

## **List of Assignments**

1. Finding Information about a Stock.
2. Finding Information about Interest Rates
3. Examine an Actively-Managed Stock Fund
4. Examine a Bond Fund
5. Investing Goals and Risk Tolerance
6. Asset Allocation: The Allocation
7. Asset Allocation: Choosing Mutual Funds
8. Finding Information about Stock Indexes
9. Buying a Stock on Margin
10. Selling a Stock Short
11. Traditional vs. Roth IRA
12. Finding Information about a Company
13. Financial Ratio Analysis
14. Valuation using PE Ratios
15. Valuation and Sustainable Growth Rate
16. Finding the Current Term Structure

## **Assignment 1. Finding Information about a Stock**

### *Objective:*

Learn how to find information about stock prices online.

### *Assignment:*

You are given a company on your assignments sheet. Go to a popular website for financial information (such as [money.cnn.com](http://money.cnn.com) or [finance.yahoo.com](http://finance.yahoo.com) or [bloomberg.com](http://bloomberg.com)) and find the information requested below.

### *Report:*

Your report may be written as a list, but be sure to use complete sentences. You should include the following information

1. Your ID number.
2. Your company's ticker symbol.
3. The quoted price along with the day and time of quote
4. The previous day's closing price and the percent change.
5. The percent change year-to-date and the closing value at the start of the year.
6. The market capitalization of the company.
7. How would you describe the behavior of the stock price over the last two years?

**WARNING:** A goal of this class is to practice getting financial information online by having you go to real websites. However, many of the websites you visit will offer advertisements for financial projects and many of these advertisements are basically scams. Nothing in this class is meant to be an endorsement of any company or any offer. Throughout your investing life you will be exposed to many kinds of financial offers and you need to do your research and be suspicious about anything you read.

## **Assignment 2. Finding Information about Interest Rates**

### *Objective:*

Learn how to find information about interest rates online.

### *Assignment:*

Go to [money.cnn.com](http://money.cnn.com) or another financial website and find current market yields.

### *Report:*

Your report may be written as a list, but be sure to use complete sentences. You should include the following information

1. Your ID number.
2. The day you collected the information
3. Find two money market yields; for example, the Fed Funds rate and the 3-month T-bill rate
4. Compare the 5-year Treasury Note rate with the 5-year TIPS rate. What does this suggest the people are expecting for inflation over the next five years?
5. Compare the 10-year Treasury Bond rate with the Investment Grade Corporate rate. What is the risk premium?

### **Assignment 3: Examine an Actively-Managed Stock Fund**

*Objective:*

Learn how to get information about a mutual fund.

*Assignment:*

Find an actively-managed stock mutual fund (that is, a fund that is trying to “beat the market” and *not* a passively-managed fund such as an index fund). Any actively-managed stock fund is fine. Look up the description of the fund online and report key information.

*Report:*

Your report may be written as a list, but be sure to use complete sentences. You should include the following information

1. Your ID number.
2. According to the fund, what is its strategy?
3. What is its style?
4. Is it very diversified in terms of industries or countries invested in?
5. What index is used as a benchmark? How has it performed compared with its benchmark over the last year? Over the last five years (or the life of the fund if it hasn't been in existence for five years)?
6. Does it have a Morningstar rating? How has it performed?
7. Is there a load? What is the expense ratio?
8. Give one other fact about the fund.

## **Assignment 4: Examine an Bond Mutual Fund**

### *Objective:*

Learn how to get information about a bond mutual fund.

### *Assignment:*

Find any bond mutual fund. Look up the description of the fund online and report key information.

### *Report:*

Your report may be written as a list, but be sure to use complete sentences. You should include the following information

1. Your project number.
2. According to the fund, what is its strategy?
3. Is it an active or passive fund?
4. For a bond fund, would you consider this relatively high risk or low risk? Why?
5. Is it very diversified in terms of countries invested in?
6. What index is used as a benchmark? How has it performed compared with its benchmark over the last year? Over the last five years? (or the life of the fund if it hasn't been in existence for five years)
7. Is there a load? What is the expense ratio?
8. Give one other fact about the fund.

## **Assignment 5. Investing Goals and Risk Tolerance**

### *Objective:*

Understand the concepts of investing goals and risk tolerance.

### *Assignment:*

Go to: [https://www.wellsfargo.com/investing/basics/goals\\_risk](https://www.wellsfargo.com/investing/basics/goals_risk)

How might Sharon's investment goals affect her investment strategies?

Go to: [http://moneycentral.msn.com/investor/calcs/n\\_riskq/main.asp](http://moneycentral.msn.com/investor/calcs/n_riskq/main.asp) and take the quiz. What is your risk tolerance and capacity for risk?

### *Report:*

Your report may be written as a list, but be sure to use complete sentences. You should include the following information

1. Your ID number.
2. How might Sharon's investment goals affect her investment strategies?
3. What is your risk tolerance and capacity for risk? According to the website, how should that influence your investment strategy?

## **Assignment 6. Asset Allocation: The Allocation**

### *Objective:*

The asset allocation assignments (6 and 7) are designed to show you how to get information about mutual funds online and to implement a simple investment strategy using mutual funds.

### *The Assignment:*

A family has received \$120,000 that they want to invest towards retirement. You will determine how much they should invest in each asset class.

Information about the family is given to you on your assignments sheet. You should go to <http://cgi.money.cnn.com/tools/assetallocwizard/assetallocwizard.html> and use the asset allocator there to determine the fraction of wealth allocated to each asset class. From this you can determine the dollar amount.

### *Notes:*

There are many different asset allocators available online and they vary according to how much information you need to input and how many categories of assets they include. When doing this for real, you may want to consult several different sources. Information about asset allocation can be found in Jones *Investments* (11<sup>th</sup> ed.) chapter 8, pages 197-206.

### *The Report:*

The first sentence of the report is your ID number.

You should write a short paragraph indicating the amount that should be invested in each type of fund.

You should write a second paragraph discussing some other things you think might affect the appropriate asset allocation for the family, i.e., if you were their investment advisor, what other information would you like to know?

## **Assignment 7. Asset Allocation: Choosing Mutual Funds**

### *Objective:*

The asset allocation assignments (6 and 7) are designed to show you how to get information about mutual funds online and to implement a simple investment strategy using mutual funds.

### *Assignment:*

You are going to use mutual funds to implement the asset allocation calculated in assignment 6. Go to any mutual fund company and choose one fund for each of the asset categories. Use index funds to the extent they are offered by your mutual fund company.

### *Report:*

Your report may be written as a list, but be sure to use complete sentences. You should include the following information

1. Your ID number.
2. For each asset class, list the name of the company and fund and then a short description of the fund. For the descriptions, you can use your own words or take the description used by the fund. If you use the fund's words, be sure to put them in quotes.
3. Discuss how well diversified the funds are.

### *Notes:*

There are a number of different mutual fund companies including Vanguard or Fidelity. You are free to use any company you wish or to use funds from more than one company.



## **Assignment 8. Finding Information about Stock Indexes**

### *Objective:*

Learn how to find information about interest rates online.

### *Assignment:*

Go to [money.cnn.com](http://money.cnn.com) or another financial website and find current stock market indexes.

### *Report:*

Your report may be written as a list, but be sure to use complete sentences. You should include the following information

1. Your ID number.
2. The day you collected the information
3. Find the closing values of the S&P500, DJIA and the Nasdaq.
4. For the S&P 500, show how to find the previous day's close using both the point change and the percentage change.
5. Of Japan, England, Germany and Hong Kong, which country did the best and which did the worst?
6. How did the performances of the foreign stock markets compare with the domestic stock markets?

## **Assignment 9. Buying Stock on Margin**

### *Objective:*

Learn how to do calculations associated with buying on margin.

### *Assignment:*

You would like to buy 100 shares of ABC Corporation which is currently selling for \$x per share (x is given to you on your project sheet). The initial margin is 40%. Calculate how much money you would need to provide and how much you would borrow. You sell the stock one year later after the price has increased by 15%. If the interest rate on a margin loan was 10% how much money would you have in your account after you sold the stock and repaid the loan? What is the rate of return on your investment?

### *Report:*

Your report may be written as a list, but be sure to use complete sentences. You should include the following information:

1. Your ID number and the initial price of the stock.
2. The amount of money you would borrow.
3. The amount in your account at the end of the year and the rate of return on your investment.

### *Notes:*

Buying on margin is covered in Jones *Investments* (11<sup>th</sup> ed.) chapter 5, pages 115-118. Remember, when calculating the investment rate of return, you want to look at the amount *you* earned compared with the amount you invested.

## Assignment 10. Selling a Stock Short

### *Objective:*

Learn how to do calculations associated with selling short.

### *Assignment:*

You are interested in selling 200 shares of ABC Corporation short. The initial margin is 40%. You sell the shares at \$ $x$  (where  $x$  is the price from assignment 9). How much money do you have to add to your account and how much money is in your account in total? If the price of the stock immediately increased by 15%, and you bought it back at that price, what would be the rate of return on your investment (assume no fees or interest costs)?

### *Report:*

Your report may be written as a list, but be sure to use complete sentences. You should include the following information:

1. Your ID number and the initial price of the stock.
2. The amount of money you add to your account and the total amount of money at the start.
3. The rate of return on your investment.

### *Notes:*

Selling short is covered in Jones *Investments* (11<sup>th</sup> ed.) chapter 5, pages 118-121. Remember, when calculating the investment rate of return, you want to look at the amount *you* earned compared with the amount you invested.

## **Assignment 11. Traditional vs. Roth IRA**

### *Objective:*

Learn how to determine if a traditional IRA or a Roth IRA is a better investment.

### *Assignment:*

You will calculate how much an individual will have saved under a traditional IRA and a Roth IRA for given tax rates. You will assume that the after-tax Roth investment is \$5,000 per year. They will contribute for 30 years and retire at 65. The pre-tax rate of return on investments is 5%

### *Report:*

Your report may be written as a list, but be sure to use complete sentences. You should include the following information:

1. Your ID number, the current tax rate and the retirement tax rate from your assignments sheet.
2. How much they would have with a traditional IRA (show your work)
3. How much they would have with a Roth IRA (show your work)
4. Go to <http://www.statefarm.com/learning/calc/iracalc2.asp> and compare their answer with yours.

## **Assignment 12. Finding Information about a Company**

### *Objective:*

Learn how to find financial information about a company from various online sources.

### *Assignment:*

You will be assigned a company on your project sheet. Go to the investor relations page of the company website. Using the most recent annual report, find the CEO and CFO of the company.

Go to a financial website (e.g., [finance.yahoo.com](http://finance.yahoo.com), [money.cnn.com](http://money.cnn.com), [reuters.com](http://reuters.com)) and find the most recent values for your company's earnings, the total amount of debt and equity, and the debt to equity ratio.

Go to the SEC's website (<http://www.sec.gov/edgar.shtml>) and find your company. What is the CIK number and the SIC code and name for the industry (take a look at who are considered to be in the same industry). From the most recent 10Q, report the total amount of debt and equity and the debt to equity ratio.

### *Report:*

Your report may be written as a list, but be sure to use complete sentences. You should include the following information:

1. Your project number, company name and ticker symbol.
2. The CEO and CFO of the company.
3. From a financial website, earnings, the total amount of debt and equity and the debt to equity ratio along with the date for each of them.
4. From Edgar, the CIK number and the SIC code and name and the date of the most recent 10Q. From the 10Q, the total amount of debt and equity and the debt to equity ratio.

### *Notes:*

Edgar is the SEC's database of financial filings. They have a tutorial, but most of it will be obvious if you click around a bit. The one thing to watch for is that the same company name may bring up a number of related (or unrelated) companies. You want the filings for the main company. A good indicator that you have the right company will be that it will have the SEC (industry) code for the right industry. For example, there are eight listings for "Boeing" but the one you would want is "Boeing Co. SIC: 3721 – Aircraft".

The various financial websites will differ in the kind and amount of information offered. If you can't find what you want, try a different site. If you still can't find what you need for this assignment, report that it is unavailable.

### **Assignment 13. Financial Ratio Analysis**

*Objective:*

Learn to interpret basic financial ratios.

*Assignment:*

Compare the financial ratios of your company with the industry average.

You will be assigned a company on your project sheet. Go to the stocks page of [www.reuters.com](http://www.reuters.com). Find your company using the ticker symbol and look at the financials.

Pick **one** financial ratio in **each** of the following categories: Valuation Ratios, Growth Rates, Financial Strength, Profitability Ratios, Efficiency and Management Effectiveness. For each ratio you picked, explain how each ratio is calculated and what it measures. Report the value of the ratio and the industry average and whether the company is doing better or worse than the industry.

*Report:*

Your report may be written as a list, but be sure to use complete sentences. You should include the following information:

1. Your project number, company name and ticker symbol.
2. For each ratio, explain how it is calculated and what it measures. Report the value of the ratio and the industry average and whether the company doing better or worse than the industry.

## **Assignment 14: Valuation Using PE Ratios**

### **Objective:**

Learn how to value a stock using PE ratios.

### **Assignment:**

Go to [reuters.com](http://reuters.com) and use information about your company's earnings and competitor's PE ratios to value its stock.

### **Report:**

Your report may be written as a list, but be sure to use complete sentences. You should include the following information:

1. Your ID number.
2. Report what the stock price should be if company had the same P/E ratio as the industry or the sector? To calculate this, use the analysts estimate for annual earnings for 2011. If there is no earnings estimate, or the earnings estimate is negative, use earnings for 2010. If that's also negative, pick another company for this assignment.
3. Provide one reason the price might rationally be different from the values you estimated.



## Assignment 15. Valuation and Sustainable Growth

### *Objective:*

Learn how to use a simple dividend discount model to value a stock.

### *Assignment:*

From your assignments sheet you are given the following information:

- The return on equity.
- The plowback ratio.
- The beta of the stock, the expected market return and the risk-free rate.
- The current price of the stock.

Determine whether you should buy the stock, assuming that the company will grow at its “sustainable” growth rate.

### *Report:*

Your report may be written as a list, but be sure to use complete sentences. You should include the following information:

1. Your ID number.
2. Your valuation of the stock (show your work).
3. Explain why the stock is (or is not) a good investment.

### *Notes:*

The basic valuation model is covered in Jones *Investments* (11<sup>th</sup> ed.) Chapter 10, pages 252-254. The sustainable growth rate is covered on Chapter 15, page 383. Using CAPM to calculate the required return is covered in Chapter 9, pages 226-227

## Assignment 16. Finding the Current Term Structure.

### *Objective:*

Learn how to interpret information about the term structure of interest rates.

### *Assignment:*

From an online source of information about interest rates, find the term structure and discuss what it might mean.

### *Report:*

Your report may be written as a list, but be sure to use complete sentences. You should include the following information:

1. Your ID number.
2. The source and day of your information.
3. The following yields:
  - a. 3 month
  - b. 6 month
  - c. 12 month
  - d. 2 year
  - e. 5 year
  - f. 10 year
  - g. 30 year
4. How would you describe this yield curve?
5. Provide possible explanations for its shape.
6. According to the expectations hypothesis, what is the expected one-year interest rate next year? Calculate this using the 2 year and 12 month rates – show your work.

### *Notes:*

Yield curves are covered in Jones *Investments* (11<sup>th</sup> ed.) chapter 18, pages 425-429. There are a variety of online sources for interest rate data including [www.bloomberg.com](http://www.bloomberg.com) and [finance.yahoo.com](http://finance.yahoo.com).