ANSWER OUTLINE

ECONOMICS 353

L. Tesfatsion/Fall 07

EXERCISE 1: Six Questions (8 Points Total) DUE: Tuesday, September 4, 2:10pm

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

EXERCISE INSTRUCTIONS:

- (1) Please fill in your name and student ID number on Side 1 of your bubble sheet and write **353 Exercise 1** in the top margin of Side 1.
- (2) Use a number 2 pencil to **mark your answers** on Side 1 of the bubble sheet to the first five questions Q1 through Q5, below, which are in multiple choice format.
- (3) The sixth question Q6 is a Web Exercise that asks you to prepare data in table and graphical form using an Excel spreadsheet and print out the graphical data. Please put your name and student ID number at the top of your print-out sheet for Q6 along with 353 Exercise 1 and separately hand in this print-out sheet for Q6 in addition to your answer bubble sheet for questions Q1 through Q5.
- (4) Each question Q1 through Q5 is worth 1 point, and Q6 is worth 3 points.
- Q1 (1 point). According to Mishkin (Chapter 1), nominal Gross Domestic Product (GDP) for an economy during some year T measures the total value of
 - A. all final goods and services consumed within the economy during year T.
 - **B.** all final goods and services produced by the economy's citizens during year T.
 - C. all final goods and services produced within the economy's borders during year T.
 - **D.** all production taking place within the economy's borders during period T.
- **Q2** (1 Point). According to Mishkin (Chapter 1) and class lectures, *inflation* by definition is
 - **A.** the rate of change of the aggregate price level.
 - **B** B. a continual increase in the aggregate price level.
 - C. an increase in the value of a country's currency.
 - **D.** an increase in the value of a country's nominal GDP.
 - **E.** none of the above.

- Q3 (1 Point). According to Mishkin (Chapter 1), since 1970 the U.S. dollar
 - A. has steadily declined in value against all major foreign currencies.
 - B. has steadily increased in value against all major foreign currencies.
 - C. has solidified its place as the reserve currency of choice throughout the world.
 - **D.** has experienced substantial fluctuations in value in relation to major foreign currencies.
- Q4 (1 Point). According to Mishkin (Chapter 1), the U.S. Government Budget since 1952 has largely been
 - **A** A. in deficit, meaning government expenditures have exceeded tax revenues.
 - B. in deficit, meaning government expenditures have been less than tax revenues.
 - C. in surplus, meaning government expenditures have exceeded tax revenues.
 - D. in surplus, meaning government expenditures have been less than tax revenues.
- Q5 (1 Point). As shown by data presented in class (source: www.economagic.com), the U.S. inflation rate since 1952
 - **A.** has steadily trended downward (evidence of a "New Economy").
 - **B.** has steadily trended upward (evidence of a "twin deficit" problem).
 - **C** C. has remained positive (indicating a persistent increase in prices).
 - **D.** has fluctuated around its "natural rate" level of 0 percent.

SEE THE FOLLOWING PAGE FOR Q6: WEB EXERCISE

Q6: Web Exercise (3 Points Total).

This Web exercise asks you to download and graphically present stock index data from the Web – specifically, data for the NASDAQ Composite (NASDAQ = National Association of Securities Dealers Automatic Quotation). The steps needed to carry out Part B(1)-(3) of this Web Exercise are similar (but not identical) to the steps outlined by Mishkin for his sample Web exercise on pages 15-17 (8th edition).

Make a one-page print-out of your graph for Q6:Part B(1)-(3) (just the graph, not the long table of data!), and write your answers to Q6:Part A and Q6:Part B(4) on the back of this print-out.

Turn in this sheet for Q6 together with your answer bubble sheet for Q1 through Q5 (do not staple or otherwise attach the two sheets). Be sure that both sheets (your print-out sheet and your answer bubble sheet) include the following information in the top margin: Your name, student ID number, and the words "353 Exercise 1."

Q6:Part A (1 Point) Provide a careful definition for what is meant by the NASDAQ Composite.

Answer Outline for Q6:Part A From www.investorwords.com: "(The NASDAQ Composite is a) market-value weighted index of all 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. 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."

Q6:Part B (2 Points Total, 1/2 Point Each Part)

- (1) Go to www.forecasts.org/data/index.htm, click on "stock index data" at the top of the page, then choose the U.S. stock indices-monthly option. Finally, **choose the NASDAQ Composite option**.
- (2) Using the basic method presented by Mishkin in his example on pages 15-17, move the data from 1984:10 to 2006.01 into an Excel Spreadsheet, where "yyyy:xx" indicates "month xx of year yyyy." Set the spacing of the data into two regular columns by clicking on DATA/TEXT-TO-COLUMNS in your Excel menu and selecting the "fixed width" option. Label your first column of data "Date" and your second column of data "NASDCOMPM." This second column gives the NASDAQ Composite value for each corresonding date.
- (3) Now prepare a graph of this data by highlighting the "NASDCOMPM" column of data, clicking on the Chart icon in the Excel menu, and selecting a **line** chart for the graph option. Use the "NASDCOMPM" column of data as the "Y" series for your graph, and set "NASDCOMPM" as the name of this Y series. Be sure to include

in this Y series the entire historical NASDAQ Composite time series data values from 1984:10 through 2006:01. Only these Y series data values should actually be graphed within the chart. The corresponding dates (first column of your data) should then be set as the X series for your graph (the values along the horizontal axis). Set the title of your graph to be "NASDAQ Composite: 1984:10-2006:01" followed by "Source:www.forecasts.org". Label your "Y" axis "Value" and your "X" axis "Date".

(4) Compare your graph of the NASDAQ Composite prepared in (3) with the graph of the Dow Jones Industrial Average (DJIA) in Figure 2 on page 6 of Mishkin's text. In particular, just viewing the two graphs together, which series appears to show greater "volatility" during the dot.com bubble burst starting around 2000? Can you explain why?

Answer Outline for Part B:(4) The NASDAQ Composite appears to show greater volatility than the DJIA during the dot.com bubble burst starting around 2000 in the sense that the NASDAQ suffered a much larger percent decline than the DJIA in the months immediately following 2000. A key reason for this larger drop is that the NASDAQ Composite is more heavily tilted towards technology stocks than the DJIA, and these were the stocks hardest hit by the dot.com bubble burst.

Additional Remark: More precisely, the NASDAQ Composite dropped from a high of around 4697 in 2000:02 to a low of 1172 in 2002:09, a drop of 3525 points over a period of 31 months, i.e., a drop of 100% x 3525/4697 = 75% in 31 months. In contrast, going back to www.forecasts.org/data/ and viewing the Dow Jones Industrial Average (DJIA) data, the DJIA peaked at 11,497 in 1999:12 and then fell to a low of 7,591 in 2002:09, but this drop of 3,906 points represented "only" a drop of 100% x 3,906/11,497 = 34% over a period of 34 months.

Important Remarks Regarding Mishkin's Sample Web Exercise (Pages 15-17):

When data comes in comma-delimited form (as indicated in Figure 10 on page 16), then when you click on DATA/TEXT-TO-COLUMNS in Excel you should use the "Delimited" option rather than the "Fixed Width" option, and you should select "comma" as your delimitor in the next dialog box that appears. (This separates your data into columns with all commas removed.) If your data is separated by spaces only, then use the "Fixed Width" option. Also, on page 17 (Figure 11), Mishkin's depicted chart is actually a "line" chart, not a "scatter diagram" chart as the text on page 16 asserts.