Preferred Stock Characteristics

- Unlike common stock, no ownership interest
- Second to debt holders on claim on company’s assets in the event of bankruptcy.
- Annual dividend yield as a percentage of par value
- Preferred dividends must be paid before common dividends
- If cumulative preferred, all missed past dividends must be paid before common dividends can be paid.

Preferred Stock Valuation

- Promises to pay the same dividend year after year forever, never matures.
- A perpetuity.
- \( P_0 = \frac{D}{r} \)
- Expected Return: \( r = \frac{D}{P_0} \)
- Example: GM preferred stock has a $25 par value with a 8% dividend yield. What price would you pay if your required return is 9%?
- \( D = 25 \times 0.08 = 2 \)
- \( V_{ps} = \frac{2}{0.09} = 22.22 \)
**The Financial Pages:**

**Preferred Stocks**

<table>
<thead>
<tr>
<th>Hi</th>
<th>Lo</th>
<th>Sym</th>
<th>Div</th>
<th>%</th>
<th>PE</th>
<th>100s</th>
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<td>GM</td>
<td>2.28</td>
<td>8.9</td>
<td>...</td>
<td>86</td>
<td>25</td>
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- Dividend: $2.28 on $25 par value = 9.12% dividend rate.
- Expected return: $2.28 / 25.53 = 8.9%.

**Common Stock Quotes**

<table>
<thead>
<tr>
<th>Hi</th>
<th>Lo</th>
<th>Sym</th>
<th>Div</th>
<th>%</th>
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<td>4.2</td>
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<td>0</td>
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- GMs Dividend Yield = $2.00 / $48.12 = 4.2%
- PE Ratio = Close Price/Earnings Per Share (EPS)
- GE's Latest EPS = Close/PE = $32.52 / 22 = $1.48
Valuing Common Stocks: Finite Holding Period

Dividend Discount Model - Computation of today’s stock price which states that share value equals the present value of all expected future dividends.

\[ P_0 = \frac{Div_1}{(1+r)^1} + \frac{Div_2}{(1+r)^2} + \ldots + \frac{Div_H + P_H}{(1+r)^H} \]

H - Time horizon for your investment.

Stock Valuation

Infinite Holding Periods

Stock Value = PV of Future Expected Dividends

\[ P_0 = \frac{D_1}{(1+r)^1} + \frac{D_2}{(1+r)^2} + \frac{D_3}{(1+r)^3} + \ldots + \frac{D_\infty}{(1+r)^\infty} \]
Stock Valuation: Dividend Patterns

For Valuation: we will assume stocks fall into one of the following dividend growth patterns.

- Constant growth rate in dividends
- Zero growth rate in dividends, like preferred stock
- “Supernormal” (non-constant) growth rate in dividends

Stock Valuation Case Study: Doh! Doughnuts

- We have found the following information for Doh! Doughnuts:
  - current dividend = $2
  - Required return = 12%
Analysts Estimates for Doh! Doughnuts

- NEDFlanders predicts a constant annual growth rate in dividends and earnings of zero percent (0%).
- Barton Kruston Simpson predicts a constant annual growth rate in dividends and earnings of 8 percent (8%).
- Moe Homer Simpson & Bernard expect a dramatic growth phase of 20% annually for each of the next 3 years followed by a constant 8% growth rate in year 4 and beyond.

Our Task: Valuation Estimates

- What should be each analyst’s estimated value of Doh! Doughnuts?
Valuing Common Stocks: Constant Growth

Constant Growth DDM - A version of the dividend growth model in which dividends grow at a constant rate (Gordon Growth Model).

\[ P_0 = \frac{\text{Div}_0 (1+g)}{r - g} = \frac{\text{Div}_1}{r - g} \]