ANSWER OUTLINE

ECONOMICS 353

L. Tesfatsion/Fall 2010

EXERCISE 5: Five Questions (8 Pts Total)

DUE: Tuesday, Oct 12, 2:10pm

IMPORTANT REMINDER: LATE ASSIGNMENTS WILL NOT BE ACCEPTED – NO EXCEPTIONS

EXERCISE INSTRUCTIONS:

- (1) The first four questions Q1-Q4 below are multiple-choice questions from Mishkin Chapter 7. Question Q5 asks you to answer questions about actual stock market data.
- (2) Please fill in your name and student ID number on Side 1 of your bubble sheet and write **353 Exercise 5** in the top margin of Side 1. Use a number 2 pencil to mark your answers to Q1-Q4 on Side 1 of your bubble sheet.
- (3) Use a separate sheet of paper for your answers to Q5, being sure to put your name, student ID number, and "Econ 353: Ex 5" on this sheet.
- (4) Turn in both your bubble sheet answers for Q1-Q4 and your separate answer sheet for Q5 at the beginning of class on the due date.
- (4) Each question Q1-Q4 is worth 1 point, and Q5 is worth 4 points.
- Q1. In the ONE-PERIOD VALUATION MODEL FOR STOCK SHARES, the current price of a stock share is assumed to equal the discounted value of
 - **A.** all future dividend payments to the shareholder
 - **B** B. next period's dividend payment plus next period's expected share price.
 - C. next period's dividend payment to the shareholder.
 - **D.** next period's expected share price.
- **Q2.** In the GENERALIZED STOCK VALUATION MODEL, the current price of a stock share is assumed to equal the discounted value of
 - **A** A. all future dividend payments to the shareholder.
 - **B.** next period's dividend payment discounted by the required return on equity net of the dividend growth rate.
 - **C.** the future revenues of the issuing corporation.
 - **D.** the future profits of the issuing corporation.

Q3. The key assumption characterizing RATIONAL EXPECTATIONS is that

- **A.** people do not make sudden changes in their expectations.
- **B.** people do not make use of past observations because these observations are out-of-date.
- **C** C. people make optimal use of their information when forming their expectations.
 - **D.** people are able to forecast things without error.

Q4. In its strongest form, the EFFICIENT MARKETS HYPOTHESIS implies

- **A.** there is no adverse selection in financial markets.
- **B** B. the price of each stock share equals its fundamental value, i.e., the discounted value of its future dividend payments.
 - C. the prices of securities cannot exhibit sudden large changes.
 - **D.** technical analysis is the preferred mode for determining financial investments.

Q5 (4 Points Total).

Part A (1 Point): Stock share information on the Ford Motor Company from February 17, 1999, is given at the following site:

http://econ2.econ.iastate.edu/classes/econ353/tesfatsion/Mish7b.StockTables.htm

As best you can, replace this old data by current data for some day between October 5, 2010, and October 11, 2010.

Answer Outline for Part A:

See the *updated* version of the above website, to be posted by the end of today. One interesting development is that Ford is no longer paying a dividend!

- Part B (3 Points): Briefly but carefully compare and contrast the scope and construction of the following three U.S. stock market indices:
 - the **Dow Jones Industrial Average (DJIA)**;
 - the Standard and Poor 500 (S&P 500);
 - the NASDAQ Composite index.

Be sure to include a full citation for any reference(s) you used for these answers (whether Web or print).

Answer Outline for Part B:

DJIA:

SCOPE: "(The Dow Jones Industrial Average (DJIA) is) the most widely used indicator of the overall condition of the stock market, a price-weighted average of 30 actively traded blue chip stocks, primarily industrials. The 30 stocks are chosen by the editors of the Wall Street Journal (which is published by Dow Jones & Company), a practice that dates back to the beginning of the century. The Dow was officially started by Charles Dow in 1896, at which time it consisted of only 11 stocks."

Source: http://www.investorwords.com/1525/DJIA.html

CONSTRUCTION: The Dow is computed using a price-weighted indexing system. To calculate the DJIA, simply add up the per-share closing prices of its 30 component stocks on their primary exchanges and divide the sum by the "DOW divisor." Over the years, adjustments have been made to the DOW divisor to ensure the continuity of the DJIA after corporate actions such as spin-offs and stock splits. As a result the DOW divisor is no longer equal to 30, the number of stocks included in the DJIA. In fact, after 100 years of adjustments, the current DOW divisor for the DJIA is less than one. For example, on Monday, June 8, 2009, the DOW Divisor was set to 0.132319125

Sources: Information paraphrased from

http://www.djindexes.com/mdsidx/index.cfm?event=showAvgMethod

http://www.cmegroup.com/trading/equity-index/files/Dow_divisor.pdf

S&P 500

SCOPE: "Standard & Poor's 500 Index, the 'S&P 500' or just the 'S&P', ... is a broad stock market index (indicator) derived from the value of common stocks of 500 publicly traded companies. The S&P 500 is composed of 400 industrial, 60 transportation and utility, and 40 financial company stocks. While the DJIA is the most popular indicator, the S&P 500 is believed to be more representative of the entire market."

Source: http://pages.prodigy.com/wealth/term.htm

SCOPE: "The S&P 500 index is weighted by market value, and its performance is thought to be representative of the stock market as a whole. The S&P 500 index was created in 1957, although it has been extrapolated backwards to several decades earlier for performance comparison purposes. This index provides a broad snapshot of the overall U.S. equity market; in fact, over 70 percent of all U.S. equity is tracked by the S&P 500. The index selects its companies based upon their market size, liquidity, and sector. Most of the companies in the index are solid mid cap or large cap corporations. Like the Nasdaq Composite, the S&P 500 is a market-weighted index. Most experts consider the S&P 500 one of the best benchmarks available to judge overall U.S. market performance."

Source: http://www.investorwords.com/4378/SP 500.html

CONSTRUCTION: A company's market capitalization is the total market value of all of its outstanding stock shares. A Market-Capitalization Weighted Stock Index, also known as a Market-Valued Weighted Stock Index, is a stock index in which each stock share price included in the index is weighted by the current (relative) market capitalization of the company issuing the stock. For example, if a company's market capitalization is \$1,000,000 and the market capitalization of all stocks in the index is \$100,000,000, then the weight applied to the company's stock share price would be 0.01 (1 percent). In such a weighting scheme, larger companies account for a greater portion of the index. Most indexes are constructed in this manner, with the best example being the S&P 500.

Source: Paraphrased from www.investopedia.com/terms/w/wamc.asp)

NASDAQ Composite:

SCOPE: "A market-value weighted index of all (4000+) common stocks listed on Nasdaq. The Nasdaq Composite dates back to 1971, which is when the Nasdaq exchange was first formalized. The index is used mainly to track technology stocks, and thus it is not a good indicator of the market as a whole."

Source: www.investorwords.com/3190/Nasdaq_Composite_Index.html

CONSTRUCTION: "Unlike the Dow Jones Industrial Average (DJIA), the Nasdaq is market value-weighted, so it takes into account the total market capitalization of the companies it tracks and not just their share prices."

Source: www.investorwords.com/3190/Nasdaq_Composite_Index.html

Extra Note on Terminology: "NASDAQ" is an acronym for National Association of Securities Dealers Automated Quotation. In recent times, the acronym interpretation has been dropped and Nasdaq is used in place of NASDAQ as if it were a proper noun.