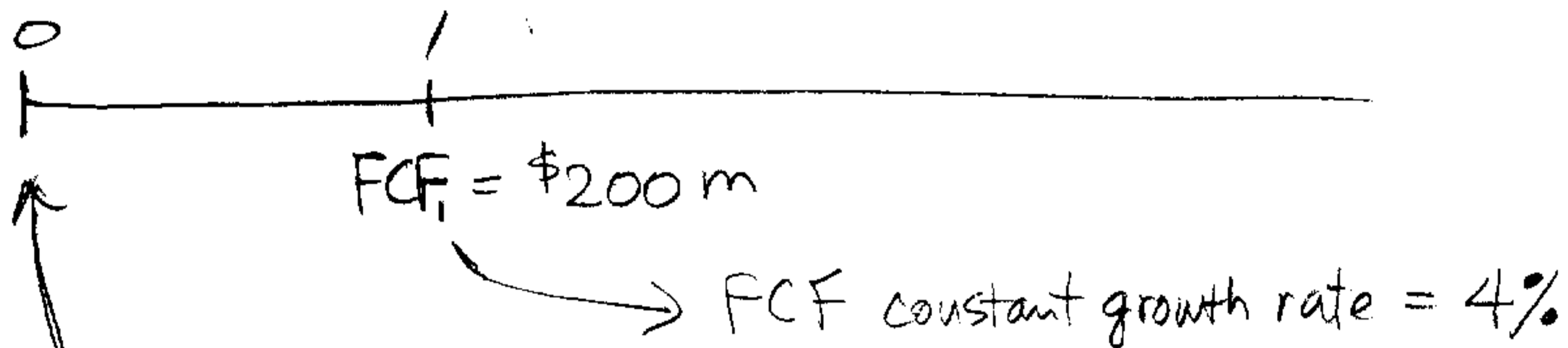


Corporation Valuation Model

(4)

→ Similar to the constant growth model
but use free cash flows instead of dividends.

Ex) Please take a look at the Corporate valuation example
in chapter 9 ppt slides.



Step 1: Find the firm's value today using the constant growth model.

$$V_0 = \frac{FCF_1}{WACC - g} \quad (\Rightarrow \text{similar to } \frac{D_1}{r - g), \text{ WACC} = \text{Weighted average cost of capital})$$
$$= \frac{\$200 \text{ m}}{.08 - .04} = \$5,000 \text{ m} = \$5 \text{ billion}$$

Step 2: The firm's equity value = $V_0 - \text{Debt} - \text{Preferred stock}$
(common)
 $= 5,000 \text{ m} - 600 \text{ m} - 400 \text{ m}$
 $= 4,000 \text{ m} (= 4 \text{ billion})$

Step 3: Stock price per share today = $\frac{\text{Equity}}{\# \text{ of shares}} = \frac{4,000 \text{ m}}{80 \text{ m}} = \50

Preferred stock valuation

→ With perpetual dividends, preferred stock price
is equal to the PV of perpetuity.

$$\text{So, Preferred stock price} = \frac{D}{r}$$

Look at the Preferred stock valuation example in ch 9 ppt slides.

$$\text{Preferred stock price} = \frac{3}{.15} = \$20$$