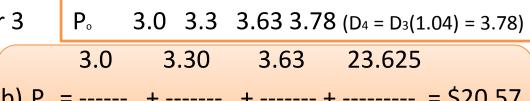
## Two stage growth models

Introduction to Investments Prof S G Badrinath Multi-stage DCF Models

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



b) 
$$P_0 = ---- + ----- + ----- = $20.57$$
  
(1.20)  $(1.20)^2 (1.20)^3 (1.20)^3$ 

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

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