FIN 327: INVESTMENTS

Assignment #1 (Due February 12, 2007)

<u>Instructions</u>: The assignments are to be done in groups of two or fewer. Assignment submitted as a group must clearly identify all group members on the first page. Group members whose names are inadvertently missing from the first page will get no credit so please make sure your name is on any group assignment to which you contributed. Student names appearing on multiple assignments will receive the lowest score. Finally, you are responsible for understanding the entire homework. Please show all of your work on each problem.

1. The following table provides month-end prices and cash dividends for Exxon Mobil (XOM) for a recent two year period. Use these data to complete the following analyses.

Date	Price	Dividend
Dec-06	76.63	
Nov-06	76.81	0.32
Oct-06	71.42	
Sep-06	67.1	
Aug-06	67.67	0.32
Jul-06	67.74	
Jun-06	61.35	
May-06	60.91	0.32
Apr-06	63.08	
Mar-06	60.86	
Feb-06	59.37	0.32
Jan-06	62.75	
Dec-05	56.17	
Nov-05	58.03	0.29
Oct-05	56.14	
Sep-05	63.54	
Aug-05	59.9	0.29
Jul-05	58.75	
Jun-05	57.47	
May-05	56.2	0.29
Apr-05	57.03	
Mar-05	59.6	
Feb-05	63.31	0.27
Jan-05	51.6	

- a. Find the holding period return for each month.
- b. Calculate the arithmetic mean return and standard deviation. Annualize the arithmetic mean and standard deviation (to annualize the monthly standard deviation multiply it by the square root of 12).
- c. Calculate the geometric mean. Why is the geometric mean less than the arithmetic mean?

- d. If you begin with the year with \$10,000 invested in Exxon Mobil, how much would the investment be worth at the end of the two year period? Allow fractional shares and assume you reinvest your dividends in additional shares of XOM.
- 2. A share of the stock A-Star Inc. is now selling at \$23.50. A financial analyst summarizes the uncertainty about the rate of return on the stock by specifying three possible scenarios:

Market	Scenario	Probability	End-of-Year	Annual
Conditions			Price	Dividend
High	1	035	35	4.40
Growth				
Normal	2	0.30	27	4.00
Growth				
No Growth	3	0.35	15	4.00

Calculate the expected HPR and standard deviation of the HPR.

- 3. Consult the current issue of the Standard & Poor's *Outlook* in the library.
 - a. What asset allocation does S&P currently recommend?
 - b. Choose a stock discussed in this current issue of S&P's Outlook and listed in Value Line. Summarize S&P's position on this stock.
 - c. What are the S&P star and quality rankings for this stock? Explain the meaning of these rankings.
 - d. How does Value Line rank the same stock in terms of timeliness, safety and technical. Explain the meaning of these rankings.
 - e. Prepare a table reporting the calculated beta, current PE ratio, estimated earning in the next 12 months, and relative PE Ratio (all available on the Value Line report).
 - f. Pick at least two other stocks in the same industry as the stock discussed above. Create a table comparing the market capitalization, beta and PE ratio for all three companies.
 - g. In your opinion is the stock you originally choose a buy or sell? Explain.
- 4. Look up on Yahoo Finance or in the Wall Street Journal the historical price data for Motorola.
 - a. What is the firm's ticker symbol?
 - b. What is the Holding Period Return for January 30, 2007?
 - c. What news event appears responsible for the HPR on January 30, 2007? Explain.
 - d. How many shares could you buy for \$5,000?
 - e. What would be your annual expected dividend income from those shares?
- 5. In an effort to track the local economy Finance 327 has decided to create a San Diego stock market index. The index will be made up of four local stocks Sempra Energy (Ticker Symbol: SRE), Jack in the Box (JBX), Qualcomm (QCOM) and Diversa (DVSA).

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Download the historical prices from January 1, 2006 through December 31, 2006 from Yahoo Finance to complete the exercise.

- a. Plot the daily adjusted closing price data for each local stock on a single graph.
- b. Calculate the holding period return for each security over the entire year.
- c. Calculate a price weighted index and plot the value of this index. Assign a starting index value of 100.
- d. Calculate the holding period return for the price weighted index over the entire sample period.
- e. Go to Yahoo Finance to determine how many shares are outstanding for each stock. Use this data to calculate a market weighted index and plot the value of this index on the same graph as the price weighted index. Assign a starting index value of 100.
- f. Calculate the holding period return for the market weighted index over the entire sample period.
- 6. Read the article "The NYSE: Faster (and Lonelier)" printed in the WSJ January 24, 2007 and available on Blackboard to answer the following questions.
 - a. What is the role of a specialist on the NYSE? Why would the move to electronic trading reduce the need for specialists?
 - b. What is meant by the term "open outcry"? How often, and in what situation, is this method of trading used now?
 - c. What are the benefits of the move to electronic trading? What are the possible side-effects?
 - d. Go to the NYSE website at www.nyse.com and click on "Market Information" then "Hybrid Market" and "Benefits to Customers". Under "For Listed Companies", by what percentage does the NYSE claim interday volatility will be reduced when companies move their listing from Nasdaq to the NYSE? According to the feature article, what is Nasdaq's position on this claim?
 - e. Also at the NYSE website under "Market Information" and "Hybrid Market" click on FAQs. Why did the NYSE build the Hybrid Market? What is the Order Protection Rule and what was its role in the move to the Hybrid Market? What two restrictions within the NYSE Direct+ Market were removed with the Hybrid Market

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