

# Homework #1: Macro Facts

## Econ 352: Macroeconomics

### 1 Williamson Ch 1. WWD Q1: Working with data (8 pts)

To answer the two questions below, you may access the St. Louis Fed's FRED database at:  
<http://research.stlouisfed.org/fred2/>

#### 1.1 Sub-question a: GDP (4 pts)

Graph **real** gross domestic product (GDP) and **real** gross national product (GNP) in 2012 dollars from 1947 to the present. Is there much difference in these two measures of aggregate economic activity for the U.S.? “Real Gross Domestic Product ” and “ Real Gross National Product” may help.

#### 1.2 Sub-question b: Taxes and Expenditures (4 pts)

Total government expenditures consist of expenditures by the federal government and by state and local governments. Calculate and graph the ratio of federal government expenditures to local government expenditures. Has the Federal government become larger or smaller relative to state and local governments over time. “Government total expenditures ” and “ Federal government total expenditures ” may help.

### 2 Williamson Ch 2. LO 1 (2 pts)

Assume an economy where there are two producers: a wheat producer and a bread producer. In a given year, the wheat producer grows 30 million bushels of wheat of which 25 million bushels are sold to the bread producer at \$3 per bushel, and 5 million bushels are stored by the wheat producer to use as seed for next year's crop. The bread producer produces and sells 100 million loaves of bread to consumers for \$3.50 per loaf. Determine GDP in this economy during this year using the product and expenditure approaches.

### **3 Williamson Ch 2. LO 4 (2 pts)**

In the United States, a large fraction of transactions among banks takes place over Fedwire, which is an electronic payments system operated by the Federal Reserve System. In December 2015, the volume of funds transferred on Fedwire was about \$72 trillion, which was more than four times annual GDP in 2015. Do these statistics indicate there might be some large measurement error in the official U.S. national income accounts, or is this entirely consistent with official GDP numbers being accurate measures of aggregate economic activity? Explain, and discuss your answer.