

# Understanding Financial Management: A Practical Guide

## Guideline Answers to the Concept Check Questions

### Chapter 12

### Dividend Policy

#### Concept Check 12.1

1. **What is the difference between regular cash dividends and specially designated dividends?**

A *regular cash dividend* is the distribution of earnings to shareholders in the form of cash. Dividend paying firms typically pay quarterly dividends. If a company pays regular, steady dividends, investors will come to expect them. Regular cash dividends represent unlabeled dividends. A *specially designated dividend* (SDD) is one that management labels as “extra”, “special”, or “year-end”. Labeling dividends allows management to differentiate a SDD from a regular cash dividend and communicate this difference to stockholders. This ability to label dividends indicates how seriously management considers this communication through dividend announcements.

Regular dividends should potentially convey more information than SDDs because management labels the latter as temporary dividends. Although firms often declare SDDs after experiencing good earnings over the previous year, investors should not expect the operating performance that precedes a special dividend to continue after the announcement. Research indicates that earnings changes after regular dividend changes are greater than earnings changes after SDDs.

2. **Who is ultimately responsible for deciding a corporation's dividend policy?**

The board of directors is ultimately responsible for setting a firm's dividend policy. The board has the discretion of whether to pay dividends, which can be in the form of cash, stock, or merchandise. The most common form of dividends is cash. Top managers, especially the chief executive officer and chief financial officer, often provide input to help the board set a corporation's dividend policy.

3. **What are the four key dates in the dividend payment procedure? Explain the purpose of each.**

When the board of directors declares a dividend, they issue a statement indicating the dividend decision, the record date, and the payment date. Such announcements typically appear in *The Wall Street Journal* and other financial news media. The four key dates in

the dividend payment procedure are the declaration date, record date, ex-dividend date, and the payment date.

- The *declaration date* is the date on which the board of directors announces the next dividend payment.
- The *record date*, also called the *holder-of-record date*, is the date on which a stockholder must own a share to receive a declared dividend at some specified future time.
- The *ex-dividend date* is the date on which the stock begins trading without the right to receive the upcoming dividend. Thus, buyers of a stock selling ex dividend do not receive the current dividend. The ex-dividend date is generally several weeks after the declaration date and several weeks before the payment date.
- The *payment date* is the actual date on which the firm mails the dividend payment to the holders of record.

4. **Why does a stock go ex-dividend two business days before the record date?**

Shares listed on the New York Stock Exchange (NYSE) go ex-dividend two business days before the record date. That is, new shareholders receive the dividends only if they buy the stock at least two business days before the record date. Other U.S. exchanges typically follow the NYSE rule. The purpose of this rule is to allow enough time for the transfer of the shares and give the company sufficient notice of the transfer to ensure that new stockholders receive the dividend. Thus, a stock goes “ex-dividend” two business days before the record date because of delays in the share transfer process.

5. **How should the price of a stock behave when it goes ex-dividends?**

In perfect markets, assuming certainty, the stock’s price should drop by the amount of the declared dividend on the ex-dividend date. In practice, uncertainty and other economic factors affect the behavior of those trading on the ex-dividend day. The ex-dividend day evidence is inconclusive as is the rationale for the behavior. Thus, the expected ex-dividend day price drop and the dividend per share do not necessarily have to be equal.

**Concept Check 12.2**

1. **Why do Miller and Modigliani contend that dividend policy is irrelevant?**

Assuming an idealized world of perfect capital markets and rational investors, Miller and Modigliani (M&M) conclude that the firm’s choice of dividend policy is irrelevant. According to their theory, M&M contend that the distribution of dividends does not affect a firm’s value. Instead, the earning power and risk of its assets solely determine the value of the firm. M&M also argue that shareholders are indifferent to the payment of dividends because they can create any dividend policy they desire by buying or selling shares of the stock. This controversial conclusion means that dividend policy has no affect on shareholders’ wealth. The view of dividend irrelevance is contrary to traditional

wisdom. If dividend policy is relevant to investors, some of M&M's assumptions must be in error.

2. **What are the key assumptions of perfect capital markets?**

In a perfect capital market, there are no taxes and no flotation, transactions, or agency costs. Investors are symmetrically informed, which means that information is costless and available to everyone equally. Investors act rationally and no single investor can exert enough power to influence the price of a security.

3. **If shareholders could create their own income stream at no cost (using the argument by M&M), what type of dividend policy would a firm most likely use?**

If shareholders could create their own income stream without cost, M&M contend that all dividend policies are equivalent under their simplifying assumptions. Stockholders would be indifferent about receiving dividends and view them as irrelevant because they can undo any dividend decision made by a firm's managers. For example, if a firm did not issue dividends and the firm's stockholders wanted dividends, they could create "homemade dividends" by selling some shares of their stock to get the extra cash they desire.

4. **What are the "three big imperfections" and the "three little frictions" involving capital markets?**

The "three big imperfections" involving capital markets are taxes, asymmetric information, and agency costs. The "three little frictions" are transaction costs, flotation costs, and behavioral considerations.

5. **What is the clientele effect? What kind of clienteles would utility stocks paying high dividends likely attract?**

The *clientele effect* is a theory that a firm will attract a group of investors favoring a particular kind of dividend policy. Thus, firms with different dividend policies would appeal to different kinds of investors or dividend clienteles. For example, firms paying stable and predictable dividends would attract investors needing stability and income. Those investors not needing current income would prefer firms that pay little or no dividends. Stocks of utility companies with high dividends are likely to attract individual investors seeking income and institutional investors such as pension plans that pay little or no taxes.

6. **What are the implications of the clientele effect on a firm's dividend policy?**

An implication of the clientele effect is that a firm may change the composition of its stockholders by altering its dividend pattern. Stockholders who are unhappy with the new policy may sell the stock and buy stock of companies having dividend policies more consistent with their dividend preferences. As a result, the firm's stock price may decrease due to selling pressure. If, however, more new investors prefer the new policy than dislike it, the net result of the clientele effect may be an increase in the price of the stock.

7. **How can management use a firm's dividend policy to signal information about the firm?**

As insiders, corporate managers generally are in a better position to know more about their firm than is the typical investor. Thus, a situation of *asymmetric information* exists because the two parties have different information about the firm. Because of this information asymmetry, investors often believe managers use dividends to provide informational content about the firm's future prospects. Suppose that management has favorable information about the firm's future cash flows presently unknown to the market. Given this information disparity, how can management convey believable information to the market? Management could make a public announcement but investors may be wary about such news because management has an incentive to send false signals if the information is likely to have a positive affect on the firm's stock price. Thus, simple announcements are likely to lack credibility. Investors could attempt to verify any new information but the process of gathering and assessing information may be costly. Another approach would be for management to transmit favorable information in a believable manner by paying a higher dividend. This change in dividends could serve as a credible signal of private information and reduce information asymmetry. Thus, management would let the higher dividend do its talking.

8. **How can flotation costs in financing affect a firm's dividend policy?**

Firms can finance investments internally by retaining earnings or externally by raising outside funds. Those choosing to raise external funds to finance desirable investment opportunities incur flotation costs. When dividends compete with investments for internally generated funds, financing costs may affect dividend policy. If the cost of external financing is high, firms may prefer to finance internally by reducing the amount of the dividend payment.

9. **How do stock prices typically respond to news of unexpected dividend increases and decreases?**

Research evidence shows that increases in stock prices often accompany larger than expected dividend increases. In addition, unexpected dividend cuts, especially if due to a loss or to low earnings, can lead to lower stock prices. The nonpayment of dividends creates uncertainty about the future, which is likely to result in lower stock prices. Thus, the market generally responds positively to unexpected announcements of dividend increases, but negatively to news of dividend decreases or omissions. These market reactions reflect the informational content of dividends.

**Concept Check 12.3**

1. **What characteristics affect shareholders' preferences for a high or low dividend payout ratio? How does each characteristic affect the preference?**

Shareholder factors that may affect how shareholders view dividend policy include their income needs, risk preferences, tax status, and concern about dilution of ownership. Investors tend to prefer a high dividend payout if they: (1) are lower-income shareholders who need dividend income, (2) believe that current dividend payments

reduce uncertainty, (3) are low-tax bracket shareholders who do not prefer to defer taxes, and (4) have little concern about dilution of ownership. Those shareholders with the opposite preferences are likely to prefer a lower dividend payout.

2. **What characteristics of a firm affect its preference for a high or low dividend payout ratio? How does each characteristic affect the preference?**

Firm factors that may influence the dividend payout ratio include the stage in the life cycle, investment opportunities, external financing costs, access to funds and reserves, and the profitability and earnings stability. Interrelationships often exist among these factors. Firms tend to pay a high dividend payout if they: (1) are in the maturity and/or decline stage in their life cycle, (2) have low investment opportunities and external financing costs, (3) have a high access to funds and reserves, and (4) high profitability and stable earnings. On the other hand, conditions favoring no or smaller dividend payouts occur when firms: (1) are in the start up to rapid growth stage in their life cycle, (2) have high investment opportunities and external financing costs, (3) have a low access to funds and reserves, and (4) low profitability and unstable earnings.

3. **What is the implied dividend policy at the start-up to rapid growth stages compared with the maturity and decline stages of the dividend life cycle?**

Young, rapidly growing firms often pay no dividends or have a low dividend payout ratio, while older, slower-growing firms in mature industries frequently have a higher payout ratio. Several factors help to explain these different payout policies such as differences in investment opportunities and availability of external financing. Firms in the early stages of the dividend life cycle tend to have better investment opportunities but less access to external financing than do those firms in the later stages of this cycle. Hence, such firms tend to retain cash flows instead of paying them out as cash dividends in order to finance their growth.

4. **How can creditors affect a firm's dividend policy? Why do creditors prefer to place constraints on a firm's dividend policy?**

Creditors can affect a firm's dividend policy by requiring certain contractual constraints as a condition for providing funds. For example, bond indentures often restrict or prohibit dividend payments. In addition, loan agreements frequently contain certain restrictive provisions that limit the firm's ability to pay cash dividends. Creditors place various restrictions to protect them from losses due to insolvency on the part of the firm and to ensure the firm will have sufficient funds to meet its obligation to them.

5. **Why do some firms pay low or no dividends, even when they have funds available to pay high dividends?**

Managerial preferences help to explain why some firms pay low or no dividends even when they have funds available to pay high dividends. For example, firms are often hesitant to set dividend payments at levels that may be unsustainable. Managers are aware that by lowering a dividend sometime in the future, shareholders are likely to react unfavorably to this negative signal causing the firm's stock price to decline at that time. Managers may be cautious and retain earnings in good years to enable the firm to pay dividends in poor earnings years. In addition, management may believe that paying dividends does not constitute the best use of the firm's cash flow.

6. **What legal constraints may influence a firm's dividend policy?**

There are two major forms of legal restrictions on dividend payments. First, states often impose restrictions designed to prevent excess cash distributions. For instance, the capital impairment rule prohibits firms from making dividend payments that exceed a legally defined surplus such as retained earnings or paid-in capital. Second, bond covenants and loan agreements usually contain covenants that restrict the amount of common dividends a firm can pay. These legal limitations protect creditors by restricting a firm's ability to transfer wealth from bondholders to stockholders by paying excessive dividends.

**Concept Check 12.4**

1. **What is a residual dividend policy? What implications does this theory have for the payment of dividends?**

A *residual dividend policy* is one in which a firm pays dividends from the amount remaining after undertaking all desirable projects from internally generated cash flows. A desirable project is usually one having a positive net present value. Under this passive type of dividend policy, shareholders receive any excess cash as dividends. Both the amount of internally generated cash flows and desirable projects are unpredictable over time. Thus, an implication of this theory is that the amount of the residual dividend is likely to be highly variable and often zero. Such instability of dividend payments may result in increased uncertainty by investors.

2. **Why do few firms follow a “pure” residual dividend policy in practice?**

A “pure” residual dividend policy could result in small or no dividends during periods when earnings are low and investment opportunities are plentiful. Because dividend payments may be volatile, this can lead to volatile stock prices and investor dissatisfaction. A limitation of strictly following a residual dividend approach is that it may lead to a highly unstable dividend policy. Thus, few firms prefer to follow a “pure” residual dividend policy.

3. **What are the steps in following a “smoothed” or “modified” residual dividend policy?**

Managers can achieve a “smoothed” or “managed” residual dividend policy by taking three steps. First, they need to estimate future residual funds. This requires estimating the firm's earnings and cash flows, investment opportunities, and target capital structure over an appropriate time horizon such as five years. Next, managers can use this forecasted information to determine the average residual model payout ratio and dollars of dividends during the planning horizon. Finally, they can set a target payout ratio based on the average projected data. The quarterly dividend rate should be sustainable over the planning horizon.

4. **What are three types of managed dividend policy?**

Three of the more commonly used managed dividend policies are: (1) stable dollar dividend policy, (2) constant payout ratio policy, and (3) regular plus specially designated dividends.

- A *stable dollar dividend policy* is a policy based on the payment of a fixed-dollar dividend each period. Firms paying regular dividends typically do not increase the dividend until they are confident that any increase in earnings is sustainable. Because this policy provides dividend stability, it is the most popular kind of dividend policy for dividend paying firms.
- A *constant payout ratio policy* is a policy of paying a fixed percentage of a firm's earnings as dividends in each period. Such a policy is likely to result in wildly fluctuating dividends. As a result, only a small percentage of dividend paying firms follow such a policy.
- A *regular plus specially designated dividends policy* is a policy of paying low regular dividends, supplemented by an additional dividend when warranted by the firm's earnings or cash flows. The low regular dividend provides income stability, while the extra dividend occurs occasionally when earnings are higher than normal in a given period.

5. **Why do firms often prefer to follow policies that result in dividend stability?**

Firms often prefer to follow policies that result in dividend stability for several reasons. First, managers often believe that dividend stability minimizes uncertainty and leads to higher stock prices. Second, managers are aware that some stockholders depend on dividends as a source of income. Third, a stable dividend policy has a lower probability of conveying erroneous informational content. Instead, such a policy provides the owners with generally positive information. Finally, legal listing in many states requires dividend stability.

6. **Why do firms with stable dividend policies avoid immediately boosting dividends when experiencing above-normal performance?**

Managers realize that they may be able to affect investor expectations through the information content of dividends. Firms with a stable dividend policy generally announce an increase in dividends when they believe the dividend is sustainable. By boosting its dividend when experiencing a temporary increase in earnings, a firm is sending a false signal to investors. Investors will expect the higher dividend level to continue in the future. If the firm later cuts the dividend, investors may view this cut as conveying extremely unfavorable news. As a result, the firm's stock price is likely to decline upon the unexpected announcement of the dividend cut. Thus, firms try to ratchet up regular dividends based on permanent not temporary increases in earnings.

**Concept Check 12.5**

1. **What is treasury stock?**

*Treasury stock* is stock reacquired by the issuing company and available for retirement or resale. Such stock is issued but not outstanding. Treasury stock has no voting rights, accrues no dividends, and is not part of the ratios measuring values per common share.

2. **What are three major methods for repurchasing stock?**

The three basic methods for repurchasing stock are an: (1) open-market repurchase, (2) self-tender offer, and (3) targeted share repurchase.

- In an *open market repurchase*, the firm buys back a fraction of its outstanding shares at market prices over a long period. Open-market repurchases constitute the most common type of repurchase.
- In a *self-tender offer*, the firm announces its intention to buy a specific number of shares either at a fixed price or a Dutch auction. The latter method gives a firm greater flexibility in determining the price at which it repurchases the shares.
- In a *targeted share repurchase*, the firm buys a large block of shares from one or more major stockholders on a negotiated basis.

3. **How does a traditional fixed-price tender offer differ from the Dutch auction method?**

In the conventional fixed-price offer, the firm offers to buy a specific number of shares it wants to repurchase at a specified price, which is at a premium over the prevailing market price. If an offer is oversubscribed, the firm typically has the right to buy more than the specified amount or to buy shares on a pro rata basis. In a Dutch auction, a firm specifies a range of purchase prices (minimum and maximum) for the shares and the total number of shares sought. Tendering shareholders select a single price at which they are willing to sell their shares within a specified range. After the tender period expires, the firm counts the number of shares stockholders offered to sell back at each price within the range. Management finds the lowest price that allows the firm to repurchase all shares needed. A firm typically pays a lower average premium in a Dutch auction repurchase than in a fixed-price tender offer.

4. **What is the signaling motive for repurchasing shares?**

A common belief is that a firm's management typically has better information about the company's true value than outside shareholders. This informational asymmetry can lead to occasions in which the market price of a stock is below its intrinsic value. A firm can use common stock repurchases as a way to convey positive inside information to the market. One signaling story is that managers may use share repurchases to convey good news about future profitability. Managers are willing to repurchase the stock today because they expect to finance future capital needs with anticipated increases in future earnings. Another signaling story is that managers are signaling their disagreement with how the market is pricing existing public information. Specifically, managers view that that the market is undervaluing or mispricing their firm's stock at the time the firm announces a repurchases. Thus, repurchasing shares may signal good news about future cash flows or earnings or market undervaluation. Research seems to lend greater support to the latter signaling motive (market mispricing) than the former (future profitability) at least for open market repurchases.



5. **How can a firm's repurchase of stock affect its capital structure?**

One possible economic motive for stock repurchases involves leveraging. According to this view, companies with low debt ratios use repurchase plans to increase leverage ratios. By repurchasing stock, a firm decreases the amount of equity outstanding, which in turn increases the proportion of debt in a firm's capital structure. Thus, stock repurchases increase financial leverage as reflected in such ratios such as debt-to-total assets and debt-to-equity.

6. **How does the market typically respond to news of open-market repurchases and self-tender offers?**

Research evidence shows that the market typically responds favorably to repurchase announcements. This positive stock price reaction tends to be less dramatic for open-market repurchases and Dutch auctions, a type of self-tender, than for fixed-price tender offers. The reason for the larger price increase for fixed-price tender offers relates primarily to the premium and size of the repurchase. Considerable debate exists over the underlying economic rationale for the generally positive market reaction to repurchases.

**Concept Check 12.6**

1. **What are the differences in tax effects between cash dividends and share repurchases?**

The tax effects differ between cash dividends and share repurchases. For individuals, cash dividends are taxed as ordinary income but income from share repurchases is treated as capital gains. With cash dividends, shareholders must accept a dividend payment and pay any applicable tax. With a stock repurchase, shareholders have a choice of selling or not selling. If they choose to sell, they pay taxes on any capital gains realized in a repurchase. In some periods, the tax rate has provided preferential treatment of capital gains compared with dividend income for at least for some investors. If shareholders choose not to sell, they hold their shares, receive no income, and incur no tax burden. Thus, using stock repurchases as a close substitute for a cash dividend provides a way for stockholders to conserve taxes.

2. **How can repurchasing stock result in wealth transfers?**

In some instances, stock repurchases benefit shareholders at the expense of bondholders and other claimants. Share repurchases can result in wealth transfers in several ways. With an open-market repurchase involving undervalued shares, a wealth transfer occurs from participating to non-participating stockholders. On the other hand, a targeted repurchase results in transferring wealth from non-participating to participating stockholders because the latter group receives a premium over the market price. Most shareholders do not participate in either type of repurchase. In addition, wealth transfers could occur between current bondholders to stockholders because stock repurchases increase a firm's debt ratios.

3. **What are the comparative advantages and disadvantages of repurchases compared with cash dividends?**

Compared with cash dividends, the advantages of share repurchases involve:

- *Tax effects.* Share repurchases can help minimize stockholder taxes. Repurchases offer favorable tax treatment over dividends in terms of low capital gains tax rate during some periods and a deferred tax on capital gains.
- *Self-selectivity.* Repurchases give shareholders the choice of whether to sell back all or a fraction of their shares to the firm.
- *Signaling.* Management can use both dividends and stock repurchases to convey positive inside information to the market. This information with repurchases often signals management disagreement with the current market price. That is, management believes the market is currently underpricing the firm's stock.
- *Flexibility.* Management may prefer to distribute temporary excess cash in the form of repurchases instead of regular dividends. Dividends are "sticky" in the short run because management is reluctant to increase a dividend if the firm cannot maintain the dividend in the future. Unlike regular dividends, repurchases do not imply future commitments. Open market repurchase programs provide management with flexibility in responding to changing market conditions.
- *Ownership.* Share repurchases can change the ownership structure of the firm.

Compared with cash dividends, the disadvantages of share repurchases are:

- *Wealth transfers.* Share repurchases may transfer wealth between participating and non-participating shareholders.
- *Principal/agent conflicts.* Managers and others can increase their concentration of control and entrenchment by not selling their shares in a repurchase offer.
- *IRS and SEC reactions.* Improper use of repurchases can result in penalties or sanctions from various government bodies.
- *Effects on trading activities.* Repurchasing shares results in fewer outstanding shares, which, in turn, could result in lower trading activity and negatively affect liquidity.

4. **How can managers use stock repurchases for their own gain?**

Managers can use repurchases as a way to thwart a hostile corporate takeover and to consolidate their control and voting power by not tendering their shares. Managers may be able to reap gains through entrenchment. Stock repurchases could also benefit managers who have stock options since a firm's stock price typically increases upon repurchase announcements.

**Concept Check 12.7**

1. **What is a direct stock purchase plan?**

*Direct stock purchase*, also called a *direct enrollment stock purchases plan*, permits investors to buy initial and sometimes additional shares directly from the company or its transfer agency, bypassing commissioned brokers.

**2. What is the major difference between a market plan and new-issue plan?**

A *dividend reinvestment plan (DRIP)* allows each common stockholder to use dividends to buy full or fractional shares of the firm's common stock. Thus, participating shareholders receive additional shares of company stock rather than getting cash. With a *market plan*, the firm uses the reinvested dividends to buy its outstanding shares in the open market for participating shareholders. Firms often use a third-party trustee to buy these shares. With a *new-issue plan*, the firm sells new shares to participating shareholders. Hence, the major difference between the two plans is the source of the shares purchases. Market plans involve only "old stock" while new-issue plans involve newly issued stock or treasury stock. Another difference between the two plans is that a new-issue plan raises new capital for the firm, but a market plan does not.

**3. What features do some DRIPs offer?**

Besides providing for reinvestment of dividends, DRIPs offer other features. Most plans offer no or low transaction costs for buying shares. Some plans offer a partial reinvestment option, the ability to make optional cash contributions, and open enrollment whereby anyone can buy the firm's stock directly. Others permit participants to have optional cash purchases electronically deducted from their checking or savings accounts. Plans sometimes offer stock at a discount from the actual market price.

**4. What are the major advantages and disadvantages of DRIPs to firms and to participants?**

From the perspective of a firm, DRIPs serve as a powerful mechanism to attract and develop shareholder loyalty. In addition, new issue plans provide a way to raise new equity capital and reduce a firm's capital shortage problem. The chief disadvantage of DRIPs to the firm is administrative costs.

From the perspective of participants, DRIPs offer the advantage of building stock assets over the long term at a reduced cost. DRIPs typically do not charge annual management fees, asset-based fees, or advertising fees. In addition, DRIPs increase long-term investment returns through compounding an increasing dividend. DRIP investing has several disadvantages. One drawback is the record keeping needed to calculate share repurchases and costs to determine future taxable capital gains. Another disadvantage is that investors are subject to taxes because the IRS considers reinvested dividends as taxable income. A potential drawback is that DRIPs trade shares on a specific date regardless of market price. Finally, although some companies offer fee-free DRIPs, others stipulate transaction fees for the purchase and sale of shares.

**Concept Check 12.8**

**1. What are the major motives for issuing stock dividends? Explain each.**

A *stock dividend* is the payment to existing owners of a dividend in the form of stock. Motives for issuing stock dividends involve signaling, trading range, trading liquidity, tax timing, cash substitution, and retained earnings.

- The *signaling* motive suggests that management uses the announcement of a stock dividend to convey positive information to the market about the firm's future prospects.
- The *trading range* hypothesis suggests that stock dividends help to move a stock into a normal or preferred price range.
- The *liquidity* hypothesis suggests that the firm uses a stock dividend to enhance liquidity by creating additional shares that generate greater trading and ownership dispersion of the firm.
- The *tax-timing* motive suggests that the firm issues a stock dividend to enable investors to delay any tax payments on stock dividends until they sell the shares.
- The *cash substitution* hypothesis states that management's uses a stock dividend as a temporary substitute for an existing or contemplated cash dividend.
- The *retained earnings* hypothesis suggests that stock prices do not fully adjust to a stock dividend on the ex-dividend date.

2. **What is the impact of a stock dividend on (a) the total level of stockholders' equity, (b) the firm's asset accounts, and (c) the firm's liabilities?**

A small stock dividend, which is a distribution of less than 25 percent of the common stock outstanding at the time the board of directors declares the dividend, has no effect on the total level of stockholders' equity, the firm's asset accounts, and the firm's liabilities. From an accounting perspective, a stock dividend involves adding the par value of the new stock to the common stock account and adding the remainder to additional paid-in capital. No change occurs in the par value of the stock. Thus, a stock dividend only redistributes funds among stockholders' equity accounts.

3. **In theory, what affect, if any, should a stock dividend have on the wealth of the shareholders? Why?**

In theory, shareholders receiving a stock dividend get nothing of value so their wealth should remain unchanged. After the firm pays the dividend, the per-share value of the stock should decrease in proportion to the dividend. As a result, the market value of the shareholder's holdings in the firm should remain unchanged. The shareholder's proportional ownership in the firm should also remain the same. Because stock dividends do not change the basic operations of the firm or its future cash flows, such dividends should not have any affect on the firm's value or the wealth of its shareholders. From a purely economic standpoint, stock dividends are additional pieces of paper.

4. **Under what conditions might the market respond positively to the announcement of a stock dividend?**

The market might respond positively if it views the announcement as a signal of favorable prospects of the firm. That is, stock dividends might serve as a relatively low-cost way to signal higher future earnings and dividends. Typically, the price of a firm's stock rises shortly after it announces a stock dividend.

## Concept Check 12.8

1. **What is the impact of a stock split on (a) the common stock account, (b) additional paid-in capital, and (c) retained earnings?**

A stock split has no impact on the total amounts recorded in common stock account, additional paid-in capital, and retained earnings. Within the common stock account, however, a stock split typically increases the number of shares outstanding and reduces the stock's per-share par value. Thus, the effects of a stock split on a firm's balance sheet are insignificant.

2. **An investor owns 5 percent of Shaw Industries. The firm announces a 3-for-1 stock split. Will the investor's proportional ownership increase, decrease, or remain unaffected due to the stock split? Explain.**

The investor's proportional ownership will remain unaffected due to the stock split. A stock split serves as another way to increase the number of shares outstanding without changing the amount of total stockholders' equity.

3. **Why do firms choose to split their stock?**

Firms may engage stock splits for reasons involving signaling, trading range, liquidity, and taxes. The signaling motive suggests that stock splits provide favorable information about the firm's future prospects. Some firms split their stock based on the belief that the stock is currently selling at too high a price. By splitting the stock, management may believe the firm will lower the market price to an optimal price range that will maximize the firm's value. This is the crux of the trading range hypothesis. According to the liquidity motive, reducing the stock price will enhance marketability and stimulate trading activity because ownership will be more affordable to a broader base of investors. Finally, the tax motive states that stock splits provide a means of deferring taxes into the future.

4. **What are the most common reasons for firms declaring a reverse stock split?**

A *reverse split* is a procedure whereby a corporation reduces the number of shares outstanding. By exchanging a specific number of outstanding shares for one new share of stock, each share will be worth more but the total value of the firm should remain unchanged. Firms often initiate reverse splits because they believe the price is too low to attract investors. Thus, increasing the market price could bring the stock price into a more respectable trading range as well as improve marketability and demand. Some firms need to bring their stock price to a specific level to avoid the threat of delisting by an exchange.

5. **What is the typical impact of a stock split on a firm's stock prices? How about a reverse stock split?**

A stock split typically causes a slight increase in the market value of the stock. Some researchers attribute this positive market action to the informational content of stock splits and to the fact that total dividends often increase slightly after a split. Investors

tend to view a reverse split as a negative signal of the firm's future prospects. Others may view a reverse split as a desperate attempt by management to support the firm's depressed stock price.