Chapter 2: The Data of Macroeconomics

Any macroeconomic research begins with looking at real data. Then economists try to find a model to explain the observed facts, and make forecasts if needed.

We use gross domestic product (GDP) to measure the value of all economic activity. GDP is often considered as the best measure of how well the economy is performing.

The frequency of GDP data is_______
The GDP data is made by__________

One way to view GDP is as the total income of everyone in the economy
Another way to view GDP is as the total expenditure on the economy’s final output of goods and services.

For the economy as a whole, income must equal expenditure. Why?

Rules for computing GDP
(1) Market prices are used to add values of goods and services.
(2) The sale of used goods is not included as part of GDP.
(3) Production for inventory increases GDP.
(4) The sum of all value added must equal the value of all final goods and services.
(5) Imputed values are used when market prices are unavailable.
(6) **Nominal GDP** measures the value of goods and services at **current** prices.

(7) **Real GDP** measures the value of goods and services at **constant** prices.

(8) **GDP deflator** is the ratio of nominal GDP to real GDP. The GDP deflator reflects what happens to the overall level of prices.

In order to compute GDP using the expenditure approach, we decompose the total expenditure as

\[ Y = G + I + G + NX \]

This equation is called **national income accounts identity**.

Consumption (C) consists of nondurable goods, durable goods and services.

Investment (I) consists of business fixed investment, residential fixed investment, and **inventory** investment. Investment creates **new** capital. Investment does not include purchases that merely reallocate **existing** assets among different individuals.

Government purchases are the goods and services bought by governments. It does not include **transfer** payments.

Net exports = export – import. It represents the net expenditure from abroad on our goods and services.

Discuss Figure 2-1
What is the real GDP per person in 2009? How to interpret this number?
Do you see something weird? How about the number 22,229 for service?
How about 2534 for the defense? Compare that to the nondefense number of 1190.
How to interpret the number -1269 for net export?

Critical thinking

What is the drawback of using GDP to measure overall economy?

What happens to China’s GDP if many new houses are built even though a lot of them cannot find buyers?

What happens to US’s GDP if only the income of top 1% people rises but the income of remaining 99% people is unchanged?

Suppose the same surgery costs $1000 in Thailand but $100,000 in US. How does this price differential affect each country’s GDP?

The increase in the overall level of prices is called inflation.

The consumer price index (CPI) is the current price of a basket of goods and services relative to the price of the same basket in some base year.

Example: page 32
Figure 2-3 shows that CPI and GDP deflation tend to move together.
Discuss:
What is the variable on the vertical axis?
What happened in 1948?
What is the recent inflation rate?

Read the case study on page 34. What is the drawback of using CPI to measure inflation?

The labor-force participation rate shows the fraction of adults who are working or want to work

The unemployment rate shows what fraction of labor force does not have a job.

Example: page 36

Critical thinking
Since the 2007 crisis, many people gave up looking for jobs after being unemployed for a long time. How does this affect the labor-force participation rate and unemployment rate?

Please comment on the following statement
“The more relevant statistic is that of those laid off during the recession, only 7% have landed jobs that pay as well, or better, than the jobs they lost. That means the vast majority of new jobs being created are lower paying with worse benefits. The unemployment rate is a meaningless statistic that fails to take into account the hundreds of thousands of workers who have given up hope of finding employment, as well as the hundreds of thousands of workers who are now making far less than before. All of this is happening at the same time the top floor employees make more and more.”