

## Section #4

### Outline

1. Group Exercise: Commercial Banking, 1896–1998
  - (a) Historical Statistics of the United States (HSUS)
  - (b) Exploring historical trends in U.S. banking
  - (c) Comparing (1913) apples to (1998) apples: Inflation Adjustment

## 1 Group Exercise: Commercial Banking, 1896–1998

### 1.1 Historical Statistics of the United States (HSUS)

Go to the homepage of the Historical Statistics of the United States (HSUS):

<http://hsus.cambridge.org/>

Thanks to the Berkeley library, you have access to all 37,000+ data series through HSUS. Take advantage of it for research projects and senior theses!

a. Using the search function, find the following table:

“Commercial banks–number and assets, by Federal Reserve membership and type of bank: 1896–1998”

You can search for key words in the table name, or by the individual data series that comprise the table: Cj289 - Cj297. The prefix Cj means the table is in Part C (Economic Structure and Performance), Chapter Cj (Financial Markets and Institutions).

b. Download the table in .xls format, and open it in Microsoft Excel/Google Sheets or related.

### 1.2 Exploring historical trends in U.S. banking

All calculations should be done directly in your spreadsheet software. Make note of any formulas you use below. If you're an Excel whiz, teach your classmates your shortcuts and tricks.

1. The table gives data on three types of banks. What is the difference between them?

2. How has the share of banks that are members of the Federal Reserve System (FRS) varied throughout the past? Create a column that demonstrates your answer.

a. In what year did this share reach its peak?

b. On average, throughout the span of the data, what share of banks were FRS members? Use a formula to calculate this.

3. Throughout history, has the average FRS member bank tended to be larger or smaller (measured by assets) than the average non-member bank? Create two columns to show this comparison. Use the Domestic and foreign assets column when available. Make sure to properly weight the average for member banks.

a. If a bank is not a member of the FRS, does that mean its deposits are not insured by the Federal Deposit Insurance Corporation (FDIC)? (Hint: Check out the footnotes.)

4. In the Wheelock article we will read this week, the author notes a 30% increase in the number of banks operating in Kansas from 1910-1920. He attributes this to a greater demand for financing, spurred by an increase in first-time land cultivation and the rising price of land.

a. Was the explosion in the number of banks during this period a nation-wide phenomenon?

b. Also calculate the percentage change in total assets held by banks over this time (1910-1920). Is this a meaningful calculation? Why or why not?

5. Comment on the total number of commercial banks leading up to and following the Great Depression.

a. Do the trends align with your expectations?

b. Can you calculate the number of bank failures in each year directly from the information in the table?

### **1.3 Comparing (1913) apples to (1998) apples: Inflation Adjustment**

In order to make meaningful comparisons in banking assets between years, we need to convert assets from nominal (current) to real (constant) dollars. To do so, we need to select a price index, and deflate the series.

8. The Consumer Price Index (CPI) is available from the Bureau of Labor Statistics. Go to <http://www.bls.gov/cpi/>,

and scroll down. Under CPI Databases, you will see database for All Urban Consumers (Current Series) (Consumer Price Index – CPI). Click on the Top Picks option, and select the first box for U.S. All items, 1982-84=100. (This indicates that the index is based on average prices between 1982 and 1984.) Before you download the data into an Excel sheet on the subsequent page, make sure you change the span of the data. The BLS calculates the index back to 1913.

9. After downloading the CPI series, copy and paste the CPI data as a new column into your existing spreadsheet. (Make sure you line up the years appropriately!)

a. How much was \$1 in 1913 worth today? (Construct a CPI adjustment factor to \$2014 for any year by taking the value of the CPI in 2014 and dividing it by the CPI value for that year.)

10. Calculate the total assets over all three bank types (national + state + non-member), using the most inclusive measure of assets available in each year (domestic or domestic + foreign). Then use the CPI series to express these assets in 2014 dollars in the subsequent column.

a. Using your calculated real asset series, how many times greater were banks' total assets in 1998 than in 1915?

b. By how much (in percentage terms) did assets decrease between 1928 and 1933? Compare your result for member banks and non-member banks.