opportunities.

La Porta et al. (2000) and Faccio and Lang (2002) provide further support for the agency models of dividend policy by analysing international evidence. La Porta et al. hypothesize that agency conflicts will differ across countries because of differences in the extent of investor protection. In a sample of 33 different countries, they find that dividend payments are higher in countries with better investor protection. This indicates that when investors are better able to monitor managers, they are able to force higher dividend payouts. Faccio and Lang (2002) show that in western Europe and in Asia dividend payments are higher when controlling shareholders have a higher ratio of voting rights to cash flow rights – that is, those situations in which minority shareholders are otherwise at greatest risk of expropriation by the controlling shareholder.

Asymmetric information

Contrary to the Miller–Modigliani assumption that investors have the same information as managers, a large number of studies assume that managers possess more information about the prospects of the firm than individuals outside the firm, and that dividend changes convey this information to outsiders. This idea was suggested by Miller and Modigliani and has roots in Lintner's (1956) classic study on dividend policy. Lintner interviewed a sample of corporate managers. One of the primary findings of the interviews is that a high proportion of managers attempt to maintain a stable regular

dividend. In Lintner's words, managers demonstrate a 'reluctance (common to all companies) to reduce regular rates once established and a consequent conservatism in raising regular rates' (1956, p. 84).

If managers change regular dividends only when the earnings potential of the firm has changed, changes in regular dividends are likely to provide some information to the market about the firm's prospects. More formal models in which dividends convey information to outsiders include Bhattacharya (1979; 1980), John and Williams (1985), and Miller and Rock (1985). The common assumption in these models is that managers have information not available to outside investors. Typically, the information has to do with the current or future earnings of the firm.

Empirical evidence on the information content of dividends has taken three forms. First, a large set of studies has analysed whether dividend changes are associated with abnormal stock returns of the same sign. Second, studies have analysed whether dividend changes are associated with subsequent earnings changes. Third, studies have analysed the association between dividend changes and changes in investor expectations regarding future earnings.

Studies have consistently documented that stock returns around the announcement of a dividend change are positively correlated with the change in the dividend (Aharony and Swary, 1980; Asquith and Mullins, 1983; Brickley, 1983; Healy and Palepu, 1988; Grullon, Michaely and Swaminathan, 2002; Michaely, Thaler and Womack, 1995; Pettit, 1972). These studies are robust over time and are robust to controls for contemporaneous earnings announcements. Moreover, in general, the studies indicate that the market reacts more strongly to a dividend decrease than to a dividend increase.

The findings described above indicate that dividend announcements provide information to the market. Subsequent studies have investigated whether this information is correlated with current or future earnings. On this issue, the evidence is more mixed. In a study of dividend initiations and omissions, Healy and Palepu (1988) find that the initiation of dividends follows a period of abnormal earnings growth and that earnings continue to grow in subsequent years. For omissions, however, earnings decline in the year of omission, then rebound in the following years. Using a comprehensive sample of dividend changes, Benartzi, Michaely and Thaler (1997) find no evidence that dividend changes are associated with subsequent earnings changes of the same sign. Miller's interpretation of the evidence (1987) is that dividends appear to be better described as lagging earnings than as leading earnings.

One difficulty in testing whether dividend changes 'signal' unexpected future earnings is that it is difficult to identify what level of earnings would be expected by the market if the dividend change did not take place. To address this issue, Ofer and Siegel (1987) study how analysts alter their estimates of current year earnings when firms announce dividend changes. They find that analysts revise their earnings estimates in the direction of the dividend change and that the size of the earnings revision is positively associated with the stock price reaction to the dividend change. Similarly, Fama and French (1998) report a positive association between dividends and firm value after controlling for past, current and future earnings, as well as investment and debt. They conclude that dividends contain information about value that is not contained in earnings, investment and debt.

The accumulated empirical evidence thus indicates that dividend announcements provide information to the market. Whether they convey information about future earnings is less clear. Moreover, other findings indicate that information signalling is unlikely to be a first-order determinant

of dividend policy. For example, as noted earlier, dividends are paid primarily by larger, more mature firms with higher cash flow and poorer growth opportunities. These types of firm would seem to be least in need of signalling their true value to the market.

Firm value and the form of the payout

As with increases in regular cash dividends, specially labelled cash dividends and share repurchases have been shown to be accompanied by permanent increases in stock prices (Brickley, 1983; Dann, 1981; Vermaelen, 1981). However, there is little agreement on the factors that lead managers to choose one method over another.

Given the Miller–Modigliani assumptions, the choice of the payout mechanism, like the choice of dividend policy itself, does not affect the value of the firm. Therefore, if the form of the payout is to matter, it must be due to violation of one or more of the Miller–Modigliani assumptions. To develop a theory to explain the choice of payout mechanism, it must be that there are differential costs or benefits associated with the alternative payout methods. Furthermore, the relative benefits or costs must be especially significant because, in general, dividends have been tax-disadvantaged (at the personal level) relative to share repurchases.

Economists have explored several possible explanations as to why a particular form of payout is chosen, including adverse selection effects (Barclay and Smith, 1988; Miller and McConnell, 1995), the impact on equity ownership structure (Stulz, 1988; Denis, 1990), the signalling power of alternative payout mechanisms (Ofer and Thakor, 1987; Jagannathan, Stephens and Weisbach, 2000), and the impact of executive stock options (Fenn and Liang, 2001). The evidence indicates that share repurchases are more likely when recent earnings increases are temporary, when earnings are riskier, when firms make heavy use of stock options in executive compensation contracts and when firms seek to protect themselves from a hostile takeover.

As regards the choice between regular cash dividends and specially labelled cash dividends, reasonable explanations have been relatively scarce. Brickley (1983) does provide evidence that specially labelled dividends convey a less positive message about firm value than do increases in regular cash dividends. Nonetheless, it is unclear why this is so. Moreover, there has been little examination of the choice between special dividends and share repurchases.

What managers say

Lintner's (1956) classic empirical study began with a survey of corporate executives. The results of that survey and the accompanying evidence laid the foundation for much of the empirical and theoretical work that has followed over the succeeding half century. Brav et al. (2005) have conducted a new and more extensive survey of chief financial officers (CFOs) regarding their views of corporate payout policy. Their survey yields further insights into what managers think about dividend policy, and complements the existing empirical evidence.

Brav et al. report that CFOs view dividends as inflexible in that, once a dividend level has been established, any dividend cut is likely to have a significantly adverse impact on the company's stock price. Thus, consistent with Lintner's (1956) original observation, managers tend to be conservative

when adjusting dividends upward in order to avoid having to cut the dividend at a later date. Rather than establishing a target payout ratio, managers set a per share payment that is downwardly inflexible. According to the survey, managers do not explicitly view dividends as a mechanism for signalling information that would distinguish their companies from competitors, and they consider tax effects only as an afterthought. These observations accord with the conclusions drawn from empirical studies in that both imply that taxes and signalling are not first-order determinants of dividend policy.

In contrast to dividends, repurchases are viewed by managers as a parallel but more flexible way to distribute cash to shareholders in that they can be initiated and discontinued as funds are available. This observation is consistent with the empirical evidence cited earlier that repurchases tend to be associated with temporary increases in earnings, while dividends are associated with earnings changes that are more permanent. Whether the modern survey of Brav et al. leads to the volume of additional empirical work that followed Lintner's study remains to be seen.

Summary and recent trends

Since the mid-1960s, rigorous consideration has added considerably to progress in what is known about dividend policy. We know that firms pay out to stockholders substantial amounts of cash annually in the form of regular cash dividends, share repurchases and specially labelled dividends. We also know that stock prices increase permanently when regular dividends are increased, when special dividends are declared, and when shares are repurchased, and that stock prices decline when regular dividends are reduced. While these findings imply that dividend changes reflect information available to managers that is not otherwise available to outside investors, it is still not clear what information is being conveyed through the dividend payment. Moreover, although we now know a considerable amount about the empirical determinants of the size of payout and the form of payout, there is little agreement as to whether the level of cash payout affects the value of the firm or and whether the choice of the payout method matters.

We conclude by outlining several recent trends that pose additional challenges to our understanding of dividend policy. First, Fama and French (2001) document that the propensity to pay dividends has declined substantially since the late-1970s. Second, despite this decline in the propensity to pay dividends, aggregate dividends have not declined (DeAngelo, DeAngelo and Skinner, 2004). Rather, dividends and earnings have become increasingly concentrated among larger firms. Third, specially labelled dividends have nearly disappeared (DeAngelo, DeAngelo and Skinner, 2000). Fourth, share repurchases have increased substantially so that aggregate payouts through share repurchases now exceed those through regular dividends (Grullon and Michaely, 2002). These trends are difficult to explain given our current understanding of dividend policy. Undoubtedly, therefore, economists will continue to devote substantial effort to understanding the puzzles of dividend policy.

David J. Denis and John J. McConnell

See also

- < xref = C000369 > corporate finance;
- < xref = xxxxyyyy > finance (recent developments);
- < xref = xxxxyyyy > Modigliani–Miller theorem;
- < xref = xxxxyyyy > retention ratio.

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Index terms

agency costs
asymmetric information
capital gains
capital gains taxation
dividend change
dividend policy
dividend taxation
dividends
manager–shareholder conflict
Modigliani–Miller theorem
regular vs special dividends
stock repurchases
stockholders

Index terms not found:

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