Intermediate Macroeconomics

Introduction

ECON 3311 – Spring 2025

UT Dallas

Welcome to Intermediate Macroeconomics

Econ: Study of how to allocate scarce resources

Important Macroeconomic Questions:

- Why is today's average American…
  - More than 10 times richer than 100 years ago?
  - 50 times richer than the average Ethiopian?
  - Why is there such big differences in income within a country?
- What causes financial crises?
- What role do stock markets play in the economy?
- Why has inflation been so high the past year and why?
- What is the unemployment rate? How is it determined? Why is it much higher in Europe versus the United States?

Subfields in Economics

- **Macroeconomics**
  - Study of how the interactions of people and firms through markets affect overall economic activity
  - Study of the entire economic system

Related to market outcomes (aggregate)

- **Microeconomics**
  - Study of individual people, firms, or market behavior

- In macroeconomics we would study the changes in prices of all goods in the economy, while with microeconomics we would look at a specific product
  - For example, what caused the price of gas to increase (microeconomics) versus why, on average, are all prices increasing (macroeconomics)?

- In macroeconomics we would look at the overall level of education in the economy. In microeconomics we would look at the decision of an individual regarding their desired level of education

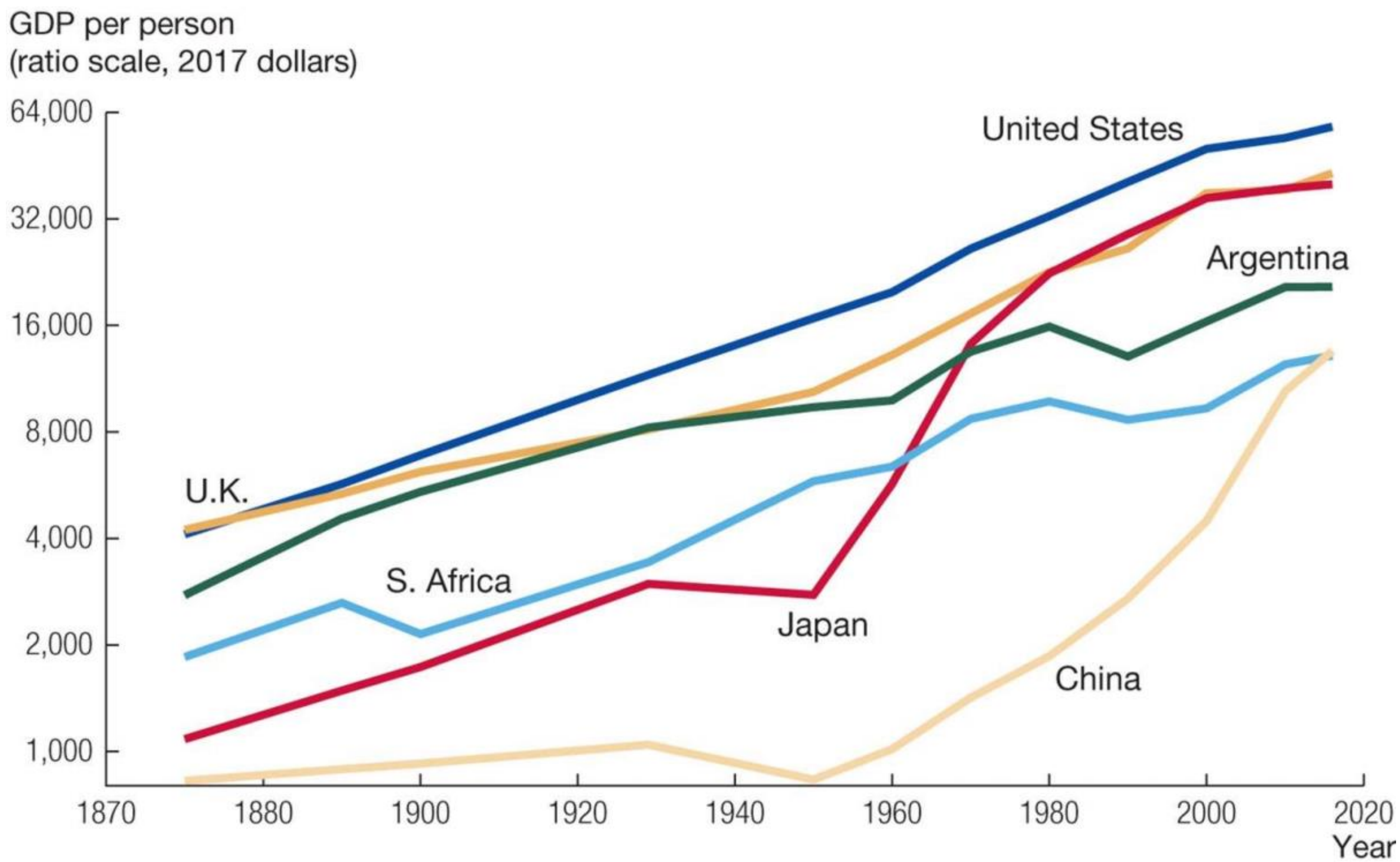
Gross Domestic Product ≈ Production of an economy

Per Capita GDP in Several Countries (average income)

"Per person"

- Note:

- Differential growth rates
- Different levels of GDP per capita
- Different degrees of fluctuations

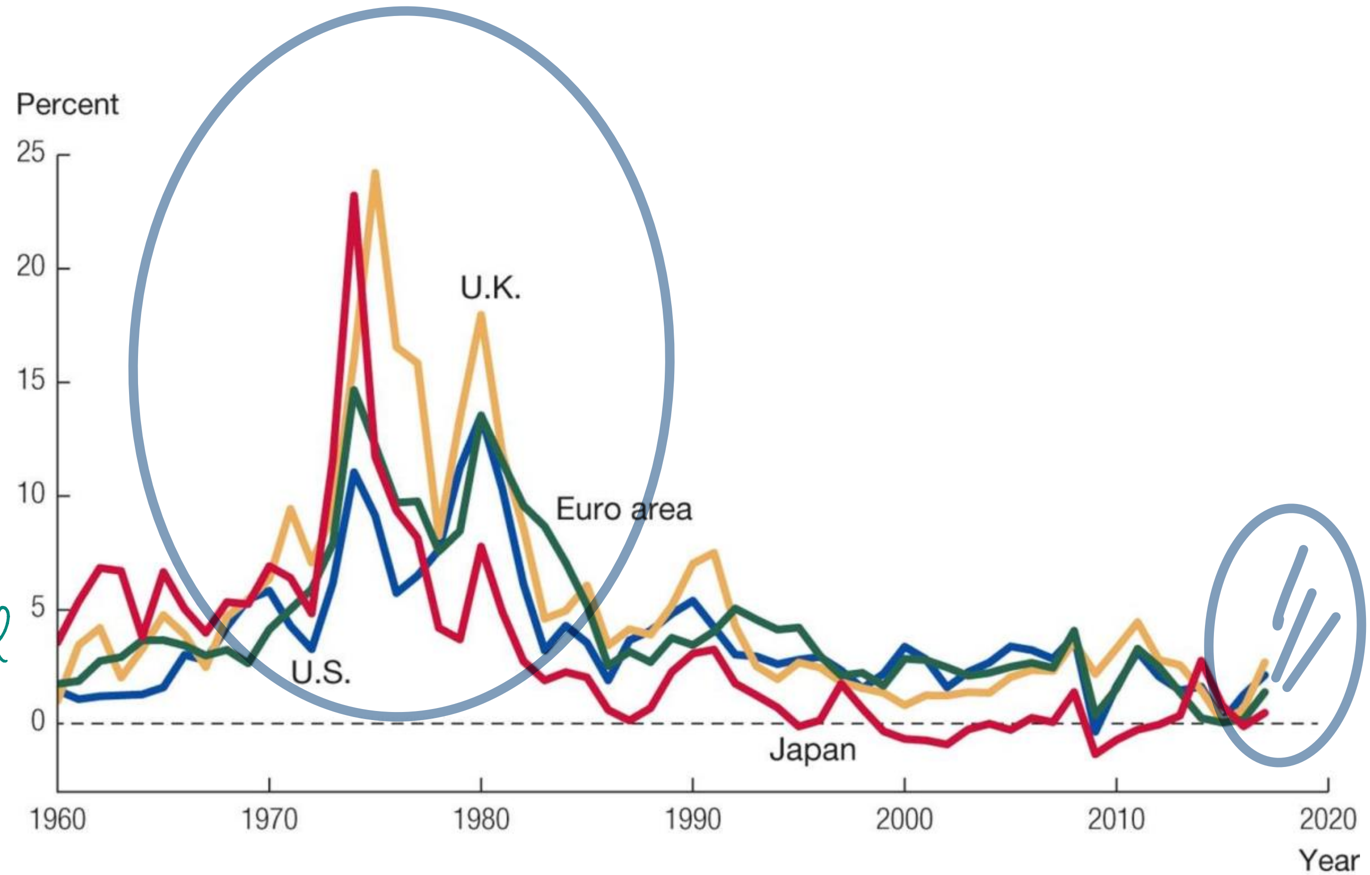


Source: The Maddison-Project, www.ggdc.net/maddison/.

Inflation Rates in Several Countries

- Inflation rate:
  Percentage change in prices
- Very high in the 1970s and today (though not as high)

"Prices": average price level

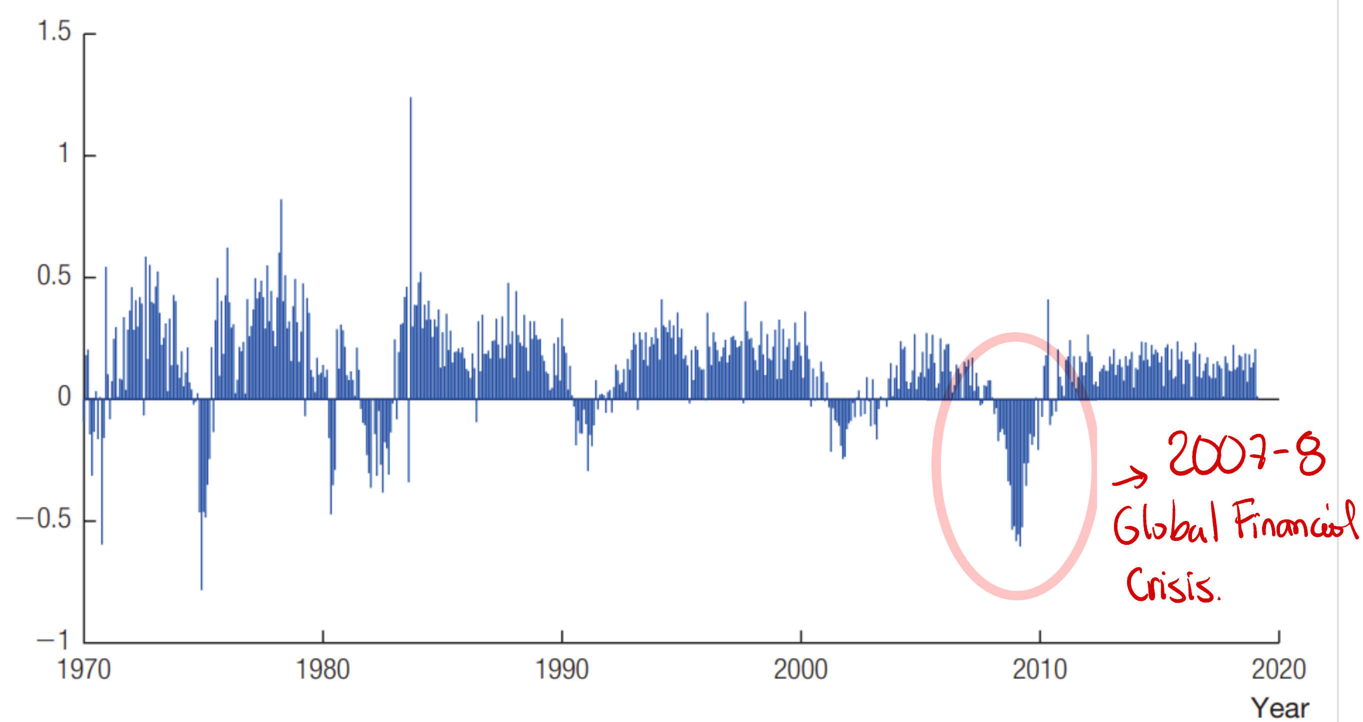


Source: FRED. The inflation rate measures the percentage change in consumer prices.

Changes in U.S. Employment

- Employment typically rises each month.

But, the 2007–2009 recession led to sustained decrease in employment



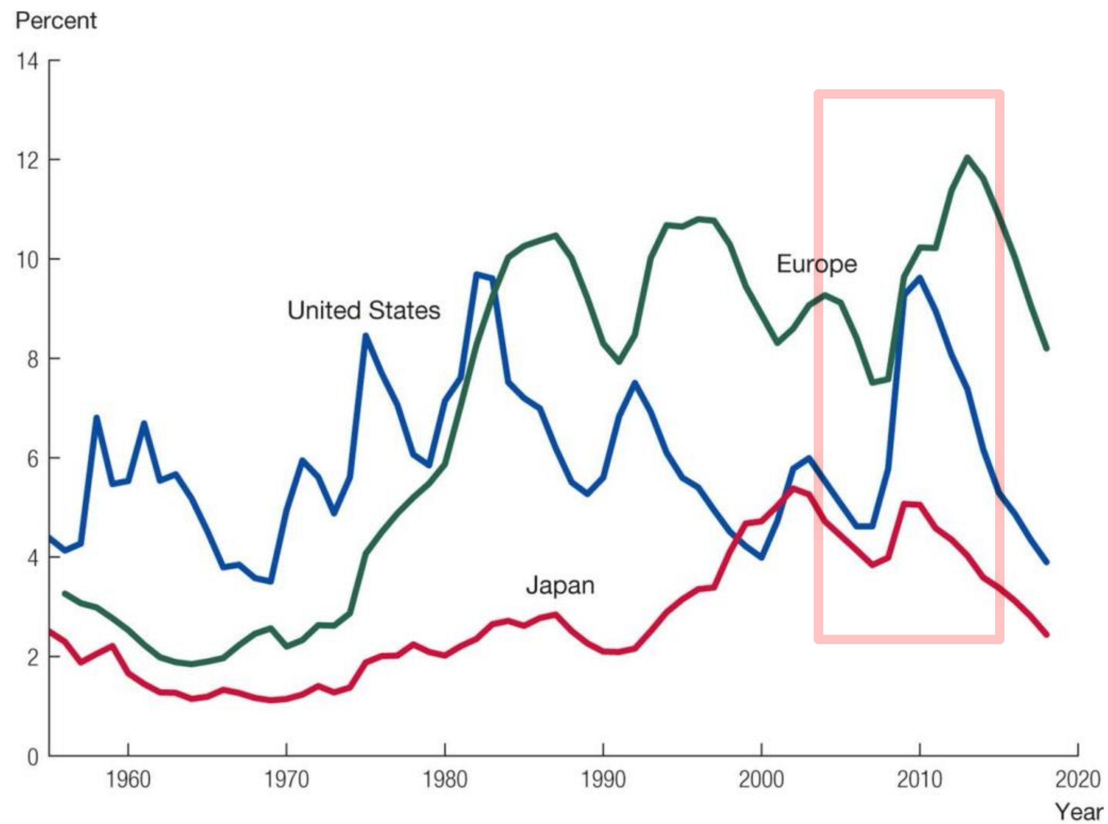
Source: Federal Reserve Economic Data (FRED), courtesy of the Federal Reserve Bank of St. Louis.

Unemployment Rates in the US, Europe, and Japan

- Unemployment rate:
  Another important measure — the percentage of the labor force not working but searching for jobs.

- When the output (GDP) of an economy decreases there are fewer people working

- Why is the unemployment rate in Europe (today) so much higher than that of the US and Japan?



Sources: OECD Main Economic Indicators and the U.S. Bureau of Labor Statistics.

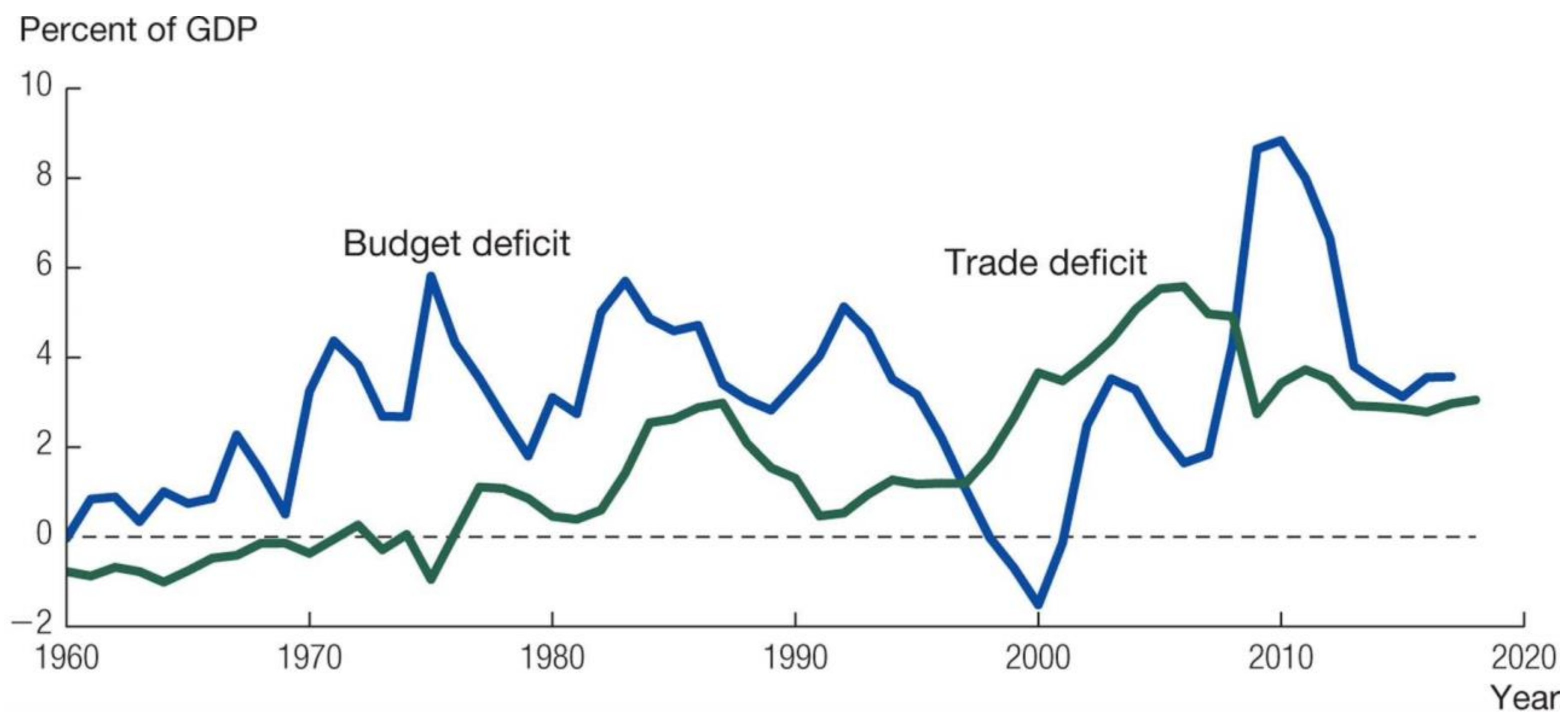
Budget and Trade Deficit

- Two additional variables investigated by macroeconomists include the budget deficit and trade deficit:

Budget: Deals with expenditure of government (net: income —taxes— minus spending)

↳ Fiscal Policy

Trade: Exports minus Imports



Source: Department of Commerce, Bureau of Economic Analysis.

Importance of previous measures

*All of these measures are important because they affect people's well-being:

- **GDP per capita**: Notion of **average income of the individual** in a country
- A **higher unemployment**: More people are out of work, which affects them negatively and worsens the government budget too.
- A **high inflation** rate means **less purchasing power** and loss of savings.
- A **greater budget deficit**, just like deficits in our personal finances, means loans have been taken out that need to be paid back at a later date
  - For nations, this means **charging higher taxes later**

Models in Macroeconomics

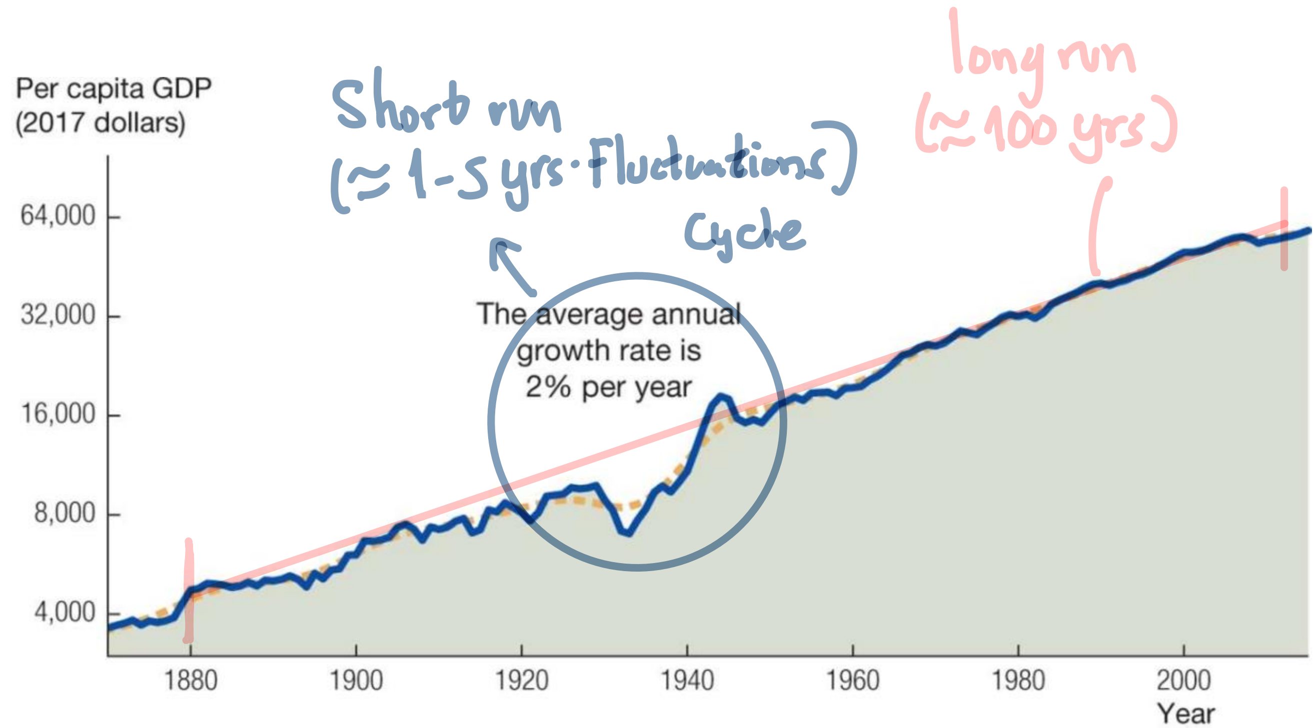
- Macroeconomic approach:
  - Document the facts – what are the unemployment rates over time in a particular country?
  - Develop a model – what theory, equation, graph, etc. can be constructed to explain changes in the unemployment rate?
  - Compare model predictions with original facts – how well does the model predict the data documented earlier?
  - Use the model to make other predictions that will eventually be tested – variables in the model can be changed to predict changes in the unemployment rate
- Models simplify the complicated real world into its most relevant elements
- Economic models often involve systems of equations, just like the supply-demand framework

Short-run and Long-run

- The course is divided into examining long-run growth over time (first part) and the short-run fluctuations in of growth over time (second part)

- Note: Two lines on the graph:

Although hard to distinguish, they are key to represent changes in society's well-being



Sources: The Maddison-Project, www.ggdc.net/maddison/, and U.S. Department of Commerce, Bureau of Economic Analysis. The blue line shows actual per capita GDP in the United States. The orange line, which is hard to distinguish from the blue line, shows potential output. The difference between actual and potential output is a measure of short-run fluctuations in GDP.

Fluctuations in GDP

- By looking at a shorter time period, we can see the short-run fluctuations in GDP

Shaded dates: Recessions (e.g., COVID-19 lockdown)

Recessions