Problem Set 1

January 15, 2025

Question 1

The Bureau of Economic Analysis (BEA) announced statistics for the U.S. Gross Domestic Product (GDP) on December 19, 2024. Find the *release* on the BEA website (www.bea.gov). You can find it on their main website (Gross Domestic Product) or under *Current Releases*. You will need to examine more than just the summary page.

- 1. Which quarter was announced? (e.g., which quarter of which year?) The Third Quarter of 2024.
- 2. Find the following values, in percent change at annual rates for the latest quarter:
 - (a) Real GDP Increased at an annual rate of 3.1 percent.
 - (b) Real personal consumption expenditure (PCE)

 The personal consumption expenditures (PCE) price index increased
 1.5 percent.
 - (c) Real nonresidential fixed investment
 The Percent Change of Real nonresidential fixed Investment from
 Preceding Period is 4.0 percent in Table 1.
- 3. Are these the Advanced, Second, or Third estimates? They are the Third estimates.
- 4. Find the schedule of news releases. On which dates will 2024 Quarter IV be released?
 - (a) Advanced estimate: January 30, 2025
 - (b) Second estimate: February 27, 2025
 - (c) Third estimate: March 27, 2025

Question 2

The Bureau of Labor Statistics (BLS) announced the Producer Price Index (PPI) for November 2024 on December 12, 2024. Find the release on the BLS website (www.bls.gov). (On right, under Latest Numbers, click on Producer Price Index.)

- 1. What was the monthly percentage change in November 2024 in the PPI (Total Final Demand)?
 - The monthly percentage change in November 2024 in the PPI(Total Final Demand) is 0.4 percent.
- The percentage change from one year ago?
 The 12-month percent change in November 2024 in the PPI(Total Final Demand) is 3.0 percent.
- 3. What was the monthly percentage change in November in goods less food and energy?
 - The monthly percentage change in November in goods less food and energy is 0.2 percent.
- 4. Find the index for pork (we are in NC!). To find this, you will have to examine the sub-tables carefully. What was the percent change from November 2023? The Unadjusted 12-month percent change from Nov.2023 to Nov.2024 is 13.7 percent.
- 5. Again for pork, the seasonally adjusted percent change from October 2024?

 The Seasonally adjusted 1-month percent change from OCt. to Nov. is 2.8 percent.

Question 3

The BLS announced the state unemployment figures for November 2024 on December 20, 2024. Find the announcement and the unemployment rates for each U.S. state (from the BLS webpage, look under Subjects/Unemployment/State & Local Unemployment Rates. The states are listed on the left. Click read more to find the state data.)

- 1. Find the unemployment rate in November 2024 in your home state. If your home state is not in the U.S., you can pick one at random, or North Carolina.
 - The unemployment rate in November 2024 in NC is 3.7 percent.
- 2. What does the (P) mean?
 - (P) means preliminary. It means that the date is just an initial estimate and may be revised later as more information becomes available.

Question 4

The Congressional Budget Office (CBO) is officially charged with making economic and budget projections. Find their most recent (June 2024) projections for U.S. real GDP on their website (www.cbo.gov). Under *Topics*, click *Economy*, then under *10-Year Economic Projections*, click *Jun 2024*. This should open up an Excel file.

- 1. Find the Quarterly projections for the percentage change in real GDP for the second, third, and fourth quarter of 2024.
 - The projections for the percentage change in real GDP for the second, third, and fourth quarter of 2024 are 2.4 percent, 2.1 percent, 1.9 percent.

2. Comment on the difference between the projection for the third quarter and your answer to question 1(b)(i) above.

The CBO projection thinks the percentage change in real GDP for the third quarter is 2.1 percent. That is the predicted value of the real GDP based on the information before June 2024. The BEA statistics is the third estimate based on more data after Q3 ended, which is highly reliable and we may think it is the correct real GDP of Q3. Therefore, we say the CBO projection underestimates the real GDP growth by 1 percentage point.

3. Find the Calendar Year projections for the percentage change in real GDP for 2024, 2025, and 2026.

The projections for the percentage change in real GDP for 2024, 2025, and 2026 are 2.6 percent, 2.1 percent, 1.8 percent.