

reported accounting earnings and other information, share price will respond. Put another way, dividends speak louder than words under these circumstances. The rationale behind a dividend signaling effect is similar to a capital structure signaling effect, described in Chapter 9.

However, it generally is agreed that the effect is more important for dividends than it is for capital structure. While there are a number of factors that may explain dividends' impact on valuation, many are difficult to test. Most empirical testing has concentrated on the tax effect and on financial signaling. This is not to say that such things as flotation costs, transactions costs, institutional restrictions, and preference for dividends have no effect; only that whatever effect they might have is swamped by the two effects discussed.

EMPIRICAL TESTING AND IMPLICATIONS FOR PAYOUT BEHAVIOR

The testing of whether or not dividends have an effect on share price has taken several forms. Again, the major thrust in orientation has been on the tax effect and on financial signaling. As we will discover, the evidence is far from uniform, which makes generalizations difficult, if not just downright unwise.

EX-DIVIDEND DAY TESTS

One of the mainstays has involved the ex-dividend behavior of common stock prices. As we explain in Chapter 12, companies paying dividends establish an ex-dividend date. Investors buying the stock before that date are entitled to the dividend declared; purchases on or after the ex-dividend date are not entitled to the dividend. In a nontaxable world, the stock should drop in value by the amount of the dividend on the ex-dividend day. If you are a taxable investor, however, and buy the stock before the ex-dividend day, you will need to pay taxes on the dividend. In contrast, if you wait until the ex-dividend day to buy the stock, you will pay no taxes on the dividend, since there is no dividend, and any price movement presumably is subject only to the capital-gains tax. A number of authors reason that if there is a tax effect, owing to capital gains being taxed at a lower rate than dividend income, a stock should decline in price by less than the dividend on the ex-dividend day. Expressed differently, investors would value a dollar of dividends less than they would a dollar of capital gains.

An earlier study of the phenomenon was by Elton and Gruber.¹¹ In a sample of companies, they found that on average a stock declined by .78 of the dividend

¹¹ Edwin J. Elton and Martin J. Gruber. "Marginal Stockholder Tax Rates and the Clientele Effect." *Review of Economics and Statistics*, 52 (February 1970), 68-74.

on the ex-dividend date. They interpret this result as consistent with a clientele effect where investors in high tax brackets show a preference for capital gains over dividends, and vice versa.

There have been a number of other studies of share price behavior on the ex-dividend day.¹² In general, the evidence is consistent with the foregoing, namely, that stock prices decline on the ex-dividend day but by less than the amount of the dividend. Many view these findings as consistent with a tax effect where dividends are taxed more heavily than are capital gains, and stock prices reflect this differential. However, others argue that biases in conceptual foundation as well as in methodology negate the ex-dividend day approach to implying tax rates or tax clientele effects.¹³ While the evidence is reasonably consistent across studies, its interpretation is not.

DIVIDEND YIELD APPROACH

A second approach to the tax effect question is to study the relationship between dividend yields and stock returns, where other influences on returns are isolated. One of the earlier studies here was by Black and Scholes.¹⁴ In testing a modification of the capital asset pricing model to measure the deviation of a stock's dividend yield from that of the market portfolio, they find the coefficient of the variable to be insignificant. Stocks with high payout ratios did not provide returns significantly different from those with low payout ratios. The authors interpret this finding as consistent with the idea that dividend policy does not matter. Miller and Scholes, in later studying the issue with a new sample, claim that after isolating for information effects, there is no relationship between returns and dividend yields.¹⁵ The differential tax explanation of dividend yield and stock returns has been challenged by others as well.¹⁶

As we know from Chapter 3, however, many authors have found a positive relationship between expected before-tax returns and dividend yields, holding other things constant. Perhaps the leading investigators here are Litzenberger and

¹²Avner Kalay, "The Ex-Dividend Day Behavior of Stock Prices: A Re-examination of the Clientele Effect," *Journal of Finance*, 37 (September 1982), 1059-70; Kenneth M. Eades, Patrick J. Hess, and E. Han Kim, "On Interpreting Security Returns During the Ex-Dividend Period," *Journal of Financial Economics*, 13 (March 1984), 3-34; Patrick J. Hess, "The Ex-Dividend Day Behavior of Stock Returns: Further Evidence on Tax Effects," *Journal of Finance*, 37 (May 1982), 445-56; James M. Poterba and Lawrence H. Summers, "New Evidence That Taxes Affect the Valuation of Dividends," *Journal of Finance*, 39 (December 1984), 1397-1416; Michael Barclay, "Tax Effects with No Taxes? Further Evidence on the Ex-Dividend Day Behavior of Common Stock Prices," working paper, Stanford University (September 1984); and Costas P. Kaplanis, "Options, Taxes, and Ex-Dividend Day Behavior," *Journal of Finance*, 41 (June 1986), 411-24.

¹³See Kalay, "The Ex-Dividend Day Behavior of Stock Prices"; Jerry Green, "Taxation and the Ex-Dividend Day Behavior of Common Stock Prices" working paper, National Bureau of Economic Research, Cambridge, Mass. (1980); and Hess, "The Ex-Dividend Day Behavior of Stock Returns."

¹⁴Black and Scholes, "The Effects of Dividend Yield and Dividend Policy on Common Stock Prices and Returns."

¹⁵Miller and Scholes, "Dividends and Taxes."

¹⁶See Marshall Blume, "Stock Returns and Dividend Yields: Some More Evidence," *Review of Economics and Statistics*, 62 (November 1980), 567-77.



U.S. Securities and Exchange Commission

Ex-Dividend Dates: When Are You Entitled to Stock and Cash Dividends

Have you ever bought a stock only to find out later that you were not entitled to the next cash or stock dividend paid by the company? To determine whether you should get cash and most stock dividends, you need to look at two important dates. They are the "record date" or "date of record" and the "ex-dividend date" or "ex-date."

When a company declares a dividend, it sets a record date when you must be on the company's books as a shareholder to receive the dividend. Companies also use this date to determine who is sent proxy statements, financial reports, and other information.

Once the company sets the record date, the stock exchanges or the National Association of Securities Dealers, Inc. fix the ex-dividend date. The ex-dividend date is normally set for stocks **two business days before** the record date. If you purchase a stock on its ex-dividend date or after, you will not receive the next dividend payment. Instead, the seller gets the dividend. If you purchase before the ex-dividend date, you get the dividend.

Here is an example:

Declaration Date	Ex-Dividend Date	Record Date	Payable Date
7/27/2004	8/6/2004	8/10/2004	9/10/2004

On July 27, 2004, Company XYZ declares a dividend payable on September 10, 2004 to its shareholders. XYZ also announces that shareholders of record on the company's books on or before August 10, 2004 are entitled to the dividend. The stock would then go ex-dividend two business days before the record date.

In this example, the record date falls on a Tuesday. Excluding weekends and holidays, the ex-dividend is set two business days before the record date or the opening of the market – in this case on the preceding Friday. This means anyone who bought the stock on Friday or after would not get the dividend. At the same time, those who purchase before the ex-dividend date receive the dividend.

With a significant dividend, the price of a stock may move up by the dollar

amount of the dividend as the ex-dividend date approaches and then fall by that amount after the ex-dividend date. A stock that has gone ex-dividend is marked with an "x" in newspapers on that day.

Sometimes a company pays a dividend in the form of stock rather than cash. The stock dividend may be additional shares in the company or in a subsidiary being spun off. The procedures for stock dividends may be different from cash dividends. The ex-dividend date is set the first business day after the stock dividend is paid (and is also after the record date).

If you sell your stock before the ex-dividend date, you also are selling away your right to the stock dividend. Your sale includes an obligation to deliver any shares acquired as a result of the dividend to the buyer of your shares, since the seller will receive an I.O.U. or "due bill" from his or her broker for the additional shares. Thus, it is important to remember that the day you can sell your shares without being obligated to deliver the additional shares is **not** the first business day after the record date, but usually is the first business day after the stock dividend is paid.

If you have questions about specific dividends, you should consult with your financial advisor. You can also get information by going to your library and reading *Standard and Poor's Dividend Record Binder*.

<http://www.sec.gov/answers/dividen.htm>

We have provided this information as a service to investors. It is neither a legal interpretation nor a statement of SEC policy. If you have questions concerning the meaning or application of a particular law or rule, please consult with an attorney who specializes in securities law.