

- 1) The price of The Walt Disney Company (DIS) is currently around \$41 per share. Their earnings per share (EPS) is \$2.63. Their 5-year average P/E is 18. If Disney's earnings per share are expected to grow at 14% next year, what would you expect their price to be next year?

$$\begin{aligned} \text{expected stock price} &= \text{historical P/E Ratio} * \text{PROJECTED Earnings per share next year} \\ &= 18 * \$2.63 * (1 + 14\%) = \$53,9676 \approx \underline{\$53.97} \end{aligned}$$

- 2) Disney's cash flow per share (CFPS) is currently \$3.56 per share. Their 5-year average Price-to-Cash Flow per Share ratio is 13. If we expect their cash flow per share to grow by 10% next year, what would you expect their price to be next year?

$$\begin{aligned} \text{expected stock price} &= \text{historical P/CF Ratio} * \text{PROJECTED Cash Flow per Share next year} \\ &= 13 * \$3.56 * (1 + 10\%) = \$50,908 \approx \underline{\$50.91} \end{aligned}$$

- 3) Finally, Disney's sales per share (SPS) is currently \$20.32 per share. Their 5-year average Price-to-Sales per Share ratio is 1.7. If we expect their sales per share to grow by 8% next year, what would you expect their price to be next year?

$$\begin{aligned} \text{expected stock price} &= \text{historical P/S ratio} * \text{PROJECTED Sales per share next year} \\ &= 1.7 * \$20.32 * (1 + 8\%) = \$37.3075 \approx \underline{\$37.31} \end{aligned}$$

- 4) Centerpoint Energy (CNP) is currently selling for around \$19 per share. It has been consistently paying \$0.81 in dividends. If our expected rate of return is 6%, how much would we be willing to pay for the ZERO stock? Would we consider the stock a good investment at \$19 per share?

GROWTH MODEL

$$\text{present Value of Stock} = \frac{\text{Annual Dividends}}{\text{Required Rate of Return}} = \frac{\$0.81}{0.06} = \$13.50$$

Market price = \$19

No, we would not consider this a good investment. The market price is greater than the computed present value. We would need to lower our required rate of return to about 4 1/4% for it to be a good investment for us.

KEY

5) Waste Management, Inc. (WM) is currently selling for around \$35 per share and paying \$1.36 per year in dividends. The company has been growing the dividend at a constant rate at 8%. Our expected rate of return is 10%. At what price would we consider Waste Management, Inc. to be a good investment?

Constant perpetual growth model

$$\text{present value of Stock} = \frac{\text{Annual Dividends} * (1 + \text{constant dividend growth rate})}{\text{Required Rate of Return} - \text{constant dividend growth rate}} = \frac{\$1.36 * (1 + 8\%)}{10\% - 8\%} = \frac{\$1.4688}{0.02} = \$73.44$$

Yes, we believe this is a good investment.

6) Yum! Brands (YUM – they own KFC, Taco Bell, & Pizza Hut) is currently selling for around \$65 per share. The dividends for the next three years are expected to be \$1.14 for 2012, \$1.24 for 2013, and \$1.32 for 2014. We forecast the price per share to be approximately \$84 at the end of 2014. If we desire a rate of return of 11%, using the Dividends-and-Earnings Model, would we consider this a good investment?

YEAR	Future Cash Flows	Present Value Multipliers	Discounted Cash Flows
2012	\$1.14	* 0.901	= \$1.02714
2013	\$1.24	* 0.812	= \$1.00688
2014	*1.32 + \$84 \$85.32	* 0.731	= \$62.3689
			\$64,4029 ≈ \$64.40

With a price of \$65, Yum! Brands doesn't quite measure up to our required rate of return of 11%, but it is pretty darned close!

7) The price of Biolase Technology (BLTI) is currently around \$3.30 per share. The company is currently losing money and pays no dividends. But it has patents on teeth cleaning and whitening technologies that should be very popular and profitable in the future. The average of the analysts' estimates for the stock price next year is \$6.11. We estimate that it will be \$8.50 price in five years. If our desired rate of return is 14%, would this be a good buy?

$$\text{present value} = \left[ \begin{array}{l} \$0 \\ \text{value from} \\ \text{Dividends} \end{array} \right] + \left[ \begin{array}{l} \text{expected} \\ \text{stock price} \\ \text{in 5 years} \end{array} * \begin{array}{l} \text{present value} \\ \text{multiplier} \\ \text{for 14\% for} \\ \text{5 years} \end{array} \right]$$

no dividends!

$$= \$0 + \left[ \$8.50 * 0.519 \right] = \$4.4115 \approx \$4.41$$

Market price = \$3.30

we believe it is a good value.  
BUT it is a very risky stock! (Benjamin Graham would not approve of this stock.)