

## Two stage growth models

- Expected Earnings  $E_1 = \$5$  per share; Div. payout = 60%,  $D_1 = 5 * 0.6 = 3$
- Required Rate of Return = 20%
- Assume: Earnings and dividends will grow at 10% per year for the next 3 years and then at 4% per year forever.

- How to discount cash flows ?
- In two parts: a) first discount as constant growth till year 3  
b) then each cash flow upto year 3

$$a) P_3 = 3.78 / (.20 - .04) = 23.625$$

0	1	2	3	4	$\infty$
$P_0$	3.0	3.3	3.63	3.78	$(D_4 = D_3(1.04) = 3.78)$

$$b) P_0 = \frac{3.0}{(1.20)} + \frac{3.30}{(1.20)^2} + \frac{3.63}{(1.20)^3} + \frac{23.625}{(1.20)^3} = \$20.57$$

- Multi-stage growth (3-stage model was popular at Lynch)
- Expectations investing: Can rework the model to judge rate of growth implied in current stock prices and then whether that rate of growth is likely to occur, and how long that rate of growth would have to persist, before making an investment decision.

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