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.
  - Bird-in-the-hand: Investors prefer a high 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.

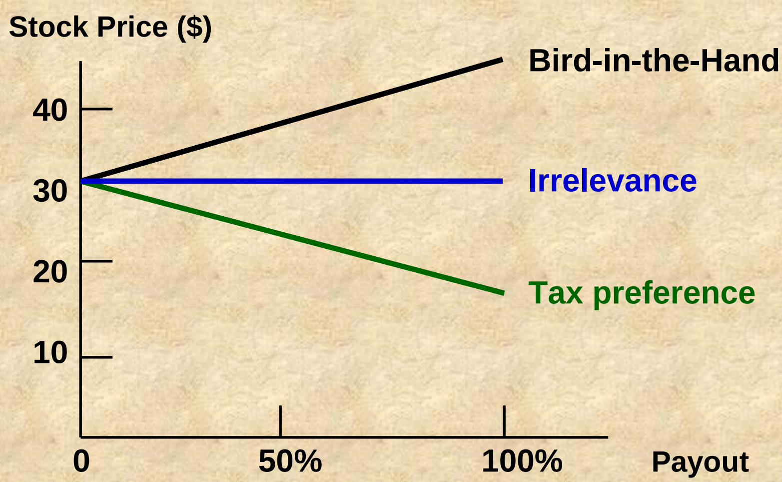
Bird-in-the-hand theory

- 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.

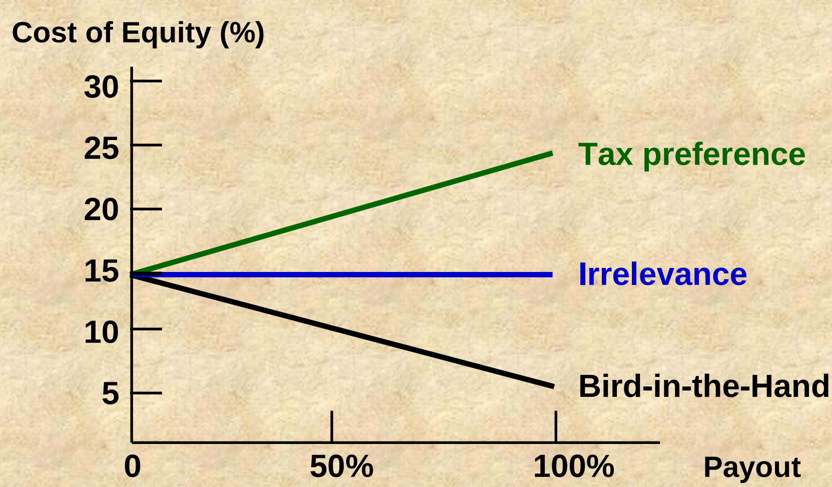
Tax Preference Theory

- 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



Possible cost of equity effects



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.

Information Content (Signaling) Hypothesis

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

- If a company’s stock price increases at the time it announces a dividend increase, this could reflect expectations for higher future EPS, not a preference for dividends over retention and capital gains.
- Conversely, a dividend cut would be a signal that managers are worried about future earnings.

- The signaling impact constrains dividend decisions by imposing a large cost on a dividend cut and by discouraging managers from raising dividends until they are sure about future earnings.
- Managers tend to raise dividends only when they believe future earnings can comfortably support a higher dividend level and they cut dividends only as a last resort.

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 impact might dividend policy have on agency costs?

- Firms with high payouts will have to go to the capital markets more frequently.
- Bankers will supply capital more willingly to better-managed firms.
- So, stockholders can worry less if the payout is high.

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

$$\text{Dividends} = \text{Net Income} - \left[\begin{pmatrix} \text{Target} \\ \text{equity} \\ \text{ratio} \end{pmatrix} \times \begin{pmatrix} \text{Total} \\ \text{capital} \\ \text{budget} \end{pmatrix} \right]$$

- 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.