I. **How dividends are paid out.**

- Dividend policy is defined as the tradeoff between retaining earnings on the one hand and paying out cash on the other hand.

- You can't pay out your "par" capital as a dividend...
  → State law protects the firm's creditors (i.e., bondholders) from paying excessive dividend.
  [Extreme case : selling all the assets and payout all the proceeds as a dividend]

- Paying a dividend reduces the amount of R/E.
- Many firms have automatic dividend reinvestment plan (so call DRIP), under which the new shares are issued at a 5% discount from the market price.
  → It saves the underwriting costs of a regular share issue.

- Share repurchases as an alternative to dividends...
  → Happens when cash resources have generally outrun good capital investment opportunities.
  [i.e., a firm has accumulated large amounts of unwanted cash]
  → Happens when the firm wants to change the capital structure by replacing equity with debt.

- Major methods of repurchases
  1. Acquisition in the open market
  2. By a general tender offer to shareholders.
  3. By direct negotiations with a major shareholder.
     [ i.e., Greenmail : Shares are repurchased by the target of the takeover at a price which makes the hostile bidder happy to agree to leave the target alone]
  → Deprive the shareholders of the value.

- Reasons for repurchases
  A. Information or Signalling Hypothesis
    - No Profitable use for internally generated funds.
    - Firm believe that stock is undervalued.
    - Mixed results (positive or negative)
  B. Dividend or Personal Taxation Hypothesis
    - In order to let the S/Holders benefit from the preferential tax treatment of repurchases relative to dividend.
  C. Leverage Hypothesis.
    - Tax subsidy connected with the deductibility of interest payments. This subsidy is passed on to the shareholders.
  D. Bondholder Expropriation Hypothesis.
    - Repurchase reduces the assets of the firm and therefore the value of the claims of the bondholders.
    - This plausibility of this hypothesis is weakened by the existence of the law and by the bond covenants.
II. How firms decide on dividend payments.

- Procedure for Dividend Payment [Page 461, Figure 18.1]
  1. Declaration date
  2. Ex-Dividend date: traded ex-dividend on and after 2nd business day before record date.
  3. Record Date
  4. Payment Date

- Lintner's finding on dividends: (page 481. 18.9)
  1. Firms have long-run target dividend payout ratios
  2. Changes much more important than levels
  3. Transitory earnings don't lead to dividend changes
  4. Managers are reluctant to reverse a recent change in dividends


- The Information Contents of the Dividend
  Dividend increases are good news → signal managerial optimism.
  Dividend increases usually lead to stock price increases
  → That is not because dividend increases create value but because they signal future prosperity.

- Clienteles Effect: Individual with different tax brackets and Corporation.

III. Dividend Controversy

1. Right wing: increasing payouts raise value [Bird-in-the-hand Theory]
2. Middle of the road: who cares about dividend policy? [MM dividend theory-Homemade div]
3. Left wing: increasing payouts lowers value [Tax Preference Theory]

• MIDDLE OF THE ROAD: Franco Modigliani and Merton Miller [MM Model]
  - The firm value is determined by its basic earning power [or by the income produced by its assets], not by how this income is split between dividends and R/E.
  - Homemade dividends.
    - Ex.) if a firm does not pay dividends, a S/Holders who wants a 5% dividend can “create” it by selling 5% of his stock.
  - Homemade dividends.
  - If companies could increase their value by increasing dividends, wouldn't they have done so already?

• THE RIGHT WING:
  - Investors value a dollar of expected dividends more highly than a dollar of expected capital gains because the dividend yield component is less risky than the “g” component in the Gordon’s model.
  - Dividends carry information that the firm truly is healthy.
  - Investors don't fully trust managers to handle the firm's free cash flow--but here dividend policy has an impact because it eliminates negative NPV investments.
THE LEFT WING:

→ Effects of a shift in dividend policy when dividends are taxed more heavily than capital gains.

[ The high payout stock must sell at a lower price to provide the same after-tax rate of return ]

<table>
<thead>
<tr>
<th></th>
<th>No-Dividend Firm</th>
<th>High-Dividend Firm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Next Year's Price</td>
<td>$112.50</td>
<td>$102.50</td>
</tr>
<tr>
<td>Dividend</td>
<td>$0</td>
<td>$10.00</td>
</tr>
<tr>
<td>Total Pretax Payoff</td>
<td>$112.50</td>
<td>$112.50</td>
</tr>
<tr>
<td>Today's Stock Price</td>
<td>$100</td>
<td>$X</td>
</tr>
<tr>
<td>Capital Gain</td>
<td>$12.50</td>
<td>$(102.5-X)</td>
</tr>
<tr>
<td>Tax on Div. (50%)</td>
<td>$0</td>
<td>$5.00</td>
</tr>
<tr>
<td>Tax on C.Gain (20%)</td>
<td>$2.50</td>
<td>$(102.5-X)*0.2</td>
</tr>
<tr>
<td>After-Tax Income</td>
<td>$10.00</td>
<td>$(10)*0.5+(102.5-X)*0.8</td>
</tr>
<tr>
<td>After-Tax R.of Ret.</td>
<td>$10/100 x 100=10%</td>
<td>$(10)*0.5+(102.5-X)*0.8 / X = 10%</td>
</tr>
</tbody>
</table>

Moral: Cut your dividends and expropriate a piece of the government’s share of the corporation by playing the angles of the tax system.

But the tax reform act of 1986 equalized the tax rates (now only a small gap exists).

• Suggested Homework Problems

Q1 – Q7