# FACTORS THAT AFFECT DIVIDEND POLICIES

Ioanaș Corina, Nichita Mirela and Gruiescu Mihaela<sup>\*</sup>

### Abstract

In this article we want to know how much should be paid out by a company to its shareholders in the form of dividends. What is the effect of dividend policy on share price?

A financial manager's dividend policy objectives are to maximize owner wealth while providing adequate financing for the company. A company's dividend policy depends on many variables: company growth rate, profitability, earnings stability, maintenance of control, degree of financial leverage.

Different types of dividend policies include: stable dividend-per-share policy, constant dividendpayout ratio, a compromise policy, residual-dividend policy.

Keywords: dividend policy, predicting stock returns, Gordon Shapiro Model, price volatility, dividend yield

## JEL Classification: G10, G32, M 40

Corporate earnings that are distributed to stockholders are referred to as dividends. Dividends are paid in either cash or stock, usually on a quarterly basis, and may be paid only out of retained earnings, not from invested capital.

Dividend policy remains a source of controversy despite years of theoretical and empirical research, including one aspect of dividend policy: the linkage between dividend policy and stock price risk. Paying large dividends reduces risk and thus influence stock price (Gordon, 1963) and is a proxy for the future earnings. A number of theoretical mechanisms have been suggested that cause dividend yield and payout ratios to vary inversely with common stock volatility. These are duration effect, rate of return effect, arbitrage pricing effect and information effect. Duration effect implies that high dividend yield provides more near term cash flow. If dividend policy is stable high dividend stocks will have a shorter duration. Gordon Growth Model can be used to predict that high-dividend will be less sensitive to fluctuations in discount rates and thus ought to display lower price volatility.

Dividend policy is important for the following reasons:

<sup>\*</sup> Corina Ioanaş is Professor of Accounting at the Academy of Economic Studies in Bucharest.

Mirela Nichita is Associate Professor of Accounting at the Academy of Economic Studies in Bucharest.

Mihaela Gruiescu is Associate Professor of Statistics at the Romanian American University in Bucharest. E-mail: mgruiescu@yahoo.com

- it influences investor attitudes. Stockholders look negatively on companies that cut dividends, since they associate such cutbacks with financial difficulties. In establishing a dividend policy, a financial manager must determine and fulfill the owners' objectives; otherwise, the stockholders may sell their shares, in turn driving down the market price of the stock.

- it impacts the financial program and capital budget of the company.

- it affects the company's cash flow. A company with a poor liquidity position may be forced to restrict its dividend payments.

- it lowers stockholders' equity, since dividends are paid from retained earnings. This results in a higher debt to equity ratio.

If a company's cash flow and investment requirements are volatile, the company should not establish a high regular dividend. It is preferable to establish a low regular dividend that can met even in bad years.

Rate of return effect, as discussed by Gordon (1963), is that a firm with low payout and low dividend yield may tend to be valued more in terms of future investment opportunities. Consequently, its stock price may be more sensitive to changing estimates of rates of return over distant time periods. Thus expanding firms although may have lower payout ratio and dividend yield, exhibit price stability. This may be because dividend yields and payout ratio serves as proxies for the amount of projected growth opportunities. If forecasts of profits from growth opportunities are less reliable than forecasts of returns on assets in place, firms with low payout and low dividend yield may have greater price volatility. According to duration effect and arbitrage effect, the dividend yield and not the payout ratio is the relevant measure. The rate of return effect implies that both dividend yield and payout ratio matters. Dividend policy may serve as a proxy for growth and investment opportunities. Both the duration effect and the rate of return effect assume differentials in the timing of the underlying cash flow of the business. If the relationship between risk and dividend policy remains after controlling for growth, this would suggest evidence of either the arbitrage or information effect.

Share price volatility should be related to the basic risks encountered in the firm's product markets. Market risk may also have impact on the firm's dividend policy. We therefore include a control variable to account for the variability in the firm's earnings stream. Given operating risk, there should be a direct link between stock price volatility and leverage. Under conditions of asymmetric information there is also likely to be a link between borrowing and dividend policy. A control variable was included to reflect corporate leverage. There are potential links between size and volatility. Small firms are likely to be less diversified in their activities and less subject to investor scrutiny. Institutions appear to concentrate their research activities and investment policies on larger listed companies. The market in the stocks of small listed firms could conceivably be less informed, more illiquid, and as a consequence subject to greater price volatility. Baskin suggests that firms with a more dispersed body of shareholders may be more disposed towards using dividend policy as a signaling device.

Dividend payout policy could be inversely linked to growth and investment opportunities. The previously mentioned duration and rate of return effects assume timing differentials in the firm's underlying cash flows. A variable to reflect growth was also included. The suggestion is that any remaining link between dividend policy and stock price volatility, after controlling for the influence of growth, would be suggestive of either the arbitrage or information effect. It is also possible that systematic differences in market conditions, cost structures, regulatory restrictions etc., may lead to differences in dividend policy. These also have impact on price volatility.

# Price volatility (PV)

The dependent variable in the regression is derived by following the Parkinson's extreme value estimate or estimating variance of the rate of return. In this case, for each year, the annual range of stock prices will be divided by the average of the high and low stock prices and then raised to the second power. These average measures of variance for all available years can be transformed to a standard deviation by using a square root transformation.

### Dividend yield (DY)

The variable was calculated by summing all the annual cash dividends paid to common stock holders and then dividing this sum by the average market value of the stock in the year. The average for all available years was utilized.

#### Earning volatility (EV)

In order to develop this variable, the first step is to obtain an average of available years of the ratio of operating earnings (before taxes and interest) to total assets. The next step is to calculate an average of the squared deviation from the overall average. A square root transformation is then applied to the mean squared deviation to obtain estimates of standard deviation.

## Payout Ratio (POR)

To begin, total cumulative individual company earnings and dividends were calculated for all years. Payout is the ratio of total dividends to total earnings. The use of this procedure controls the problem of extreme values in individual years attributable to low or possibly negative net income. The payout ratio is set to one in cases where a total dividend exceeds total cumulative profits.

### Growth in Assets

The yearly growth rate was calculated by taking the ratio of the change in total assets in a year.

The correlation between price volatility and dividend yield is -0.218, which is significant at 0.01, which is lower as compared to Baskin results of -0.643. The correlation between price volatility and payout ratio is -0.177, significant at 0.05 and

is also less than that of developed markets. The highest correlation is between payout ratio and dividend yield that has a value of 0.555 and is highly significant. This causes us to modify our regression equation because multicollinearity between two dividend policy measures may be a potential problem. The second highest correlation is between earning volatility and leverage (positive and significant), which means that higher debt firms, has higher earning volatility. Third highest correlation is between asset growth and leverage (positive and significant) i.e. firms with high debt have a high growth rate that clearly means that firms use debt to increase their size.

Significant negative correlation between dividend yield and earning volatility confirms our expectations that companies with volatile earnings are expected to pay lower dividends and to be regarded as more risky. The correlation between dividend yield (and payout ratio) and leverage are negative and significant which implies that with higher levels of debt firms pay lower dividends (and has low pay out ratio). Significant positive correlation between payout ratio and size shows that larger firms pay more of their earnings as compared to smaller ones.

When dividend yield is dropped and regression is run with payout ratio and the control variables, it indicates a significant impact along with other control factors. In the reform era, dividend yield has become more important determinant of share price volatility as compared to payout ratio. This shows that the reforms have improved the market and now companies are paying dividend more and investors are also pricing the shares on this basis. We also included the industry dummies to control the variation.

Both the dividend policy measures (dividend yield and payout ratio) have significant impact on the share price volatility. The relationship is not reduced much even after controlling for the above mentioned factors. The responsiveness of the dividend yield to stock price volatility increased during reform period. Whereas payout ratio measure is having significant impact only at lower level of significance. In overall period the size and leverage have positive and significant impact on stock price volatility. The size effect is negative during pre reform period, but positive during reform period. The earning volatility impact is negative and significant only during reform period. Although the results are not robust enough as in the case of developed markets but are consistent with the behavior of emerging markets

Most of the considerable research on the quality of earnings deals with the effects of changes in accounting principles or estimates.1 Firms are seen as temporarily increasing earnings by reducing estimates of the valuation reserve for deferred tax assets or the allowance for doubtful accounts, for example. Or, to lower earnings (and bleed them back to the future), firms overestimate a restructuring charge. If the effect is temporary (and so reverses later), reported earnings are deemed to be of poor quality because they are not a good indicator of subsequent earnings. Correspondingly, quality concerns are reduced if accounting principles and estimates are applied on a consistent basis, period to period.

The term "quality of earnings" has no established meaning and has been used with different interpretations. We examine the issue from the point of view of an analyst wishing to forecast future earnings. We define the term to mean that reported earnings, purged of extraordinary items identified on the income statement, is of good quality if it is a good indicator of future earnings that is forecasted from all information available. Thus we have in mind the notion of "sustainable earnings" that is often referred to in financial analysis. Correspondingly, unsustainable earnings produced by an accounting treatment are deemed to be of poor quality. We view earnings forecasts as an input to equity valuation. So we interpret the market as misinterpreting the quality of earnings when pricing firms if it fails, given the information available, to see that reported earnings is not sustainable in the future. This view of market inefficiency has been referred to as "fixation" on reported earnings, so, in those terms, we examine whether the market is fixated on reported earnings, unaware that they may be of doubtful quality because of conservative accounting.

# Conclusions

Funds generated from retained earnings are the single most important source of finance. For any company, the amount of earnings retained within the business has a direct impact on the amount of dividends. Profit re-invested as retained earnings is profit that could have been paid as a dividend.

The major reason for using retained earnings to finance new investments, rather than to pay higher dividends and then raise new equity funds for the new investments are follows:

- using funds from retained earnings means that investments projects can be undertaken without involving either the shareholders or any outsiders.

- the use of retained earnings as opposed to new share or debentures avoids issue costs.

- the use of funds from retained earnings avoids the possibility of a change in control resulting from an issue of new share.

A company must restrict its self-financing through profits because shareholders should be paid a reasonable dividend, in line realistic expectations, even if the directors would rather keep the funds for re-investing. At the same time, a company that is looking for extra funds will not be expected by investors to pay generous dividends, nor over generous salaries to owner directors.

In practice, shareholders will usually be obliged to accept the dividend policy that has been decided on by the directors or, otherwise to sell their shares.

The purpose of a dividend policy should be to maximize shareholders'wealth, which depends on both current dividends and capital gains. Capital gains can be achieved by retaining some earnings for reinvestment and dividend growth in the future.

According to what can be termed the "residual theory", maximization of shareholders wealth will be achieved by applying the following rules:

- if a company can identify projects with positive net present value, it should invest them

- only when these investment opportunities are exhausted should dividend be paid.

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