



Macroeconomia 1

Guião de Exercícios das Aulas Práticas - #1

2025-2026

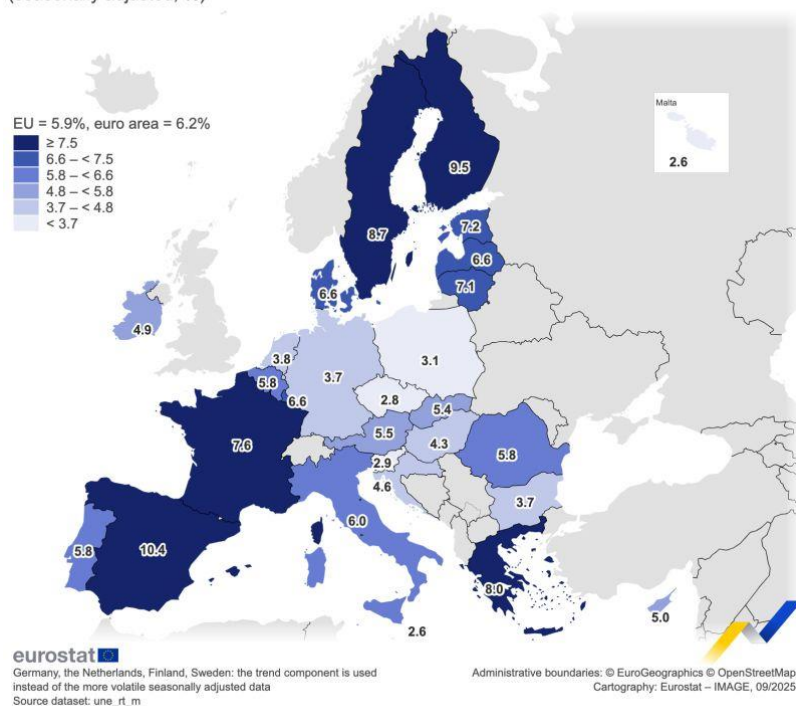
1. Which of the following topics are essentially macroeconomic and which are microeconomic?

- a) Price regulation in the telecommunications market in Portugal
- b) Evolution of Portuguese public debt
- c) Economic growth in different European economies
- d) Degree of competition among energy suppliers
- e) Evolution of income inequality in Portugal over time
- f) Inflation rate in Portugal and in Europe

2. Distinguish between the supply side of the economy and the demand side.

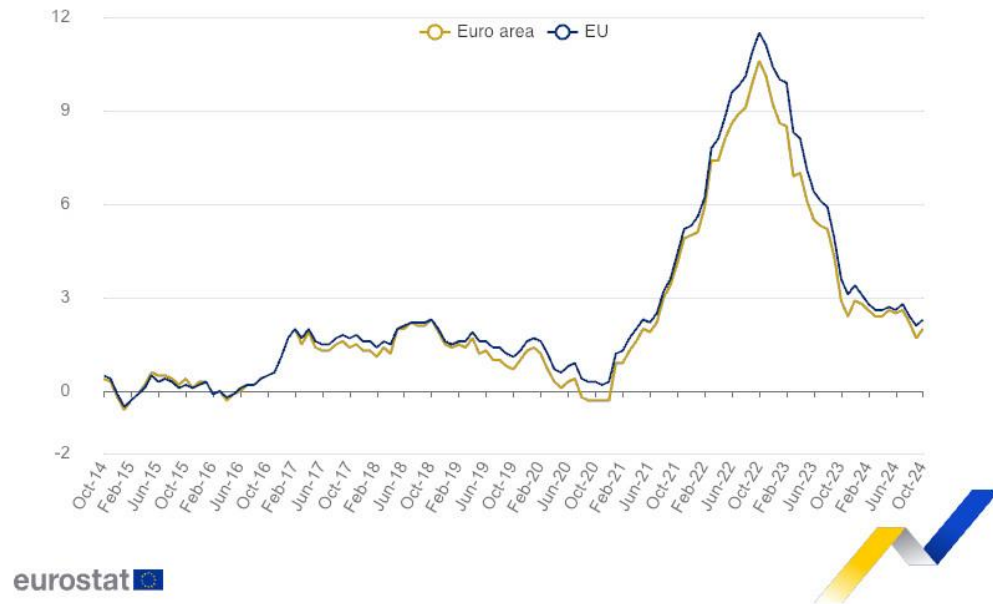
3. Look at the following figure and interpret the information contained in it. How is the variable represented in it calculated? What could explain the differences in behavior between the different European economies?

Unemployment rates, July 2025
(seasonally adjusted, %)

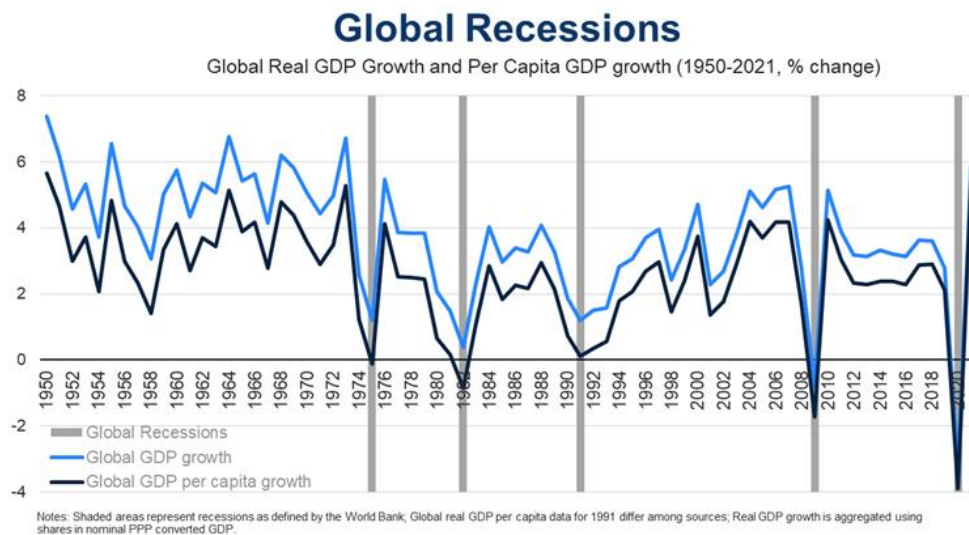


4. Analyze the following figure and interpret the information it represents. What variable is represented here and how is it calculated? What could explain the trend shown here?

Annual inflation rates (%)



5. Analyze the following figure. What variables are represented here and how are they calculated? What is meant by “global recession” according to this graph? What long-term trends can be identified? Can you associate any of the recessions represented here with specific events in the economic history of recent decades?



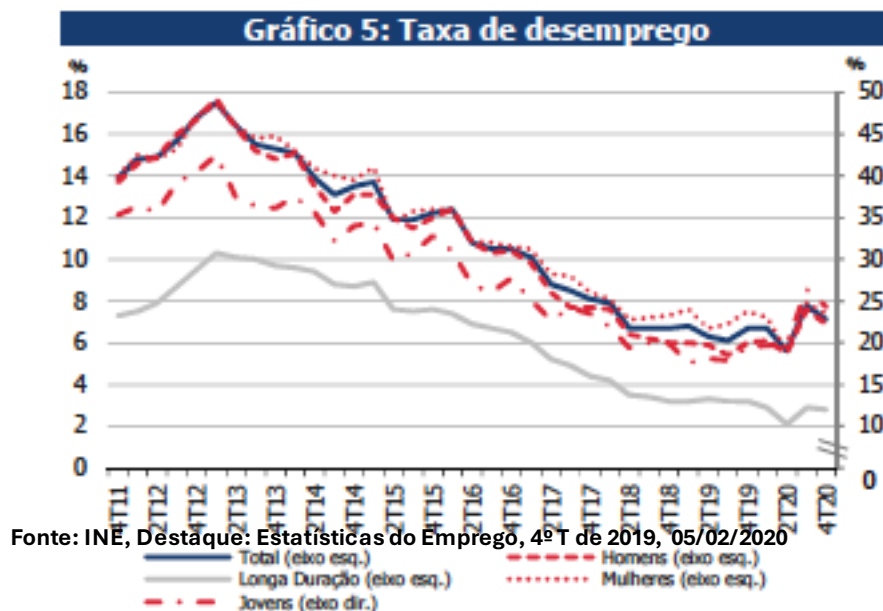
6. Consider the following three fundamental institutional sectors of the macroeconomic circuit: households, businesses, and the government. Give examples of flows/relationships between:

- i) Government and business firms (both ways)
- ii) Businesses and families (both ways)
- iii) Families and Government (both ways)

7. Read the following statements and indicate which one(s) are correct:

- a) Activity rate = Employed population / Active population
- b) Unemployment rate = Number of unemployed / Working-age population
- c) Employment rate = Employed population / Working-age population
- d) Employment rate + Unemployment rate = 100%.

8. Look at the following graph and choose the correct statement. Explain why the others are wrong or not supported by the data.



- a) In the fourth quarter of 2011, around 14% of the resident population in Portugal was unemployed;
- b) In the second quarter of 2015, around 60 out of every 100 Portuguese citizens were employed;
- c) In the fourth quarter of 2020, more than 90% of the Portuguese working population was employed;
- d) Between the first quarter of 2013 and the end of 2020, the Portuguese working population declined.

9. Throughout 2019, the employed population in Portugal increased from 4,866,700 to 4,913,100 people, while the active population rose from 5,232,600 to 5,252,600 people. Calculate the unemployment rate at the beginning and end of 2019:

- a) 93.0% and 91.2%, respectively.
- b) 7.0% and 8.8%, respectively.
- c) 93% and 93.5%, respectively.
- d) 7.0% and 6.5%, respectively.

10. Afonso lives in Viana do Castelo and earns a salary of €1,000. Pedro lives in Guimarães and earns the same salary. The consumer price index in Viana do Castelo is 95% of the national average, while in Guimarães it is 105% of the national average. We can conclude that:

- a) Pedro and Afonso's real salaries are identical.
- b) Afonso's real salary is higher than Pedro's.
- c) Pedro's real salary is higher than Afonso's.
- d) We do not have enough data to compare Pedro and Afonso's real salaries.

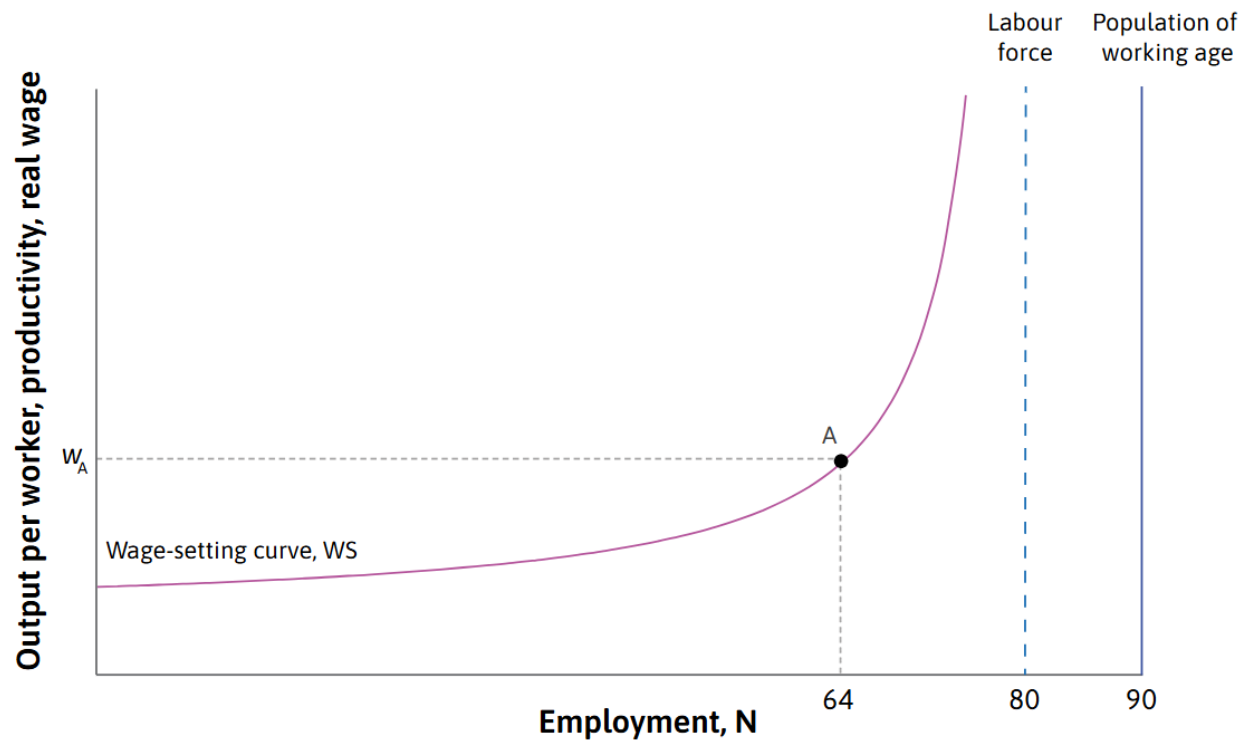
11. Consider the information in the following table with information on two macroeconomic variables for Portugal.

Ano	Índice de Preços no Consumidor (2012=100)	Salário bruto nominal médio (€)
2015	100,48	1.094,1
2016	101,09	1.105,6
2017	102,48	1.130,8
2018	103,5	1.166,9
2019	103,85	1.206,3
2020	103,83	1.247,2
2021	105,15	1.289,5
2022	113,38	1.362,4
2023	118,27	1.460,8

Indicate which of the following conclusions are correct, explaining your reasoning:

- a) Between 2015 and 2023, there was inflation every year in Portugal.
- b) Between 2015 and 2023, the average real gross salary increased by about 34%.
- c) The annual inflation rate in 2016 was 1.09%.
- d) At 2012 prices, the average gross salary in Portugal was €1,235.1.

12. Consider the following figure, which shows the WS curve for a given economy. Also consider that the total population is 100 people.



Indicate which of the following statements are correct, regarding point A:

- a) The activity rate is 89%.
- b) The unemployment rate is 29%.
- c) The employment rate is 80%.
- d) If some inactive individuals decided to become active (joining the available labor force), then, ceteris paribus, both the unemployment rate and the activity rate would increase.

13. Identify which of the following statements about the WS curve is/are correct:

- a) An increase in unemployment benefits raises the no-shirking wage and shifts the wage-setting curve downward.

b) If the unemployment rate decreases (i.e., if the demand for labor by other companies increases), the no-shirking wage increases and the wage-setting curve shifts upward.

c) If it becomes easier to monitor effort, the non-evasion wage decreases and the wage-setting curve shifts downward.

d) A sudden drop in the working-age population (due, for example, to the retirement of the baby boomer generation) would lower the non-evasion wage and the wage-setting curve.

14. For each of the following changes, indicate in which direction the WS wage-setting curve shifts (upward/left or downward/right) and why, referring to the no-shirking wage and/or the reservation wage:

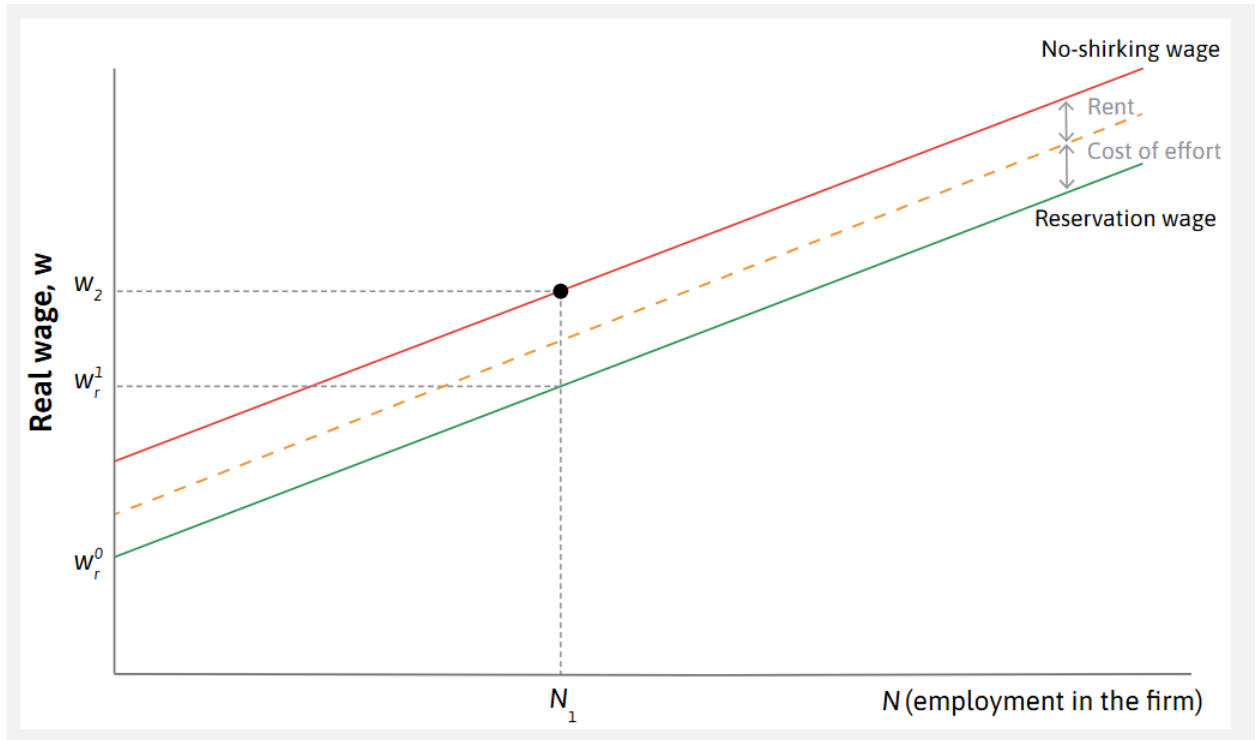
a) a decrease in unemployment benefits.

b) a decrease in the social stigma associated with unemployment

c) a decrease in the net disutility of meeting the effort standards required by the company

15. Explain what endogenous variables are in a model. Which are the endogenous variables in the WS-PS model?

16. Look at the following figure. Explain why, for each number of workers that the company intends to hire, the no-shirking wage is higher than the reserve wage.



17. Indicate, for each of the following situations, what happens, *ceteris paribus*, to the wage-setting curve WS in the economy:

- It becomes easier for companies to lay off workers
- Other companies start paying lower wages
- The unemployment rate in the economy increases significantly
- The amount of unemployment benefits increases
- New technology makes it easier for companies to verify that workers are actually meeting the desired level of effort
- The quality of life without employment increases
- Changes in the organization of work make it more enjoyable for workers to perform the tasks required by their employer