An Introduction to Macroeconomics

Economics 4353 - Intermediate Macroeconomics

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What is Macroeconomics?

- Microeconomics: focus of attention is on individual households, firms, or markets.
  - Topics include labor market discrimination, education and career choice, antitrust policy and mergers, etc.

- Macroeconomics: focus of attention is on the entire economy or on issues with aggregate economic implications.
  - Topics include economic growth, fluctuations, risk sharing, fiscal and monetary policy, etc.

- The distinction between microeconomic and macroeconomic topics can sometimes be subtle.
Gross Domestic Product

- GDP: the quantity of goods and services produced within a country’s borders during some specified period of time.
Gross Domestic Product

- Growth from $t - 1$ to $t$ is $1 + g_t = \frac{y_t}{y_{t-1}}$.
- $\ln(1 + x) \approx x$ for small $x \Rightarrow \ln y_t - \ln y_{t-1} \approx g_t$.
- Natural interpretation for plot of log GDP.
Growth and Fluctuations

- GDP can be separated into *trend* and *cyclical* components.

- This decomposition motivates the two main subfields of macroeconomics: economic growth and business cycle analysis.
Methodology and The Role of Economic Models

- Economics is a science in that it develops falsifable theories to explain how economies work.

- Experimentation is infeasible in macroeconomics, so just like meteorologists and astronomers, economists must rely on models.

- All models are abstractions and not meant to be completely accurate.
The Equilibrium Approach

- Microeconomic theory is central to macroeconomics.
  - The macroeconomy is the aggregation of individual behavior.
  - Changes in policy are likely to alter individual behavior in a way that impacts the overall economy.

- The equilibrium approach:
  - Households and firms optimize given the economic environment.
  - The environment adjusts until the economy is in equilibrium.
  - Equilibrium is a way of establishing internal consistency between individual actions and the economic environment.
  - Equilibrium concepts: Nash equilibrium, general equilibrium, etc.
Disagreement in Macroeconomics

- Most research macroeconomists agree on theoretical methodology, i.e. on what constitutes a responsible approach to macroeconomic modeling.

- Some disagreements on empirical methodology: calibration vs. estimation. Beyond the scope of this class.

- General agreement on growth theory, but sharp disagreements on the determinants of business cycles and the optimal policy response.

- Some disagreements positive, some normative.
Topics: Business Cycles

- What are the driving forces behind economic fluctuations (business cycles)?

- What makes some recessions shallow and others deep? Why are some recoveries rapid and robust and others tepid and prolonged?
Topics: Unemployment and Vacancies

- What structural and cyclical factors affect the unemployment rate?
- What accounts for the relatively recent phenomenon of jobless recoveries?
Topics: Unemployment and Vacancies

- Why do large vacancies and unemployment sometimes coexist?
- How does government policy affect labor market dynamics?
Topics: Credit Markets and the Financial Crisis

- What is a credit crisis, and what market frictions make economies susceptible to them?

- What role can the government play in preventing or mitigating credit crises?
Topics: Housing

- What causes housing booms and busts?
- How do the housing and financial markets interact?
Topics: Taxes, Government Spending, and the Deficit

- Government spending and taxes as a percentage of GDP have increased during the last 50 years.
- How do taxes and government spending affect long-run economic growth?
- Do deficits stimulate or crowd out private investment?
Topics: Aggregate Productivity

- Average labor productivity, \( \frac{\text{output}}{\text{employment}} \), experienced a slowdown from the mid 1960s – early 1980s with a subsequent acceleration.

- What accounts for this slowdown, and what is the impact of technological process in the long-run and during periods of transition?
Topics: Aggregate Productivity

CONSUMPTION SPREADS FASTER TODAY

PERCENT OF
J.S. HOUSEHOLDS

100
90
80
70
60
50
40
30
20
10
0


TELEPHONE  ELECTRICITY  TELEPHONE  COLOR TV
AUTOMATIC  REFRIGERATOR  AIR CONDITIONING  COMPUTER
STOVE  CLOTHES WASHER  CELLPHONE
AUTO  CLOTHES DRYER  VCR
RADIO  DISHWASHER  INTERNET
MICROWAVE
Topics: Inflation

- The inflation rate has been highly variable across decades in the U.S.
- What are the costs of inflation, and how does monetary policy affect inflation?
Topics: Interest Rates

- What are the determinants of nominal and real interest rates?
- What is the relationship between inflation and interest rates?
Topics: Imports, Exports, and the Trade Balance

- What are the consequences of large, persistent trade deficits?
- What explains fluctuations in imports and exports?
- What is the relationship between government budget deficits and trade deficits?