

Assignment One
Due: January 20, 2004

Part One: Obtaining and Interpreting Data

In this exercise, you will obtain economic data from the web, enter it into a spread sheet, graph it, and interpret the graph. You are permitted to work in groups but students must each submit their own work for grading.

1. Obtaining Data

Connect to the Internet. Go to the web page of the Federal Reserve Bank of St. Louis (<http://www.stls.frb.org/>). Select "Economic Research" and then "Fred II" which is the name of the St. Louis Fed's data-acquisition client. Download the following series of quarterly data for the United States. All series should be measured in "Chained 2000 Dollars" and should have a quarterly frequency (one observation for each quarter of each year). You will find all the series under "Gross Domestic Product and Its Components."

Real GDP

Real Government Consumption Expenditures and Gross Investment

Real Gross Private Domestic Investment

Real Personal Consumption Expenditures

Real Imports of Goods and Services

Real Exports of Goods and Services

To download these data, click on the data series. A window will open that displays a graph of the series. Click on "Download Data" and choose the filename with the xls extension. You will download an excel file. Once you agree to open the data file with excel, you will be in excel looking at one data series. Save the file onto your own computer.

2. Aligning the Data

After you finish step 1 for each series, you will have six different excel files. In step 2, you will merge these files into a single spreadsheet. Choose the real GDP file and use edit (copy, and paste) until you have a single spreadsheet with one date column and one column for each series.

3. Analysis (Now the fun starts. You have not completed the exercise until you give thoughtful answers to all the questions in this section.)

- a. Create a time series graph for real GDP. Display and describe this graph. What is the average annual rate of growth of Real GDP experienced over the sample period?
- b. Do the data for real GDP reveal the recession that began in 2000? Do they contain evidence that the recession is over? What is that evidence?
- c. How have the consumption, investment, and government spending shares of real GDP changed over the sample? Support your conclusion with specific references to the data.
- d. Is real GDP equal to $C+I+G+NX$? How closely does this sum track real GDP?
- e. Were there any parts of this assignment that were misleading? If so, what were they?

Part Two

Problem 3, page 69-70 of Mankiw

Problem 6, page 70 of Mankiw