

# Main Objectives of the Course



- Learn how to think as a Macroeconomist
- Within that, get familiar with the main theoretical concepts, measurement, and policy issues in Macroeconomics
- Get familiar with **national income accounting**, accounting of **fiscal and monetary authorities** (aka treasury and central bank), as well as the management of fiscal and monetary monetary policy
- Learn what the main levers of economic and structural policies can do to income growth, employment, monetary and fiscal health, as well as international economic integration of a country.

- Within that, learn the **basic Keynesian model**
- Learn the roles of fiscal and monetary policies in that model
- Learn some of the main limitations of the model (and indeed of all models!)
- Use the course's analytical instrumental to understand main economic policy decisions and main elements of macroeconomic forecasting

# Lecture 01

## Overall Course Presentation:

- Teacher's and students' backgrounds
- Bibliography
- Course Evaluation Criterion

Discuss what Macroeconomics is all about

## *After this class the student should be able to:*

- Have a broad overview of main macroeconomic issues
- Identify the differences between macroeconomics and microeconomics
- Get a sense of the main goals and and main instruments of macroeconomic policy

# Mandatory Bibliography

Frank, R. & Bernanke, B. (2011).  
*Principles of Macroeconomics, Brief Edition, 2nd ed.* New York: McGraw-Hill.



Amaral, J.F., Louçã, F., Caetano, G., Fontainha, E., Ferreira, M.C. & Santos, S. (2007).  
*Introdução à Macroeconomia, 2ª ed.* Lisboa: Escolar Editora, 2007.

# Additional Readings (English and Portuguese)

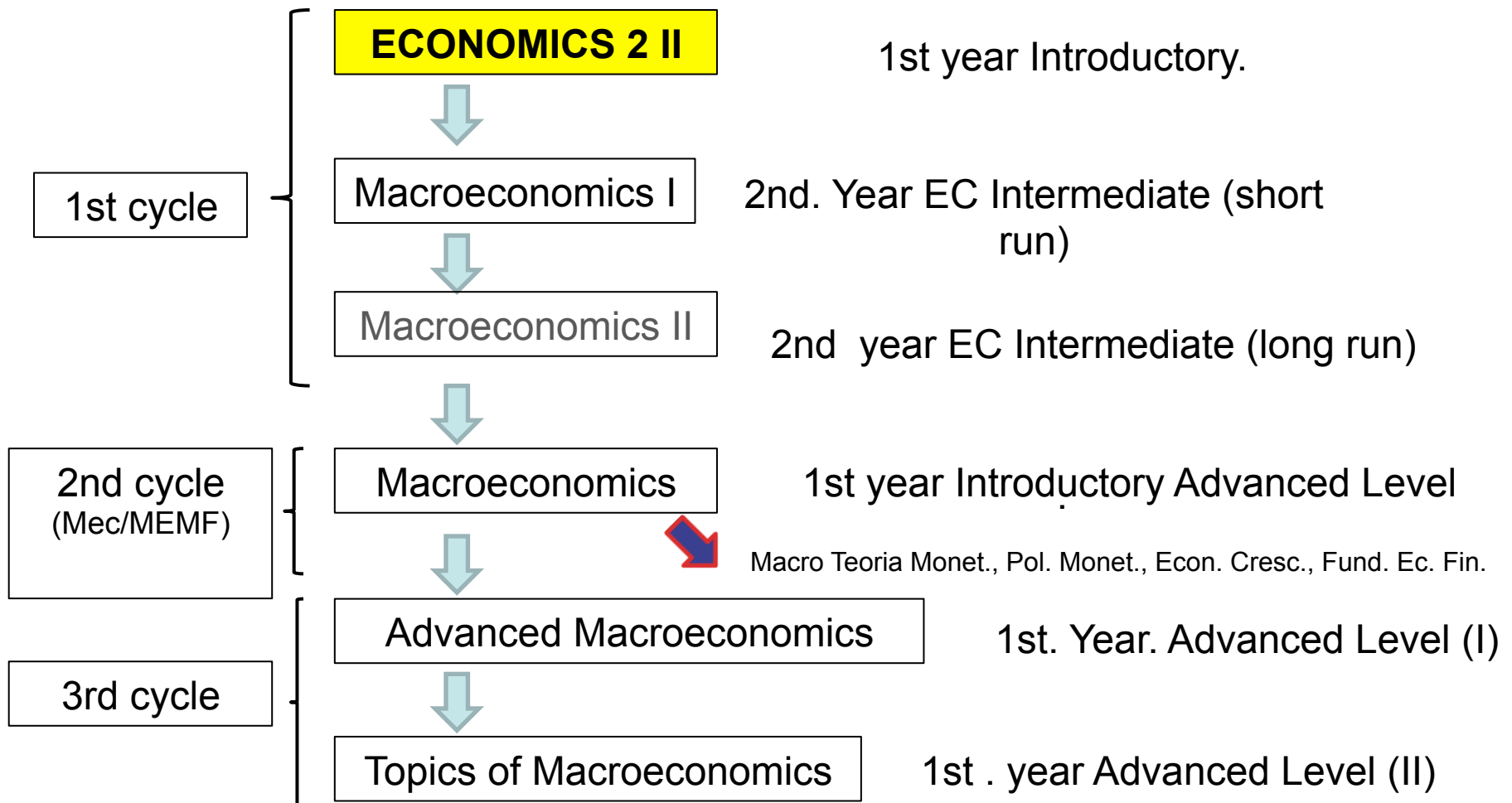
- Blanchard, J.-O.; Amighini, A. & Giavazzi, F. (2010). **Macroeconomics: A European Perspective**. Harlow: Prentice Hall
- Louçã, F. & J. Castro Caldas (2009). **Economia(s)**, Porto: Afrontamento
- Santos, J.; Pina, A.; Braga, J. & St. Aubyn, M. (2010). **Macroeconomia**, 3<sup>a</sup> Ed. Lisboa: Escolar

# Other Materials

- Available on AQUILA webpage
- Do you have different materials? Who produced them?
- Who is responsible for their quality?



# Economics II in the overall course curriculum





# Course Evaluation Criteria

## Regular Evaluation Period (“Época Normal”)

- Final Written Exam (60%)
- Mid-Term Test (40%): Required in order to attend the final exam
- The final grade of the exam is equal to 100% if higher than the that of the mid-term test
- **To attend the final exam, grade in mid-term has to be NO LESS than 10**

## Appeal Period (“Época de Recurso”) (100%)

# Course Evaluation Criteria (cont.)

## Please note:

- All evaluations are individual!
- Frauds in Exams will be regulated by Art. 12º of the RGAC as well as by Regulamento Disciplinar dos Estudantes, Carta Direitos, Garantias, Código Conduta e Boas Práticas ULisboa

# Study Material

Presentation slides do not substitute the bibliography !

# Study Method

A lot of material is learned outside the classroom!

# Course Outline

## Lectures spanning the following topics:

- **1. What is Macroeconomics?**
- 2. Measuring Economic Activity and Economic Variables
- 3. Factors of Production, Productivity, and Economic Growth
- 4. Household Consumption and Saving & Investment by Firms
- 5. Government and Public Finance
- 6. Foreign Trade and Balance of Payments
- 7. Economic fluctuations, the output gap and the Okun “law”
- 8. Aggregate Demand and the Income Multipliers
- 9. Money and Monetary Policy
- 10. The Aggregate Demand-Supply (AD/AS) Model



# 1. What is Macroeconomics?

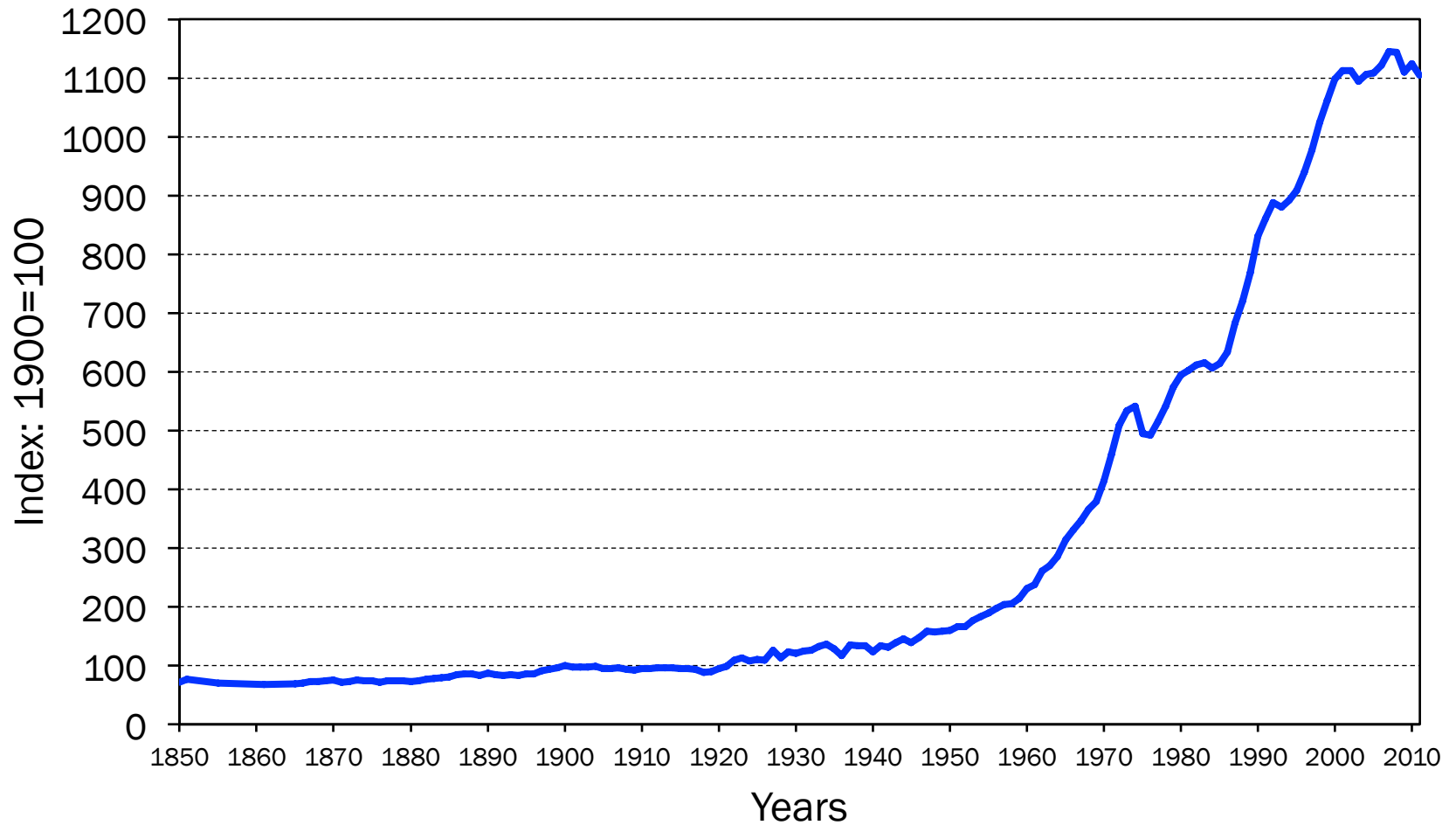
# Macroeconomics

- **Macroeconomics** is the study of
  - the performance of national economies ...
  - ... and the policies governments can use to improve that performance.
- **Macroeconomic policies**
  - The actions of the economic policy authorities designed to affect the performance of the economy as a whole.

# 1. 1. Major MACROECONOMIC ISSUES

- What determines long-run economic growth?
- Within that, what determines productivity?
- What causes fluctuations around trend economic growth, i.e., what causes the business cycle?
- Causes of unemployment and inflation
- Causes of interest rate and exchange rate movements
- Causes and effects of the Interdependence of Nations

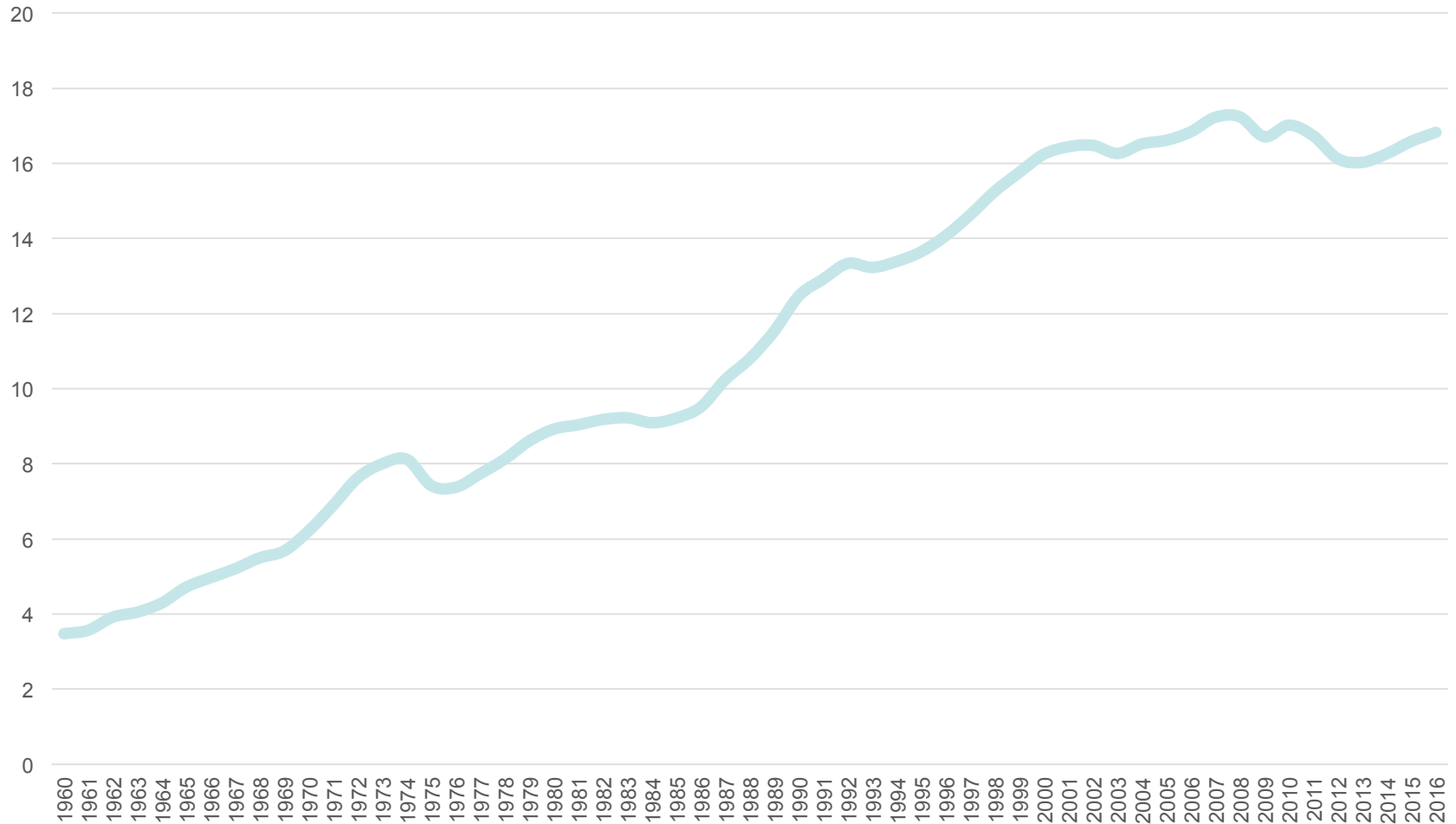
## Annual Real GDP *per capita* in Portugal: 1850-2011



Sources: [Comissão Europeia \(2012\)](#) and [GGDC \(2012\)](#)

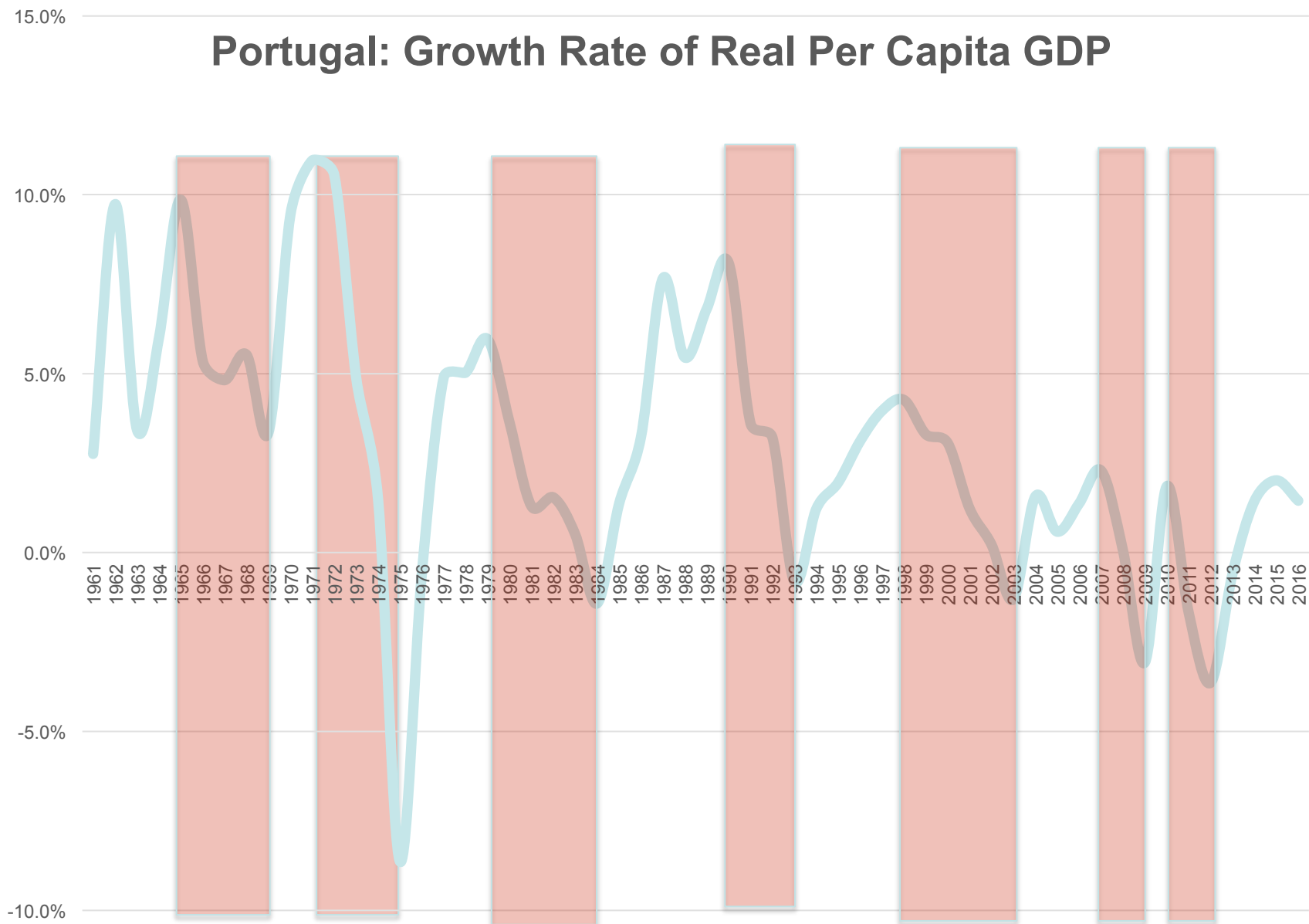


## Portugal: Per Capita real GDP, 1960-2016 (million euros, 2010 prices)



Source: AMECO, Comissão Europeia, February 2017

# Portugal: Growth Rate of Real Per Capita GDP



Source: AMECO, Comissão Europeia, fev. 2017.

## Gross Domestic Product (GDP) *per capita*:

- A GDP increase may not always correspond to an increase in GDP per inhabitant (*or per capita*) ...  
... if population had also increased.

Consequently, GDP *per capita* is a better indicator of the average living standard.

- **Another key measure of economy wide performance is average labor Productivity:**  
= Real GDP or output by employed worker

# Expansions and Recessions

As seen in the above figures, **growth is not always steady**

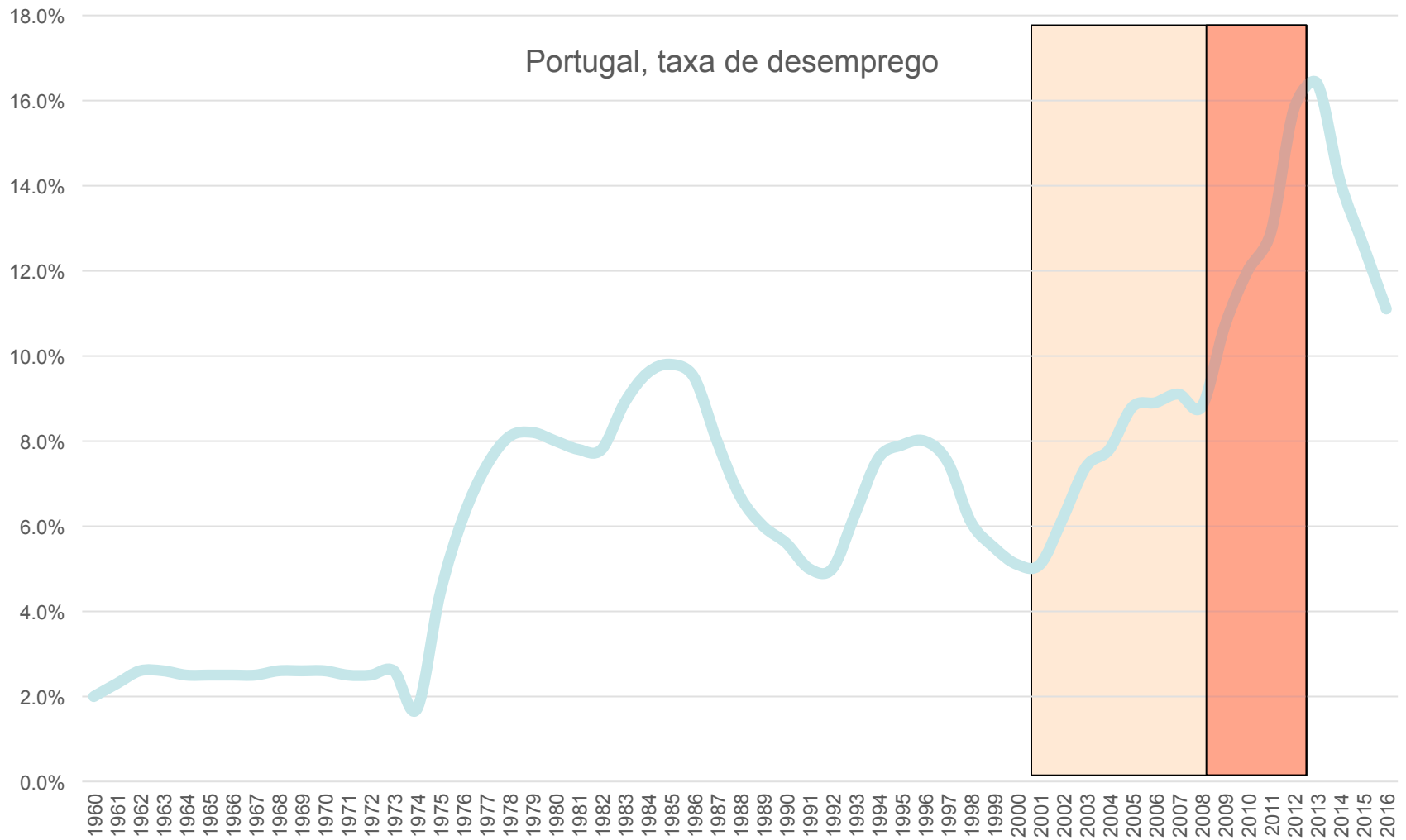
- **Recessions:** Slowdowns in real GDP growth
- **Depressions:** Severe recessions, often with negative growth rates of real GDP
- **Expansions:** Periods of rapid real GDP growth

# Unemployment Rate

Another key indicator of macroeconomic performance of a country

Measured by the fraction of people who would like to be employed but can't find work

Also a key indicator of the state of the labor market

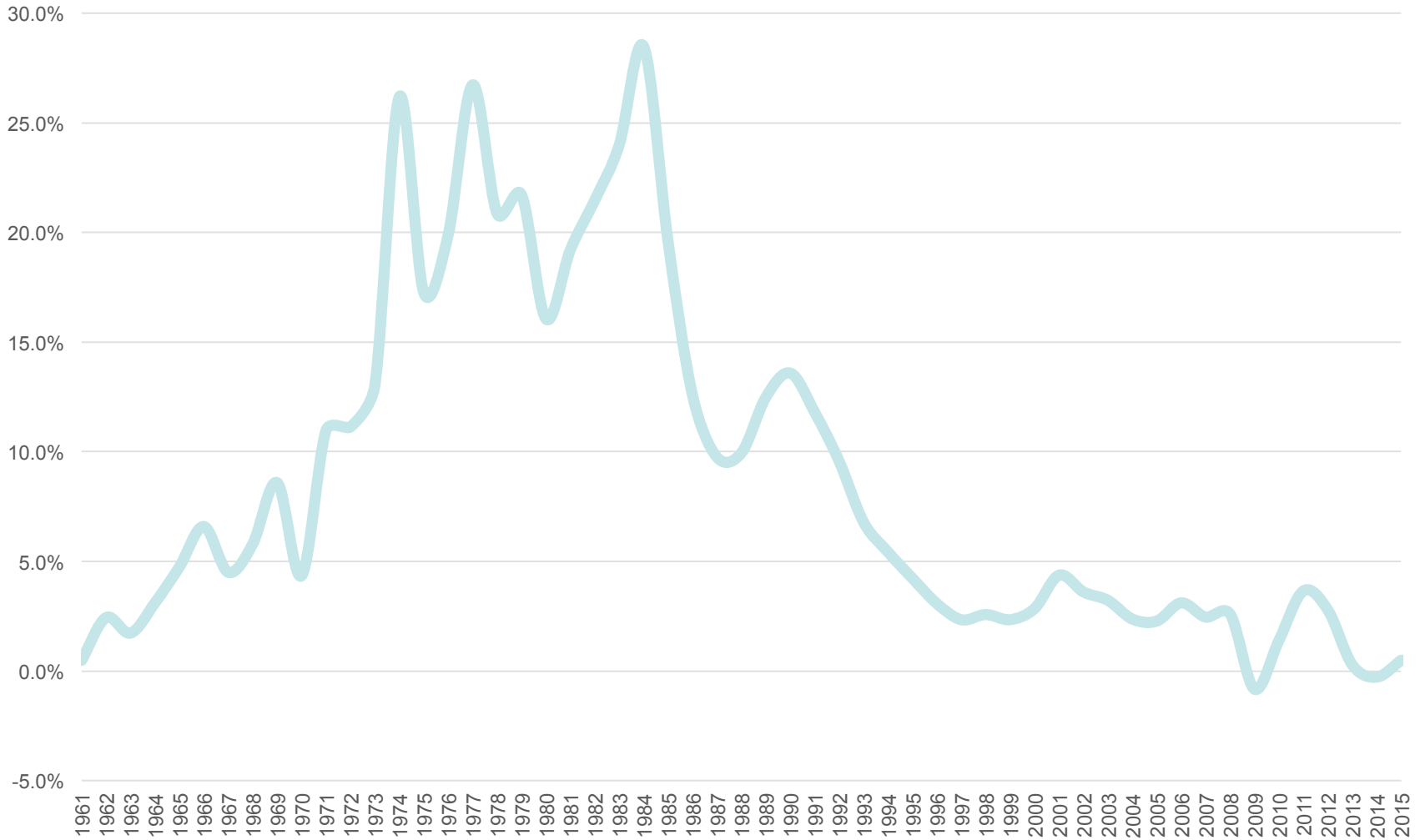


Source: Comissão Europeia (2017)

# Inflation

- is the rate at which general price index varies across time
- imposes a variety of economic costs
- in recent years it has been relatively low

## Portugal, Inflação Anual (IPC)



Fonte: AMECO, Comissão Europeia, fev. 2017.



# Interdependence among nations:

National economies are increasingly interdependent

- Through Trade:
  - Imports
  - Exports
  - Both of final and intermediate goods (increasingly through global value chains)
- Through Financial Flows
- Through Common Economic and Monetary Arrangements and Institutions”
  - European Union
  - Euro Zone

## 1.2. Macroeconomic Policies

- Monetary Policy
- Fiscal Policy
- Exchange Rate Policy
- Structural Policies

# Monetary Policy

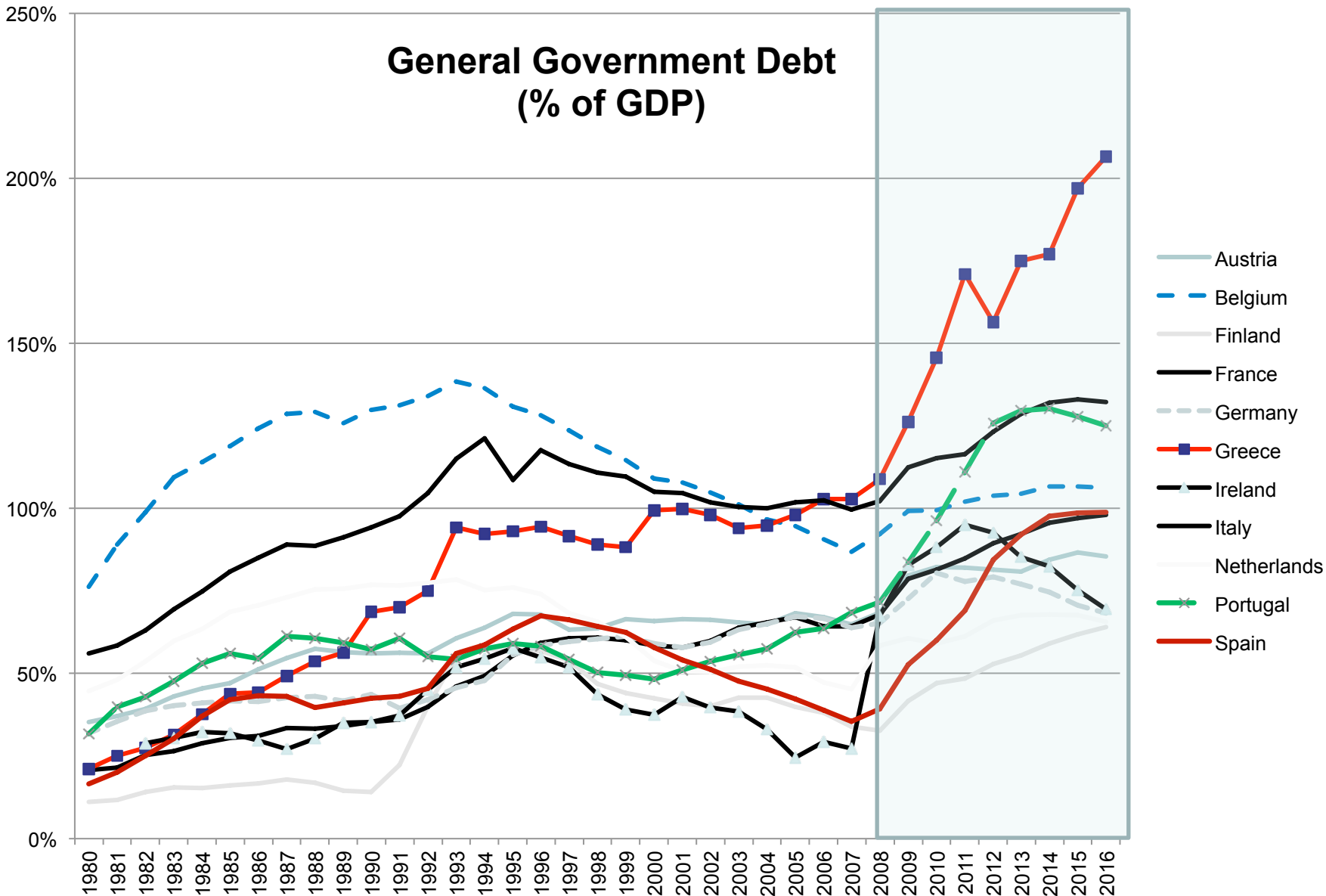
- Monetary policy:
    - Determination of the money supply and/or of benchmark interest rates
    - Changes in monetary policy affects:
      - Various interest rates in the economy
      - Production
      - Employment
      - Inflation
      - Prices of financial assets
      - International value of national currency (the Euro)
- In Euro Zone the monetary policy is controlled by European Central Bank (ECB)

# Fiscal Policy

**Decisions that determine the government's budget: expenditures and revenues of the governments**

- **Deficit:** when government spends more than what is collected
  - **Surplus:** when government spends less than what is collected
  - **Debt/GDP:** Accumulates when government deficits grow sufficiently faster than real GDP
- At any point in time, fiscal Policy is constrained by the need to service debt, capacity to borrow, as well as by domestic political considerations, and in some cases by international agreements

## General Government Debt (% of GDP)



# Exchange Rate Policy

- Seeks to influence the demand and supply of foreign currency and hence the exchange rate, i.e. the value of the domestic relative to the foreign currency
- Variations in nominal exchange rate affect the:
  - Competitiveness of goods and services.
  - Exports and imports.
  - Output, employment and inflation.
  - Prices of financial assets.
  - Ability to conduct monetary policy.
- In the Eurozone, the exchange rate policy is a responsibility of the European Central Bank (ECB).

# Structural Policies

**A government policy that aims to change the underlying structure, or institutions, of the economy**

- It usually takes much longer to work than standard macroeconomic management (fiscal and monetary) policies
- Include a diverse scope of measures, small interventions and large reforms
- A large reform of the economic system: a change from a government controlled economy (centralized planed) to a market-oriented approach in Eastern Europe

# 1.3. Macroeconomics and Aggregation

## Positive Analysis vs. Normative Analysis

- **Positive analysis**

- Addresses the *economic consequences* of a particular event or policy
- Doesn't judge whether those consequences are desirable or not (makes *no judgments* of value)

- **Normative analysis**

- Addresses the question of whether a policy should be used. Analysis a *choice*.
- Does involve the values of the person doing the analysis



# Microeconomics and Macroeconomics

- **Macroeconomics**
  - Bird's-eye view" of the economy
  - Ignores details
  - Understanding all system
- **Microeconomics**
  - "Ground level"
  - Close to economic agents
  - The behavior of individuals, households, firms and markets
- **Aggregation :**
  - The adding up of single economic variables to obtain economy-wide totals

## But Common Principles to Micro and Macro

- Scarcity Principle
- Cost-Benefit Principle
- Incentives Principle

→ When **combined**, those generate important concepts in Economics in general. E.g. the concept of cost of opportunity

See illustrations in Cap. 1 of Frank and Bernanke

## Two last “Philosophical” Considerations

I) **Use of Mathematic models**: The fact that Economics is an inexact science does not mean that the logic of Economics should be inexact!

→ Use of Maths facilitates analytical rigor and sometimes communication too!

II) **The representative agent’s abstraction**:

- Useful in filtering out inessential idiosyncratic behavior
- Also helps application of micro optimization principles to macro analysis, making it potentially more rigorous
- As you may see in advanced courses, relaxing that assumption can have important analytical implications, but we will not discuss them here