### **Answer Outline**

**ECONOMICS 353** 

L. Tesfatsion/Fall 06

EXERCISE 1: Six Questions (8 Points Total) DUE: Tuesday, September 5, 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) can be a misleading measure of economic well-being since it does not correct for \_\_\_\_\_
  - **A A**. changes in prices.
    - **B.** changes in production occurring outside the borders of the country.
    - C. changes in foreign exchange rates.
    - **D.** changes in wealth.
- Q2 (1 Point). According to Mishkin (Chapter 1), an inflation rate by definition
  - **A.** is necessarily positive in value.
  - **B.** is the growth rate of the aggregate price level as measured by a price index such as the GDP deflator.
  - C. can be either positive or negative in value.
  - **D.** both A and B above.
  - **E** E. both B and C above.

- Q3 (1 Point). According to Mishkin (Chapter 1), during 1950 to 2005, annual U.S. government tax revenues have typically
  - A. exceeded public expectations.
  - **B** B. been less than annual U.S. government expenditures.
    - C. been sufficient to just balance the government budget.
    - **D.** been in excess of annual U.S. government expenditures.
- Q4 (1 Point). As shown by data presented in class (source: www.economagic.com), the U.S. Federal Funds Rate during 1954-2006
  - **A.** has steadily trended upward.
  - **B.** has steadily trended downward.
  - C C. was particularly volatile during the periods of the first and second oil price shocks.
    - **D.** has closely fluctuated around 2.5 percent.
- Q5 (1 Point). As shown by data presented in class (source: www.economagic.com), the U.S. Civilian Unemployment Rate during 1948-2006
  - **A.** has steadily trended downward (evidence of a "New Economy").
  - **B** B. attained its highest level during the recession of 1981-1982.
    - C. has steadily trended upward (a reflection of steadily growing GDP).
    - **D.** has closely fluctuated around its "natural rate" level of 4 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, Dow Jones Industrial Average (DJIA) data. The steps needed to carry out Part A 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 A (just the graph, not the long table of data!), and write your answer to Q6:Part B on the back of this print-out.

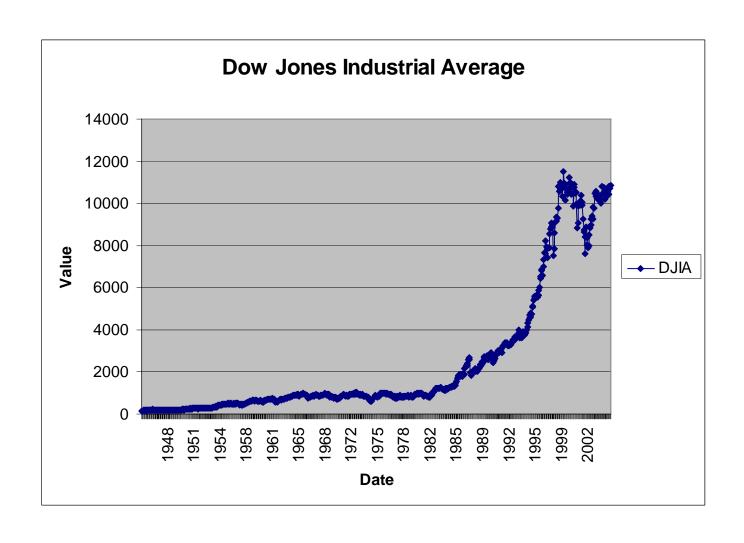
Turn in this sheet for Q6 together with your answer bubble sheet for Q1 through Q5 (do not staple or otherwise attach the two sheets). Be sure that both sheets (your print-out sheet and your answer bubble sheet) include the following information in the top margin: Your name, student ID number, and the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

- Part A: (2 Points) Carry out Mishkin's Web Exercise 1 on page 19. Use a line diagram for the graph. The title of this graph should be "Dow Jones Industrial Average." Label your "Y" axis "Value" and your "X" axis "Date". Use "DJIA" for the name of your graphed series. Be sure to include in your graph the entire historical DJIA time series data from 1945:01 through 2006:01, where "yyyy:xx" indicates "month xx of year yyyy."
- Part B: (1 Point) Go again to www.forecasts.org/data/index.htm (the site for Q6:Part A). This time click on "FFC Home" at the top of the page, where "FFC" stands for "Financial Forecast Center." Then click on the "Dow Jones Industrials" link under Forecasts in the far left column. What is the value forecasted for the DJIA in January 2007? How does the FFC attempt to indicate the accuracy of this forecast? HINT: click on the "50% Correct" link.

#### 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 diagram," not a "scatter diagram" as the text on page 16 asserts.

# Econ 353: Ex1 Browse Question



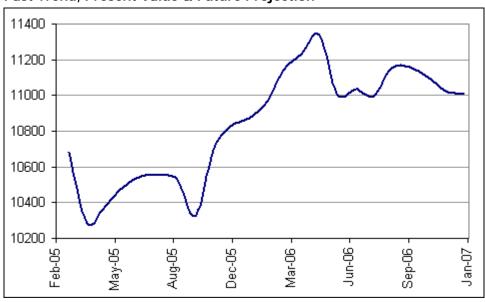
## **Dow Jones Industrial Average Stock Index Forecast**

## Dow Jones Industrial Average Stock Index Forecast Index Values, Average of Month.

	Aug 2006	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2007
Forecast Value	10,997	11,153	11,158	11,104	11,026	11,009
50% Correct	157	177	188	195	201	206
90% Correct	330	372	395	411	422	433

Updated Thursday, August 10, 2006

## Dow Jones Industrial Average Stock Index Past Trend, Present Value & Future Projection



## Terminology:

## **Percent Correct**

At the 50% Correct value, there is a 50/50 chance the forecast value will be within this margin of error.

At the 90% Correct value, there is a 90% chance the forecast value will be within this margin of error.

The potential range of a forecast's value is found by taking the published forecast value and both adding and subtracting the % Correct Values.

The % Correct (or error) values published are based on prior forecast performance.

### For Example:

Forecast Value = 100 50% Correct Value = 10 90% Correct Value = 15

There is a 50% Chance the actual value will be between 110 and 90. There is a 90% Chance the actual value will be between 115 and 85.

<u>Technical Note:</u> The Financial Forecast Center has moved away from publishing standard deviations of the forecast's performance in recognition that the distribution of value movements in the financial markets follow Levy or Cauchy distributions, not Gaussian or normal distributions. Likewise, the forecast model's errors follow similar distributions.

A Gaussian distribution significantly underestimates the probability of a large price or rate movement. A Gaussian distribution may underestimate the probability of a 3 sigma price movement by a factor of 10. In other words, the chance of a 3 sigma movement is potentially 10 times greater than that predicted by a Gaussian probability curve.

The above change in error reporting format enables a more accurate depiction a forecast model's potential performance.