FINM2063 Introduction to Finance

Chapter 7 Exercises

1. An investor with a required return of 14% for very risky investments in common stock has analyzed three firms and must decide which, if any, to purchase. The information is as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| Firm | A | B | C |
| Current earnings | $2.00 | $3.20 | $7.00 |
| Current dividend | $1.00 | $3.00 | $7.50 |
| Expected annual growth rate in dividends and earnings | 7% | 2% | -1% |
| Current market price | $23 | $47 | $60 |

1. What is the maximum price that the investor should pay for each stock based on the constant dividend growth model?
2. If the investor does buy stock A, what is the implied percentage return?
3. If the appropriate P/E ratio is 12, what is the maximum price the investor should pay for each stock? Would your answers be different if the appropriate P/E were 7?
4. What does stock C’s negative growth rate imply?
5. Jersey Jewel Mining (JJM) has a beta coefficient of 1.2. Currently the risk-free rate is 2% and the anticipated return on the market is 8%. JJM pays a $4.50 dividend that is growing at 4% annually.
6. What is the required return for JJM?
7. Given the required return, what is the value of the stock?
8. If the stock is selling for $100, what should you do?
9. If the beta coefficient declines to 1.0, what is the new value of the stock?
10. If the price remains $100, what course of action should you taken given the valuation in d?
11. Ewald Company’s current price is $36, and its last dividend was $2.40. In view of Ewald’s strong financial position and its consequent low risk, its required rate of return is only 12%. If dividends are expected to grow at a constant rate, *g*, in the future, and if *r* is expected to remain at 12%, what is Ewald’s expected stock price five years from now?
12. Your broker offers to sell you some shares of Wingler & Company common stock, which paid a dividend of $2 yesterday. You expect the dividend to grow at a rate of 5% per year into perpetuity. The appropriate rate of return for the stock is 12%.
    1. If you purchase the Wingler & Company stock with the intent of selling it in three years, what cash flows will you receive each year?
    2. What is the market value of Wingler’s stock?
13. Microtech Corporation is expanding rapidly. Because it needs to retain all of its earnings, it does not currently pay any dividends. Investors expect Microtech to begin paying dividends eventually, with the first dividend of $1 coming three years from today. The dividend should grow rapidly – at a rate of 50% per year – during Years 4 and 5. After Year 5, the company should grow at a constant rate of 8% per year. If the required return on the stock is 15%, what is the value of the stock today?