CHAPTER 14
Distributions to shareholders:
Dividends and share repurchases

- Theories of investor preferences
- Signaling effects
- Residual model
- Dividend reinvestment plans
- Stock dividends and stock splits
- Stock repurchases
What is dividend policy?

• The decision to pay out earnings versus retaining and reinvesting them.

• Dividend policy includes
  – High or low dividend payout?
  – Stable or irregular dividends?
  – How frequent to pay dividends?
  – Announce the policy?
Do investors prefer high or low dividend payouts?

• Three theories of dividend policy:
  – Dividend irrelevance: Investors don’t care about payout.
  – Tax preference: Investors prefer a low payout.
Dividend irrelevance theory

• Investors are indifferent between dividends and retention-generated capital gains. Investors can create their own dividend policy:
  – If they want cash, they can sell stock.
  – If they don’t want cash, they can use dividends to buy stock.

• Proposed by Modigliani and Miller and based on unrealistic assumptions (no taxes or brokerage costs), hence may not be true. Need an empirical test.

• Implication: any payout is OK.
Bird-in-the-hand theory

• Investors think dividends are less risky than potential future capital gains, hence they like dividends.
• If so, investors would value high-payout firms more highly, i.e., a high payout would result in a high $P_0$.
• Implication: set a high payout.
Tax Preference Theory

• Retained earnings lead to long-term capital gains, which are taxed at lower rates than dividends: 20% vs. up to 38.6%. Capital gains taxes are also deferred.
• This could cause investors to prefer firms with low payouts, i.e., a high payout results in a low $P_0$.
• Implication: Set a low payout.
Possible stock price effects

Stock Price ($)

Bird-in-the-Hand

Irrelevance

Tax preference

Payout
Possible cost of equity effects

Cost of Equity (%)

- Tax preference
- Irrelevance
- Bird-in-the-Hand

Payout
Which theory is most correct?

• Empirical testing has not been able to determine which theory, if any, is correct.
• Thus, managers use judgment when setting policy.
• Analysis is used, but it must be applied with judgment.
What’s the “information content,” or “signaling,” hypothesis?

• Managers hate to cut dividends, so they won’t raise dividends unless they think raise is sustainable. So, investors view dividend increases as signals of management’s view of the future.

• Therefore, a stock price increase at time of a dividend increase could reflect higher expectations for future EPS, not a desire for dividends.
What’s the “clientele effect”? 

• Different groups of investors, or clienteles, prefer different dividend policies.
• Firm’s past dividend policy determines its current clientele of investors.
• Clientele effects impede changing dividend policy. Taxes & brokerage costs hurt investors who have to switch companies.
What is the “residual dividend model”?

• Find the retained earnings needed for the capital budget.
• Pay out any leftover earnings (the residual) as dividends.
• This policy minimizes flotation and equity signaling costs, hence minimizes the WACC.
Residual dividend model

\[
\text{Dividends} = \text{Net Income} - \left( \frac{\text{Target equity ratio}}{\text{Total capital budget}} \right)
\]

- Capital budget – $800,000
- Target capital structure – 40% debt, 60% equity
- Forecasted net income – $600,000
- How much of the forecasted net income should be paid out as dividends?
Residual dividend model:
Calculating dividends paid

• Calculate portion of capital budget to be funded by equity.
  – Of the $800,000 capital budget, 0.6($800,000) = $480,000 will be funded with equity.

• Calculate excess or need for equity capital.
  – With net income of $600,000, there is more than enough equity to fund the capital budget. There will be $600,000 - $480,000 = $120,000 left over to pay as dividends.

• Calculate dividend payout ratio
  – $120,000 / $600,000 = 0.20 = 20%
Residual dividend model:
What if net income drops to $400,000? Rises to $800,000?

• If NI = $400,000 ...
  – Dividends = $400,000 − (0.6)($800,000) = -$80,000.
  – Since the dividend results in a negative number, the firm must use all of its net income to fund its budget, and probably should issue equity to maintain its target capital structure.
  – Payout = $0 / $400,000 = 0%

• If NI = $800,000 ...
  – Dividends = $800,000 − (0.6)($800,000) = $320,000.
  – Payout = $320,000 / $800,000 = 40%
How would a change in investment opportunities affect dividend under the residual policy?

- Fewer good investments would lead to smaller capital budget, hence to a higher dividend payout.
- More good investments would lead to a lower dividend payout.
Comments on Residual Dividend Policy

- **Advantage** – Minimizes new stock issues and flotation costs.
- **Disadvantages** – Results in variable dividends, sends conflicting signals, increases risk, and doesn’t appeal to any specific clientele.
- **Conclusion** – Consider residual policy when setting target payout, but don’t follow it rigidly.
What’s a “dividend reinvestment plan (DRIP)”?

• Shareholders can automatically reinvest their dividends in shares of the company’s common stock. Get more stock than cash.

• There are two types of plans:
  – Open market
  – New stock
Open Market Purchase Plan

• Dollars to be reinvested are turned over to trustee, who buys shares on the open market.
• Brokerage costs are reduced by volume purchases.
• Convenient, easy way to invest, thus useful for investors.
New Stock Plan

• Firm issues new stock to DRIP enrollees (usually at a discount from the market price), keeps money and uses it to buy assets.
• Firms that need new equity capital use new stock plans.
• Firms with no need for new equity capital use open market purchase plans.
• Most NYSE listed companies have a DRIP. Useful for investors.
Setting Dividend Policy

• Forecast capital needs over a planning horizon, often 5 years.
• Set a target capital structure.
• Estimate annual equity needs.
• Set target payout based on the residual model.
• Generally, some dividend growth rate emerges. Maintain target growth rate if possible, varying capital structure somewhat if necessary.
Stock Repurchases

• Buying own stock back from stockholders
• Reasons for repurchases:
  – As an alternative to distributing cash as dividends.
  – To dispose of one-time cash from an asset sale.
  – To make a large capital structure change.
Advantages of Repurchases

- Stockholders can tender or not.
- Helps avoid setting a high dividend that cannot be maintained.
- Repurchased stock can be used in takeovers or resold to raise cash as needed.
- Income received is capital gains rather than higher‐taxed dividends.
- Stockholders may take as a positive signal--management thinks stock is undervalued.
Disadvantages of Repurchases

• May be viewed as a negative signal (firm has poor investment opportunities).
• IRS could impose penalties if repurchases were primarily to avoid taxes on dividends.
• Selling stockholders may not be well informed, hence be treated unfairly.
• Firm may have to bid up price to complete purchase, thus paying too much for its own stock.
Stock dividends vs. Stock splits

- Stock dividend: Firm issues new shares in lieu of paying a cash dividend. If 10%, get 10 shares for each 100 shares owned.
- Stock split: Firm increases the number of shares outstanding, say 2:1. Sends shareholders more shares.
Stock dividends vs. Stock splits

- Both stock dividends and stock splits increase the number of shares outstanding, so “the pie is divided into smaller pieces.”
- Unless the stock dividend or split conveys information, or is accompanied by another event like higher dividends, the stock price falls so as to keep each investor’s wealth unchanged.
- But splits/stock dividends may get us to an “optimal price range.”
When and why should a firm consider splitting its stock?

• There’s a widespread belief that the optimal price range for stocks is $20 to $80. Stock splits can be used to keep the price in this optimal range.

• Stock splits generally occur when management is confident, so are interpreted as positive signals.

• On average, stocks tend to outperform the market in the year following a split.