1.2. Analysis of economic variables

Analysis of economic variables

Macroeconomics studies aggregated indicators to understand how the whole economy functions. These are some of the major macroeconomics variables

1. GDP
2. Inflation
3. Public deficit
4. Public debt
5. Exchange rate / Foreign exchange rate
6. Interest rate
7. Trade deficit/surplus
8. Unemployment rate

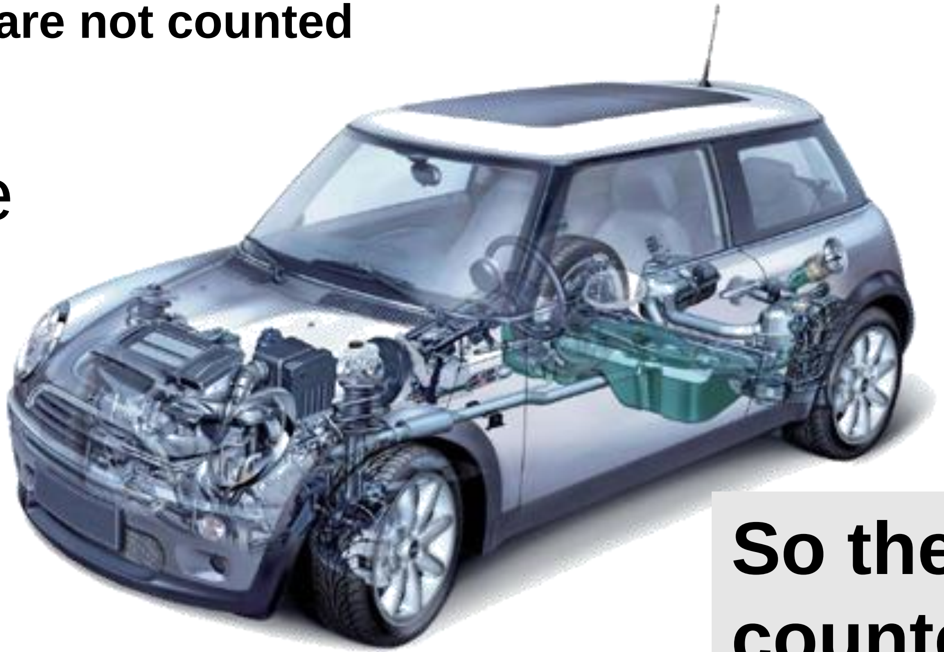
GDP

GDP is the nation's expenditures on all FINAL goods and services produced during the year

Multiple counting:

> **Only expenditures on final products what consumers, businesses, and government units buy for their own use belong in GDP**
>
> **Intermediate goods are not counted**
>
> **Used goods are not counted**

Only the value of the final sale is counted.



So they are not counted when the manufacturer buys them.

This is confusing!

The tire that comes with the car is **not** counted as a final good.

However, if you get a flat and buy the same tire, it is counted as a final good.

No Problem! To correct for this problem economists have created the Value Added approach.

Value Added Approach Eliminates Double Counting

Participants	Cost of Materials	Value of Sales	Value Added
Farmer	$ 0	$ 100	$ 100
Cone factory and ice cream-maker	100	250	150
Middleperson	250	400	150
Vendor	400	500	100
Totals	$ 750	$1,250	$500

GDP can be calculated three ways:

- add up the ***value added*** of all producers;
- add up all spending on domestically produced **final goods** and services;
- add up the all income paid to factors of production

Calculating GDP

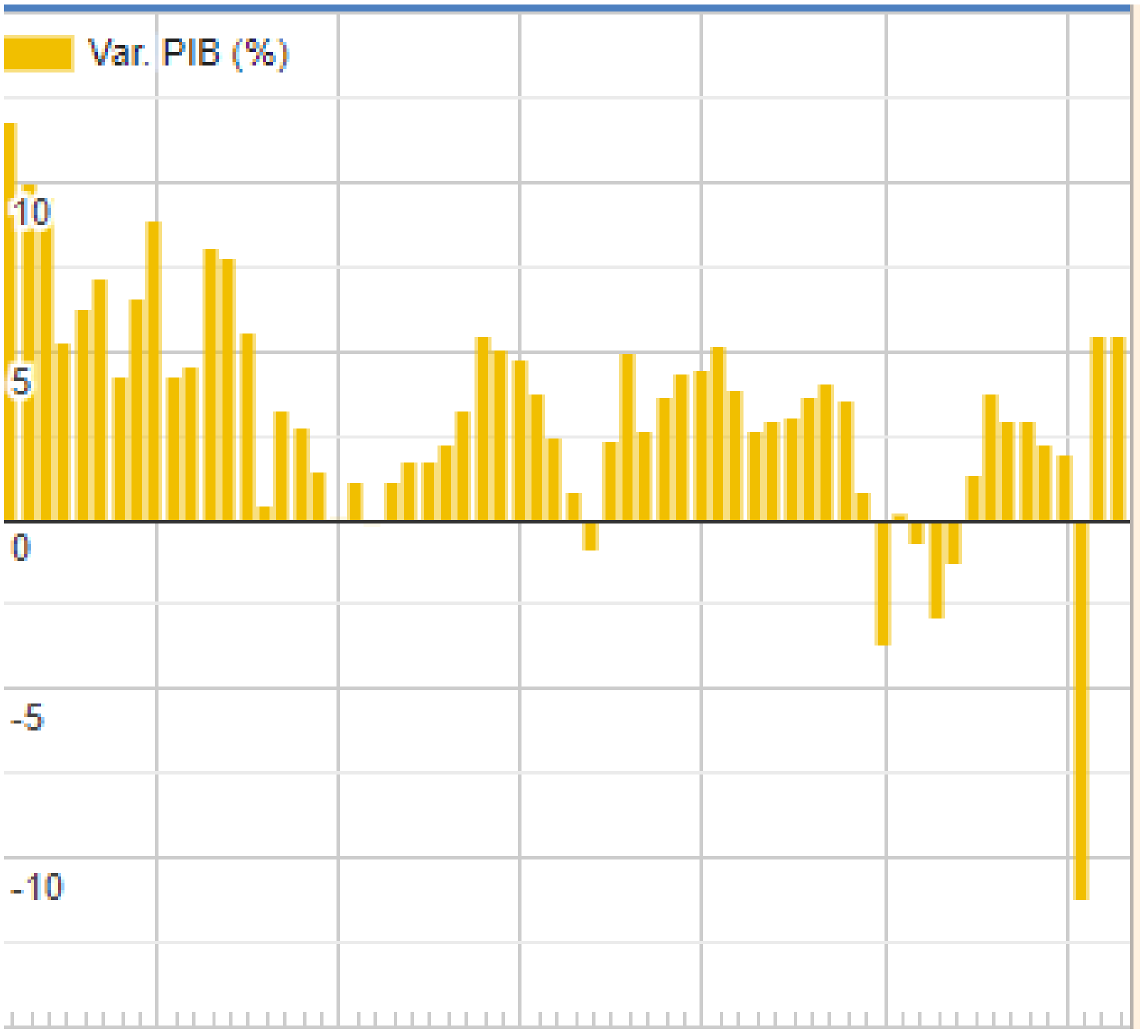
Total spending on domestically produced final goods and services = $21,500

	American Ore, Inc.	American Steel, Inc.	American Motors, Inc.	Total factor income
Value of sales	$4,200 (ore)	$9,000 (steel)	$21,500 (car)	
Intermediate goods	0	4,200 (iron ore)	9,000 (steel)	
Wages	2,000	3,700	10,000	$15,700
Interest payments	1,000	600	1,000	2,600
Rent	200	300	500	1,000
Profit	1,000	200	1,000	2,200
Total expenditure by firm	4,200	9,000	21,500	
Value added per firm = Value of sales – cost of intermediate goods	4,200	4,800	12,500	

Total payments to factors = $21,500

Sum of value added = $21,500

Spanish GDP (% regarding previous year)

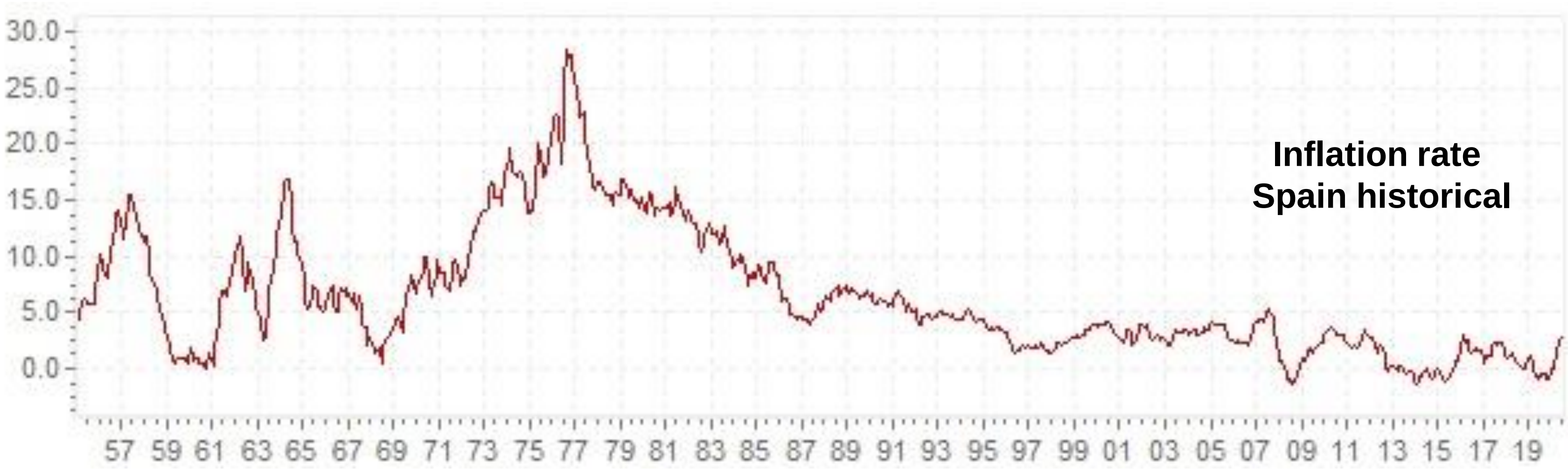


[INEbase. CONSUL]

Inflation

Inflation is a rise in the general level of prices of goods and services in an economy over a period of time.

The inflation rate is the annualized percentage change in a general price index. It measures the change in the cost of a basket of retail goods and services. The data are estimates obtained from expenditure surveys for a sample of households.



Inflation rate Spain historical

https://www.inflation.eu/en/inflation-rates/spain/historic-inflation/cpi-inflation-spain.aspx

CPI groups and weightings (Spain - 2023)

Group	Sectors	CPI Weighting (%)
1	Food and non-alcoholic beverages	19,6
2	Alcoholic beverages and tobacco	4
3	Clothing and footwear	3.9
4	Housing	12.7
5	Furniture and Household Equipment	5,8
6	Health	6
7	Transport	13.80
8	Communications	3.2
9	Recreation and culture	7.9
10	Education	2
11	Hotels, Cafes and Restaurants	13.2
12	Others	7.8

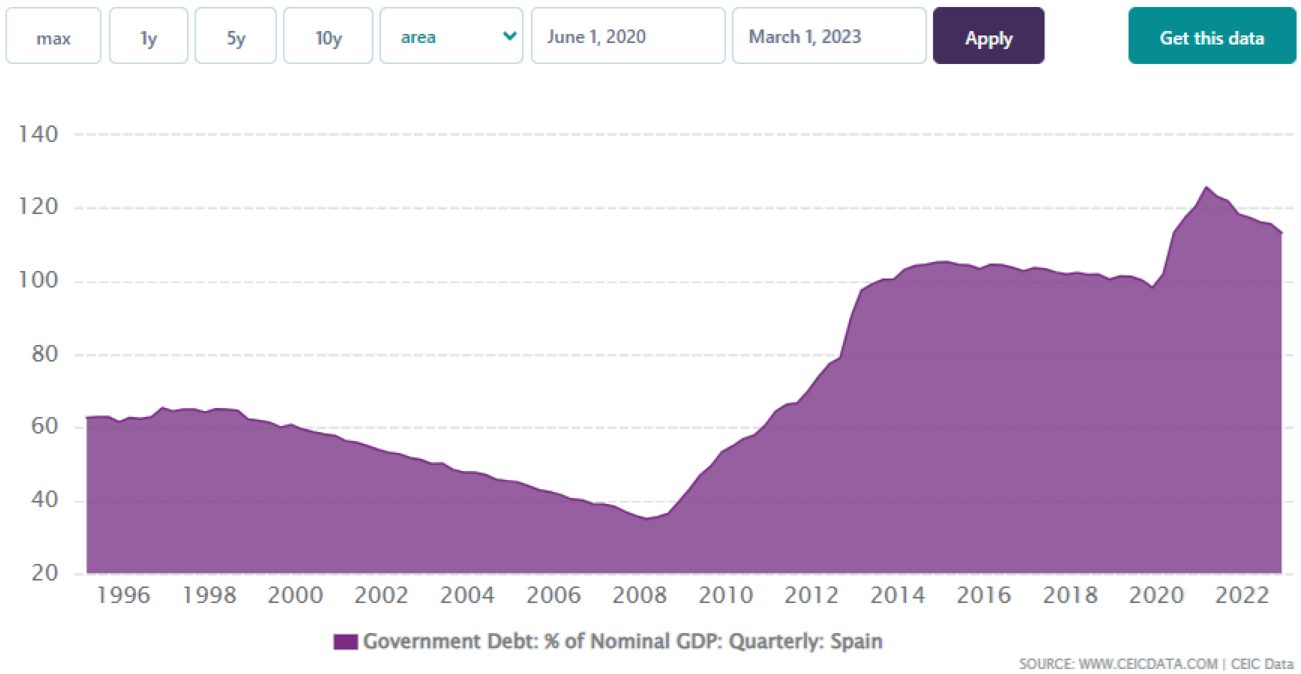
https://data.oecd.org/gga/general-government-deficit.htm

Public deficit

Public deficit, fiscal deficit or government budget deficit is the amount by which government revenues falls short of government spending.

If revenues are higher than government spending there will be a budget surplus.

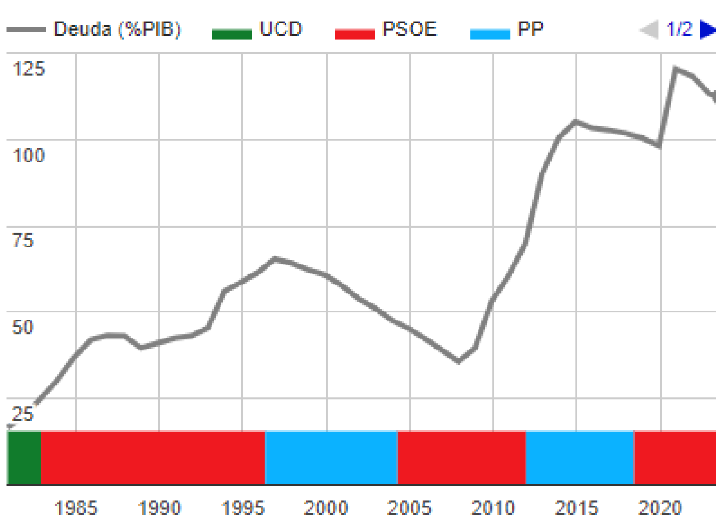
View Spain's Government Debt: % of GDP from Mar 1995 to Mar 2023 in the chart:

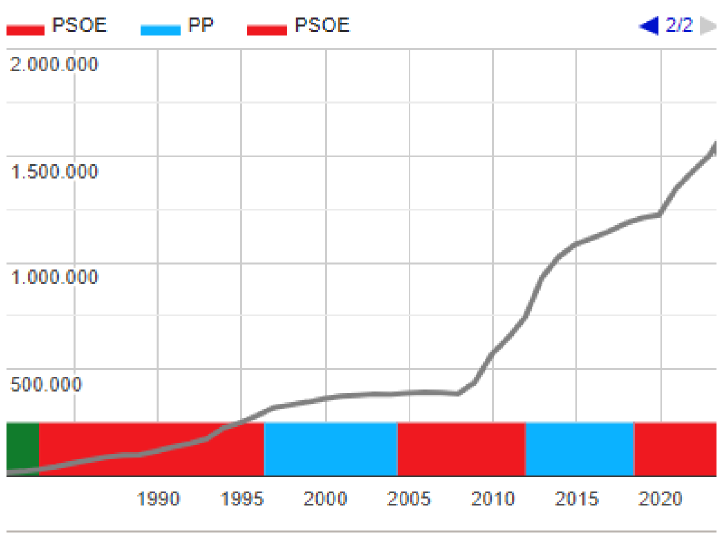


Public debt

Public debt (also known as government debt) is money (or credit) owed by a public administration (national, regional or local government).
National government debt is sometimes called sovereign debt.
Public debt is the result of accumulating budget deficits year after year.

Spanish public debt as a percentage of GDP and in million euros



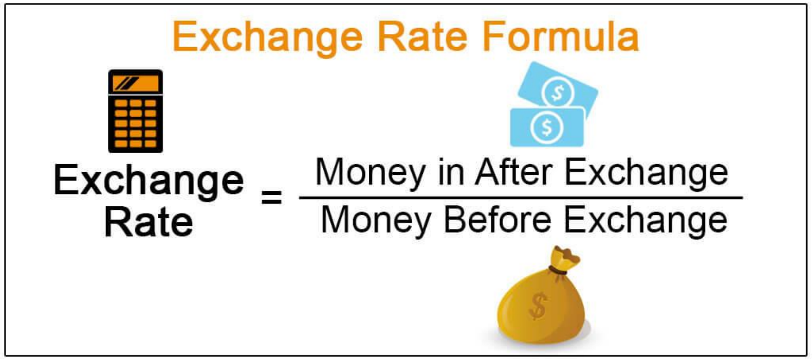


Exchange rate / Foreign exchange rate

An exchange rate (Foreign-exchange rate or FOREX rate) between two currencies is the rate at which one currency will be exchanged for another.

It is also regarded as the value of one country's currency in terms of another currency.

Currency appreciation (depreciation): An increase (decrease) in the value of one currency in terms of another.



[Divisas en tiempo real - Principales Cambios Euro - Dólar- Libra- Yen (infobolsa.es)]

Interest rate

An interest rate is the rate at which interest is paid by a borrower for the use of money that they borrow from a lender

Normally expressed as a percentage of the principal/capital for a period of one year

There are <u>many</u> interest rates (risk-free, with a risk premium, short term, long term…)

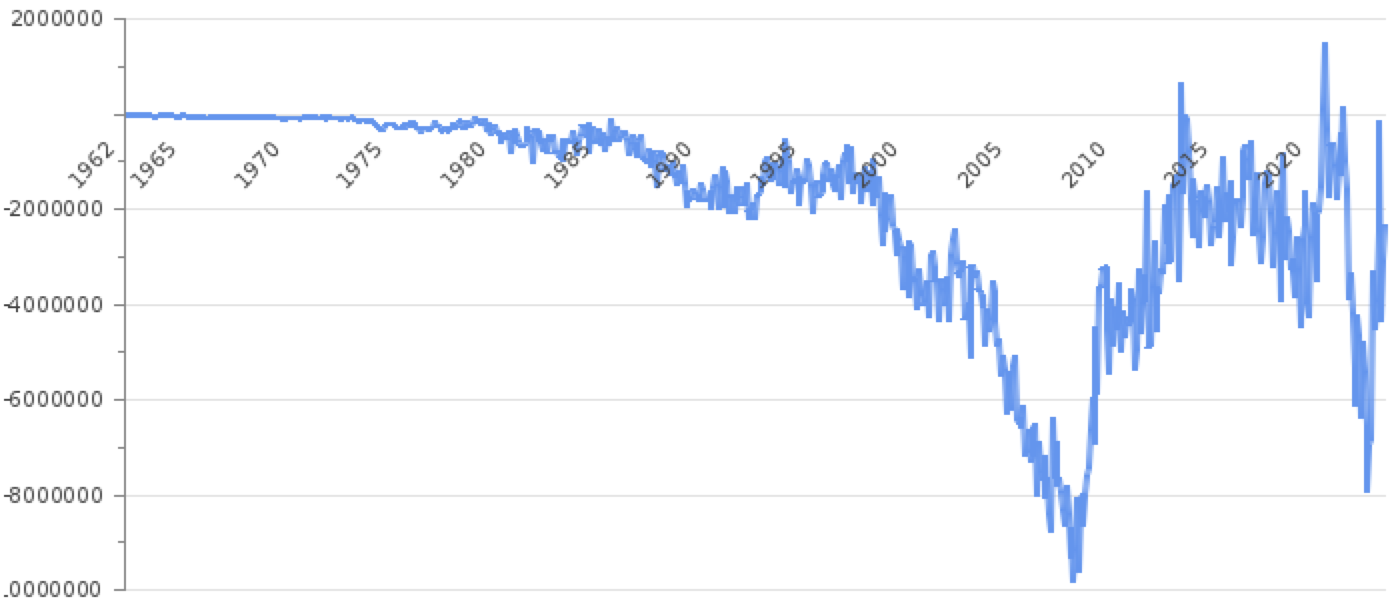
Trade deficit / surplus

The balance of trade is the difference between the monetary value of exports and imports in an economy over a certain period

A negative balance is referred to as a trade deficit (exporting less than is imported)

A positive balance is known as a trade surplus (exporting more than is imported)

Spain



Unemployment rate

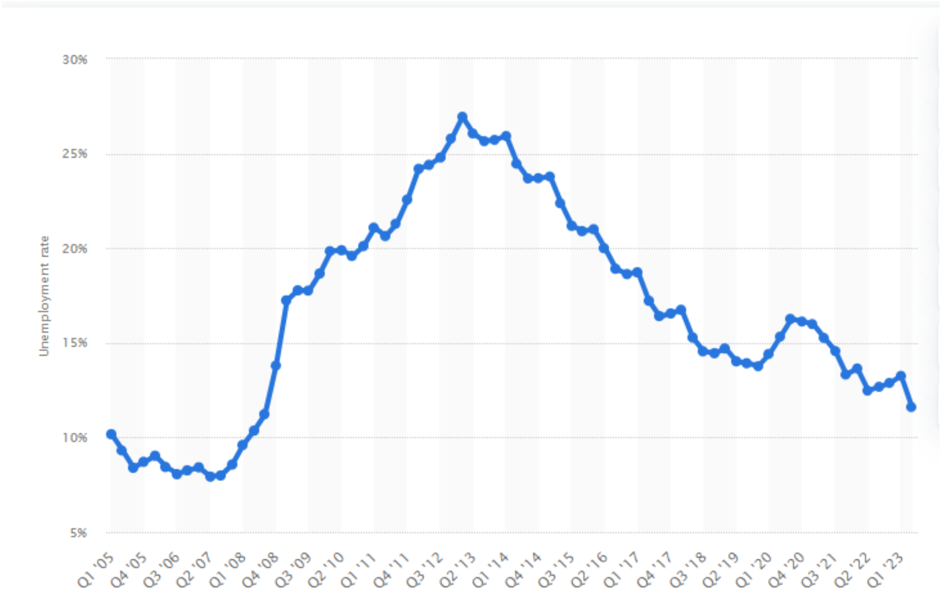
Unemployment rate = Unemployed workers / Total labour force

Unemployed workers are individuals who are currently not working but are <u>willing</u> and <u>able</u> to work for pay and have <u>actively searched</u> for work

Total labour force comprises all individuals that are currently <u>working</u> or can be classified as <u>unemployed</u>

(Note that some people are not working and cannot be classified as unemployed: students, housekeepers,…). This applies to “ERTE” aswell.

Spain



Key concepts

Economics, microeconomics and macroeconomics
Economic system
Market, planned and mixed economies
Demand and supply (curves)
Equilibrium price
Perfect competition
Monopoly
GDP
Inflation and Consumer (Retail) Price Index
Public deficit and Public debt
Exchange rate
Interest rate
Trade deficit
Unemployment rate