

Chapter 16



Payout Policy

Topics Covered

- ⇒ How Dividends are Paid
- ⇒ Share Repurchase
- ⇒ How Do Companies Decide on Dividend Payments
- ⇒ Why Dividend Policy Should Not Matter
- ⇒ Why Dividends May Increase Firm Value
- ⇒ Why Dividends May Reduce Firm Value

Dividend Payments

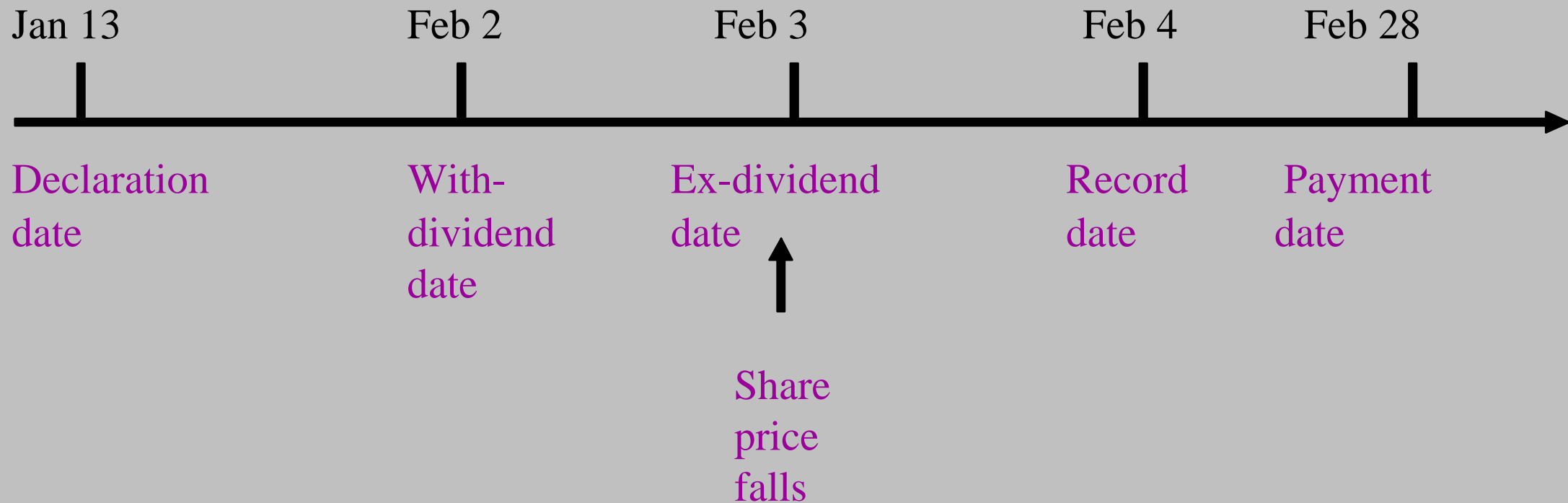
Cash Dividend - Payment of cash by the firm to its shareholders.

- ★ Regular vs. special dividend
- ★ Regular payment is an important issue

Ex-Dividend Date - Date that determines whether a stockholder is entitled to a dividend payment; anyone holding stock before this date is entitled to a dividend.

Record Date - Person who owns stock on this date received the dividend. (see the next slide)

Dividend Payments



Dividend Payments

- ⇒ Some legal limitations on dividends
 - ➔ Bondholders are often against excessive dividend payments
 - ➔ Most state prohibit a company from paying dividends such that make the company insolvent
 - ➔ Sometimes state law prevents a company from paying a dividend if it cuts into the company's legal capital (Legal capital is generally defined as the par value of the outstanding shares)

Dividend Payments

Stock Dividend - Distribution of additional shares to a firm's stockholders.

Stock Splits - Issue of additional shares to firm's stockholders.

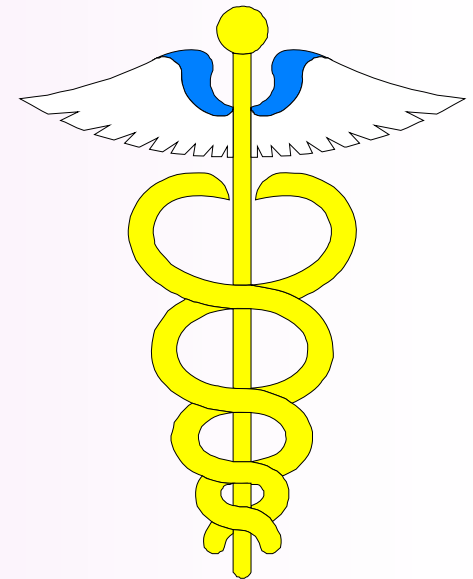
Stock Dividend

Example - Amoeba Products has 2 million shares currently outstanding at a price of \$15 per share. The company declares a 50% stock dividend. How many shares will be outstanding after the dividend is paid?

Answer

$2 \text{ mil} \times .50 = 1 \text{ mil (stock dividend)}$

$1 \text{ mil} + 2 \text{ mil} = 3 \text{ mil shares}$



Stock Dividend

Example - cont - After the stock dividend what is the new price per share and what is the new value of the firm?

Answer

- ➡ The value of the firm was 2 mil x \$15 per share, or \$30 mil. After the dividend the value will remain the same.
- ➡ Price per share = $\$30 \text{ mil} / 3 \text{ mil share} = \10 per share

Dividend Payments

Stock Repurchase - Firm buys back stock from its shareholders. (cash dividend vs. share repurchase p.435 table 16-1) (The same tables are shown in the next three slides)

★ If there are a few investment opportunities, and the companies do not want to commit a regular abundant dividend, then stock repurchase seems to be a good strategy

Stock Repurchase

Example - Cash dividend versus share repurchase

<i>Assets</i>		<i>Liabilities & Equity</i>	
A. Original balance sheet			
Cash	\$150,000	Debt	0
Other assets	850,000	Equity	1,000,000
Value of Firm	1,000,000	Value of Firm	1,000,000
Shares outstanding = 100,000			
Price per share = \$1,000,000 / 100,000 = \$10			

Stock Repurchase

Example - Cash dividend versus share repurchase

<i>Assets</i>		<i>Liabilities & Equity</i>	
B. After cash dividend			
Cash	\$50,000	Debt	0
Other assets	850,000	Equity	900,000
Value of Firm	900,000	Value of Firm	900,000

Shares outstanding = 100,000

Price per share = \$900,000 / 100,000 = \$9

Stock Repurchase

Example - Cash dividend versus share repurchase

<i>Assets</i>		<i>Liabilities & Equity</i>	
C. After stock repurchase			
Cash	\$50,000	Debt	0
Other assets	850,000	Equity	900,000
Value of Firm	900,000	Value of Firm	900,000

Shares outstanding = 90,000

Price per share = \$900,000 / 90,000 = \$10

The Dividend Decision

➡ How Dividends are Determined?

1. Firms have long-term target dividend payout ratios.
 2. Managers focus more on dividend changes than on absolute levels.
 3. Dividends changes follow shifts in long-run, sustainable levels of earnings rather than short-run changes in earnings
 4. Managers are reluctant to make dividend changes that might have to be reversed. (They are particularly worried about having to rescind a dividend increase)
- ★ Level of dividends can be taken as a signal about the company's future prospect

Dividend Policy

- ➡ Three points of view about dividend policy and the value of firm
1. Dividend policy makes no difference
 2. High dividends increase firm value
 3. High dividends bring high taxes and therefore reduce firm value

Dividend Policy is Irrelevant

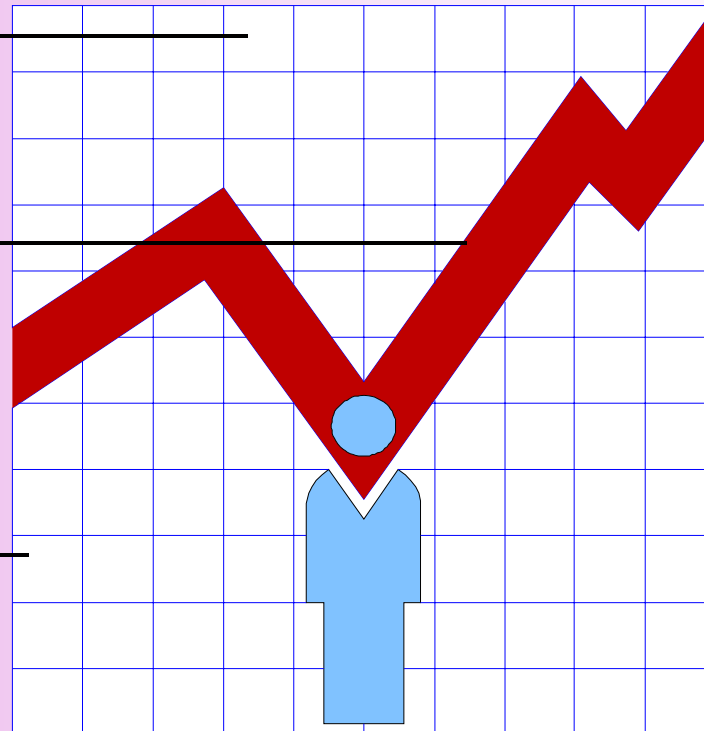
- ➡ Since investors do not need dividends to convert shares to cash (because they can do it themselves), they will not pay higher prices for firms with higher dividend payouts. In other words, dividend policy will have no impact on the value of the firm
- ★ MM dividend-irrelevance proposition: Under ideal conditions, the value of the firms is unaffected by dividend policy
- ★ Given the firm's capital budgeting and borrowing decisions, dividend policy is a trade-off between cash dividends and the issue or repurchase of common stock

Dividend Policy is Irrelevant

Example - Assume Rational Semiconductor has no extra cash, but declares a \$1,000 dividend. They also require \$1,000 for current investment needs. Using M&M Theory, and given the following balance sheet information, show how the value of the firm is not altered when new shares are issued to pay for the dividend.

Record Date

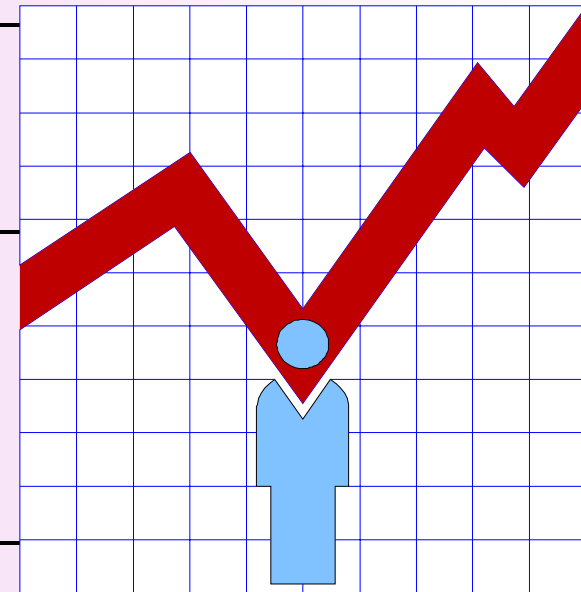
Cash	1,000
Asset Value	9,000
Total Value	10,000 +
New Proj NPV	2,000
# of Shares	1,000
price/share	\$12



Dividend Policy is Irrelevant

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Record Date		Pmt Date
Cash	1,000	0
Asset Value	9,000	9,000
Total Value	10,000 +	9,000
New Proj NPV	2,000	2,000
# of Shares	1,000	1,000
price/share	\$12	\$11



Dividend Policy is Irrelevant

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<u>Record Date</u>		<u>Pmt Date</u>	<u>Post Pmt</u>
Cash	1,000	0	1,000 (91 sh @ \$11)
Asset Value	9,000	9,000	9,000
Total Value	10,000 +	9,000	10,000
New Proj NPV	2,000	2,000	2,000
# of Shares	1,000	1,000	1,091
price/share	\$12	\$11	\$11



NEW SHARES ARE ISSUED

Dividend Policy is Irrelevant

Example - continued - Shareholder Value

	<u>Record</u>
Stock	12,000
Cash	0
 Total Value	 12,000

Stock = 1,000 sh @ \$12 = 12,000

Dividend Policy is Irrelevant

Example - continued - Shareholder Value

	<u>Record</u>	<u>Pmt</u>
Stock	12,000	11,000
Cash	0	1,000
Total Value	12,000	12,000

Stock = 1,000sh @ \$11 = 11,000

Dividend Policy is Irrelevant

Example - continued - Shareholder Value

	<u>Record</u>	<u>Pmt</u>	<u>Post</u>
Stock	12,000	11,000	12,000
Cash	0	1,000	0
Total Value	12,000	12,000	12,000

Stock = 1,091sh @ \$11 = 12,000

Dividends Increase Value

Market Imperfections and Clientele Effect

There are natural clients for high-payout stocks, but it does not follow that any particular firm can benefit by increasing its dividends. The high dividend clientele already have plenty of high dividend stock to choose from.

Dividends Increase Value

Dividends as Signals

Dividend increases send good news about cash flows and earnings. Dividend cuts send bad news.
(information content of dividends)

Because a high dividend payout policy will be costly to firms that do not have the cash flow to support it, dividend increases signal a company's good fortune and its manager's confidence in future cash flows.

Dividends Decrease Value

Tax Consequences

Companies can convert dividends into capital gains by shifting their dividend policies. If dividends are taxed more heavily than capital gains, taxpaying investors should welcome such a move and value the firm more favorably. (p.444 table 16-3)

In such a tax environment, the total cash flow retained by the firm and/or held by shareholders will be higher than if dividends are paid.

Dividends Decrease Value

	Firm A	Firm B
Next years price	\$112.50	\$102.50
Dividend	\$ 0	\$10.00
Total pretax payoff	\$112.50	\$112.50
Todays stock price	\$100	\$97.78
Capital gain	\$12.50	\$4.72
Pretax rate of return (%)	$\frac{12.5}{100} = 12.5\%$	$\frac{14.72}{97.78} = 15.05\%$
Tax on dividend @ 40%	\$0	$.40 \times \$10 = \4.00
Tax on capital gain @ 20%	$.20 \times \$12.50 = \2.50	$.20 \times \$4.72 = \0.94
Total after tax income (dividend plus capital gains less taxes)	$(0 + 12.50) - 2.50$ $= \$10.00$	$(10.00 + 4.72)$ $- (4.00 - .94)$ $= \$9.78$
Aftertax rate of return (%)	$\frac{10}{100} = .10 = 10\%$	$\frac{9.78}{97.78} = .10 = 10\%$

Dividends Decrease Value

- ➡ Before 1986, dividends tax was up to 50%, the realized capital gains were taxed only 20%
- ➡ Taxes on dividends have to be paid immediately, but taxes on capital gains can be deferred until shares are sold and capital gains are realized
- ➡ Pension funds are untaxed, so there is no difference for them
- ➡ Corporations have to pay a 35% tax on the full amount of any realized capital gain. However, they pay corporate income tax on only 30% of any dividend received