
Chapter 19: Information

Stock prices move 10 to 15 percent when organizations announce changes in their investment, dividend, or financing choices, entailing that decisions like these convey information to shareholders which causes them to revalue the organization. Managers may not be able to disclose information to the organization's stockholders for a variety of reasons:

- The information may be valuable to the organization's competitors;
- Organizations run the risk of being sued by shareholders if they make forecasts that later turn out to be inaccurate;
- Managers may favour not to disclose unfavourable information;
- The information may be hard to quantify or substantiate.

Information-revealing decisions, which are called *signals*, can include decisions related to the organization's capital expenditures, financing choices, dividends and stock splits, as well as manager's decisions to acquire or sell shares for their personal account.

Management inducements are influenced by a desire to raise both the organization's current share value and its *intrinsic value*, which is the full information value of the company. The weight that managers place on these potentially conflicting inducements is determined by the compensation and the security of the job of the manager.

Good decisions can reveal unfavourable information and bad decisions can reveal unfavourable information. Stock price reactions can be bad indicators of whether a decision has a positive or a negative effect on an organization's intrinsic value, and managers who are concerned about the current or short-term share prices of their organization may bias their decisions in a manner that lowers the intrinsic values of their organizations.

Organizations show the greatest tendency to artificially inflate accounting earnings when managers have the most to gain from increasing share prices. Organizations make discretionary accounting choices that temporarily raise reported earnings before both initial and seasoned public offerings of equity. In these cases, managers are particularly interested in improving the organization's current stock price because they want to maximize the proceeds from the equity issues. Managers also manipulate their earnings downward when they want to appear weaker than they really are.

Managers will select projects that pay off quickly over possible higher NPV projects that pay out over a longer period if they place significant weight on increasing the organization's short term stock price.

Stock prices raise when organizations raise dividends and lower on average, when they decrease dividends. This model describes how the positive stock price response to dividend raises, it is based on an analysis of what an all-equity financed organization does with the operating cash flow produced by its assets. The sources and use of funds equation:

Operating cash flow = Investment Expenditures – Change in Equity + Dividends

It holds that the cash flows produced by the assets of the organization either have to be retained within the organization for investment expenditures or be paid out to shareholders as either a share repurchase or a dividend.

Because managers can manipulate the relevant accounting numbers, shareholders cannot observe the operating cash flows of the organization. In addition, outside shareholder cannot observe all the items that constitute the organization's investment expenditures, such as equipment maintenances and expenditures to update its customer database.

A dividend raise may reflect the fact that the organization's operating cash flow was higher than expected, which would be good news, since this would hold that the organization is more profitable than was originally believed. On the other hand, the organization may have generated the cash for the higher dividend by cutting back investment, which would be bad news because it entails that the organization is sacrificing *future* operating cash flows to generate higher dividends.

A raised dividend entails, holding all else constant, higher cash flows and thus higher stock prices. By cutting investment expenditures on items that cannot be readily observed by analysts, organizations can raise reported earnings and dividends, thereby increasing their current stock prices. A manager's inducement to temporarily boost the organization's stock price may thus lead the organization to pass up positive net present value investments.

This point out that share price raises that arise when organizations announce dividend raises do not entail that shareholders like the higher dividend payout.

Although the dividend raise conveys favourable information, it doesn't necessarily create value for shareholders. Thus, the observed stock price response to dividend raise is a misguided rationale for increasing dividends.

In the absence of taxes and transaction costs, dividends and share repurchases are essentially identical. A share repurchase should also convey the same information as a dividend because, in both cases, cash is distributed to shareholders, revealing to shareholders that the organization has generated a sizable operating cash flow. It is unlikely that signalling considerations explain why organizations pay dividend rather than repurchase shares.

Shareholders and analysts are usually not capable to make accurate inferences about an organization's investment opportunities or how much managers want to invest. As a result, the dividend choice conveys information about both the opportunities and inducements to invest as well as the organization's operating cash flows. Stock price responses to dividend raises and decreases should depend on the investment opportunities available to the organization.

A dividend raise or decrease can provide information to shareholders about:

1. The organization's cash flows;
2. Management's investment decisions.

In the latter case, if shareholders believe that an raised level of investment associated with a dividend cut is motivated by improved prospects, they will view the dividend cut favourably. However, if shareholders believe that managers will make negative present value investments, they will interpret a dividend cut as bad news.

Shareholders view dividend cuts more favourably when organizations have improved investment prospects and view dividend raises more favourably when investment prospects are more poorer.

Lang and Litzenger (1989) examined the stock price reactions to announced dividend raises and decreases for stocks that differed according to the relation between their market value (MVs) and their book values (BVs). Organizations with market values that are higher than their book values are believed to have favourable investment opportunities while those with market values that are less than their book values are believed to have unfavourable investment opportunities. Dividend raises and decreases resulted in much larger stock price responses for organizations believed to have unfavourable investment opportunities, that is $MV < BV$.

High MV/BV organizations usually have lower dividend yields and greater growth potential, which entails two things:

1. Raises in the dividends of high MV/BV organizations are less likely to be seen as a surprise;
2. High MV/BV organizations probably attract shareholders who are less interested in dividends.

An additional possibility is that an organization's dividend raise or initiation results in a stock price raise because it attracts attention to the organization. The inducement to attract attention is greatest for those organizations that are the most undervalued, which holds that one might expect to see positive stock price reactions to any announcements that attracts considerable attention. The positive stock price reactions observed at the time stock dividends and stock splits are announced support the idea that stock prices respond to announcements of managerial decisions that do no more than attract attention to the organization.

The debt-equity choice passes on information to shareholders for two reasons. First, because of the costs of financial distress managers will avoid increasing an organization's leverage ratio if they have information indicating that the organization could have future financial hardships. Thus, a debt issue can be seen as a signal that managers are confident about an organization's ability to repay the debt. The second is the reluctance of managers to issue what they believe are underpriced shares. Thus, an equity issue might be seen as a signal that the organization's shares are not underpriced and therefore may be overpriced.

Organizations want higher debt levels when expected cash flows are higher because they can improved utilize the tax benefits of debt. In addition, for any given debt level, the probability of incurring costs of financial distress is lower if expected cash flows are higher. Because expected future cash flows determine the organization's optimal capital structure, the capital structure choice of improved informed managers is likely to convey information to shareholders. Managers understand that their organization's stock price is likely to respond favourably to higher leverage ratios and may thus have an inducement to select higher leverage ratios than they would otherwise favour.

For a financial decision to credibly convey favourable information to shareholders, organizations with poor prospects must find it costly to mimic the decisions made by organizations with favourable prospects.

The amount of debt an organization must use to credibly signal a high value depends on its manager's inducement to raise the organization's current stock price (short term vs. long term).

Adverse selection means that individuals will select their best actions based on their private information. The inducement to issue equity is highest when management believes that the organization's stock price exceeds its intrinsic value. Improved informed managers know that equity provides relatively inexpensive financing and a new issue would thus raise the intrinsic value of existing shares.

When organizations are experiencing financial hardships, they favour equity to debt financing for a number of reasons. In practice, the tax advantages of debt may be less and the potential for suffering financial distress costs may be greater. Issuing common stock in these situations may be a problem, however, given the negative information conveyed by an equity offering. Thus, a favoured issue may offer the best source of capital.

Event studies are academic studies that examine the stock price responses to the announcements of particular information. In some event studies, researchers average market-adjusted excess returns instead of averaging total returns on the event dates. A *market-adjusted excess return* is the stock's return less the stock's beta times the market return on that date.

On average, stock prices react the best to:

- Announcements that organizations will be distributing cash to shareholders;
- Announcements that organizations will raise their leverage;

Stock prices react the worst to:

- Announcements that organization will be raising cash;
- Announcements that organizations will decrease their leverage.