

## Homework #8, Computer Exercise

Due Thursday March 8, 2012

Econ 20150, Principles of Statistics

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For **Computer Exercises**, your study group should hand in a single assignment. When submitting assignments, **please include your name and the assignment number as part of the filename**. Please write the names of your study group members at the beginning of your homework. These assignments will be available to all members of the class.

With the news lately about the upcoming election, we will use US economic data to look at the relative performance of the economy under Democrats or Republicans. You should be able to find data on the political affiliation of each president since 1968; if you are interested you could also look up data on each party's control of the houses of Congress. Please assess the importance of political party to the economy, including a description of what data you're concentrating on. Note that there is no right answer: the point of this exercise is to calculate some figures and make a coherent argument. You should post your answers online and we'll debate them in class.

Use the Excel data in the sheet, `us_gdp_stats.xls`. This data is from FRED, Federal Reserve Economic Data – you can easily find it online. (You can add more data series if you feel like it.)

Before analyzing anything you must first tidy up the data.

Decide what measure of each data item to use. For example, the government reports the "Consumer Price Index" (CPI) which is used to calculate inflation. But it is not the inflation rate! Inflation is the percent change in the CPI. For the other figures you should consider whether to use levels or (annualized) percent change (and over what time period).

Decide what frequency of data to use – in this case, probably quarterly (although you could choose annual if you wanted). Not all of the data is available per quarter – some of the data are on the worksheet labeled "Monthly," which are (unsurprisingly) per month. Most US GDP data is released quarterly but employment, inflation, and interest rates are, on FRED, monthly or more frequent. You can convert to quarterly.

The data are given back to 1968 when all of the series became available. You might choose a shorter frame, just explain why.

Note that I'm providing the "SA" figures that are Seasonally Adjusted, except for a few things like interest rates where a seasonal adjustment doesn't make sense.