

# REVIEW FOR EXAM #2

## EXAM #2

Thursday, October 31<sup>st</sup>

**7:15** – 9:15 AM

- For Online Students: **Friday through Tuesday**  
**(deadline: Tuesday, 11/5)**
- Don't Forget:
  - Financial Calculator
  - A Black Pen (preferably)
  - *Reminder about the back side*

## **THINGS TO DO...**

- Study both the notes and the book.
- Do suggested problems.
- Do more problems!
- Be comfortable with calculator, but understand concepts (e.g., timeline).
- Get help if you are having problems.

## **HELP!**

- Wednesday Review
  - 9:30 – 10:45 AM in GBB 3018 (recording posted)
- Office Hours
  - Tuesdays and Thursdays
  - 11:00 AM – 12:00 Noon
  - *or by appointment*
- You can ask questions up to your exam time

## **THINGS NOT TO DO...**

- Study solutions and not do problems.
- Memorize all the formulas.
- Forget your calculator.
- Think bad thoughts about me between now and the exam.

## **EXAM CONTENT AND STRUCTURE**

## **BONDS AND THEIR VALUE**

- Chapter 8
- Calculate price, YTM, YTC, Current Yield, or other parts
  - Annual or semiannual; coupon or zero coupon
- Understand relation among coupon rate, YTM, price, par
- Bond features
  - E.g., sinking fund provisions, call provisions, seniority, restrictive covenants
- The term structure of interest rates
- Interest rate risk and reinvestment rate risk

## **STOCKS AND THEIR VALUE**

- Chapter 9
- The Rights of Stockholders
- The Proxy Statement
- Types of Stock Issues
- Common vs. Preferred Stock
- Differences Between Debt and Equity
- Calculating Stock Value
- The Components of Return
- Stock Market Efficiency

## **RISK AND RETURN**

- Chapters 10-11 (sections 11.1 - 11.3, 11.6, and 11.9)
- Calculating Holding Period Returns, Sample Variance and Standard Deviation, Expected Returns and the Variance and Standard Deviation of Expected Returns, Portfolio Returns and Portfolio Expected Returns, Covariance, Correlation Coefficient, the Variance and Standard Deviation of a Two-asset Portfolio, Beta, Portfolio Betas, the CAPM
- ↑ Know What They Mean ↑ (*The Conceptual Side of Things*)
- Diversification and Risk

## **THE COST OF CAPITAL**

- Chapter 13
- How to Calculate it
- How to Estimate the Pieces (and the Challenges)
- What it Measures
- What Affects it
- How to Adjust it for a Project
- Flotation Costs

# QUESTIONS AND PRACTICE PROBLEMS

## PRACTICE PROBLEM #1

As financial vice president of Butler Industries, you have been tasked with estimating the firm's cost of capital. You have been provided the following information:

- The firm's tax rate is 40%.
- The current price of Butler's 12% coupon, semiannual payment, noncallable bonds with 15 years remaining to maturity is \$1,153.72. Butler does not use short-term interest-bearing debt on a permanent basis. New bonds would be privately placed with no flotation cost.

*(continued on next slide)*

- The current price of the firm's 10%, \$100 par value, perpetual preferred stock is \$116.95. Butler would incur flotation costs equal to 5% of the proceeds on a new issue.
- Butler's common stock is currently selling for \$50 per share. Its last dividend was \$3.12, and dividends are expected to grow at a constant rate of 5.8% in the foreseeable future. Butler's beta is 1.2, the yield on T-bonds is 5.6%, and the market risk premium is estimated to be 6%. For the dividend yield plus growth rate approach, assume flotation costs of 15%.
- Butler's target capital structure is 30% long-term debt, 10% preferred stock, and 60% common equity.

## **PRACTICE PROBLEM #2**

- Harris Enterprises is expanding rapidly, and it does not pay any dividends because it currently needs to retain all of its earnings. However, investors expect Harris to begin paying dividends, with the first dividend of \$1.00 coming 3 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 rate of 8% per year. If the required return on the stock is 15%, what is the value of the stock today?



## PRACTICE PROBLEM #3

- Clark Rentals has issued bonds that have a 10% coupon rate, payable semiannually. The bonds mature in 8 years, have a face value of \$1,000, and a yield to maturity of 8.5%. What is the price of the bonds?

## PRACTICE PROBLEM #4

- Suppose you manage a \$4 million fund that consists of four stocks with the following investments:

Stock	Investment	Beta
A	\$400,000	1.50
B	600,000	-0.50
C	1,000,000	1.25
D	2,000,000	0.75

- If the CAPM holds, the market's required rate of return is 14%, and the risk-free rate is 6%, what is the fund's required rate of return?

## **PRACTICE PROBLEM #5**

- You have a \$2 million portfolio consisting of a \$100,000 investment in each of 20 different stocks. The portfolio has a beta of 1.1. You are considering selling \$100,000 worth of one stock with a beta of 0.9 and using the proceeds to purchase another stock with a beta of 1.4. What will the portfolio's new beta be after these transactions?

