Lesson 1. Introduction to macroeconomic policies and data

Beatriz de Blas
September 2011
Learning objectives

- This lesson introduces you to
  - The issues macroeconomists study
  - The tools macroeconomists use
  - Some important concepts in macroeconomic analysis
1.1 What is macroeconomics: objectives and method
Important issues in macroeconomics

**Macroeconomics**, the study of the economy as a whole, addresses many topical issues:

- why does the cost of living keep rising?
- Why are millions of people unemployed, even when the economy is booming?
- What causes recessions? Can the government do anything to combat recessions? Should it?
- What is the government budget deficit? How does it affect the economy?
- Why does Spain have such a huge trade deficit?
- Why are so many countries poor? What policies might help them grow out of poverty?
- Why is it important for Spain the economic situation in France, Germany or the U.S.?
- Why do currency prices vary (exchange rates), and how do they affect the economy?
What is macroeconomics?

- **Macroeconomics** studies the economy as a whole
  - Aggregate consumer behavior: “families”
  - Aggregate firm behavior
  - Effects of the rest of the world
  - Effects of the public sector

- Main focus on **macroeconomic variables**
  - Its individual evolution over time
  - Its relationships with other variables: economic models

- Three main variables of interest:
  - Output (GDP)
  - Inflation
  - Unemployment
U.S. inflation rate (% per year)
U.S. unemployment rate (% of labor force)
Why learn macroeconomics?

1. The macroeconomy affects society’s well-being.
2. The macroeconomy affects your well-being.
3. The macroeconomy affects politics.

- What is well-being?
  - Social well-being
    - economic development
    - Convergence
    - Non-inflationary sustained economic growth
    - Full-employment
    - …
How the macroeconomy addresses these issues

- Using **economic theories**

- An economic theory is a *justified explanation of an economic episode*

- Main ingredient of economic theories: **economic models**
Economic models

- Are simplified versions of a more complex reality
  - Based on assumptions or hypothesis that must hold for the model’s predictions to be correct
  - Irrelevant details are stripped away

- Are used to
  - Show relationships between variables
  - Explain the economy’s behavior
  - Devise policies to improve economic performance

- Include *endogenous and exogenous variables*
Endogenous vs. Exogenous variables

- The values of **endogenous** variables are determined in the model.

- The values of **exogenous** variables are determined outside the model: the model takes their value & behavior as given.

- In a model of supply & demand for cars,
  
  endogenous: $P, Q^d, Q^s$
  
  exogenous: $Y, P_s$
A multitude of models

- No one model can address all the issues we care about.

- E.g., our supply-demand model of the car market …
  - Can tell us how a fall in aggregate income affects price & quantity of cars.
  - Cannot tell us why aggregate income falls.

- So, we will learn different models for studying different issues (e.g., unemployment, inflation, long-run growth).

- For each new model, you should keep track of
  - its assumptions
  - which variables are endogenous, which are exogenous
  - the questions it can help us understand, and those it cannot
A **stock** is a quantity measured at a point in time.

*E.g.*, “The U.S. capital stock was 2006.”

A **flow** is a quantity measured per unit of time.

*E.g.*, “U.S. investment was $2.5 trillion during 2006.”
# Stocks vs. Flows – examples

<table>
<thead>
<tr>
<th><strong>stock</strong></th>
<th><strong>flow</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>a person’s wealth</td>
<td>a person’s annual saving</td>
</tr>
<tr>
<td># of people with college degrees</td>
<td># of new college graduates this year</td>
</tr>
<tr>
<td>the govt debt</td>
<td>the govt budget deficit</td>
</tr>
</tbody>
</table>
Now you try

Stock or flow?

- the balance on your credit card statement
- how much you study economics outside of class
- the size of your compact disc collection
- the inflation rate
- the unemployment rate
Prices: flexible vs. sticky

- **Market clearing**: An assumption that prices are flexible, adjust to equate supply and demand.

- In the short run, many prices are **sticky** – adjust sluggishly in response to changes in supply or demand. For example,
  - many labor contracts fix the nominal wage for a year or longer
  - many magazine publishers change prices only once every 3-4 years
Prices: flexible vs. sticky

- The economy’s behavior depends partly on whether prices are sticky or flexible:
  
  - If prices are sticky, then demand won’t always equal supply. This helps explain
    - unemployment (excess supply of labor)
    - why firms cannot always sell all the goods they produce

- Long run: prices flexible, markets clear, economy behaves very differently
# Outline of the course

<table>
<thead>
<tr>
<th>Time horizons in macroeconomics</th>
<th>Markets</th>
<th>Economic agents</th>
<th>Short-run effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long vs. Short run</td>
<td>Goods market (output)</td>
<td>Consumers&lt;br&gt;Firms&lt;br&gt;Public sector (Rest of the world)</td>
<td>GDP and demand components&lt;br&gt;Employment&lt;br&gt;Interest rates</td>
</tr>
</tbody>
</table>
1.2 National accounts
Measuring the value of economic activity: Gross Domestic Product

- **Gross domestic product (GDP)** is the market value of all final goods and services produced within an economy in a given period of time.

- **Computation:**
  - Adding apples and oranges,
  - Used goods,
  - Inventories,
  - Intermediate goods and value added,
  - Housing services and other imputations.

- **INE (Contabilidad Nacional de España).**
The main (macro) economic indicator to measure the value of economic activity in a country.

Measures aggregate output (total production) in an economy.

Some activities are NOT included in the GDP:
- home-production,
- housework,
- child and elderly care paid “off the books” or non-paid,
- underground economy.