

# International Economics

## First Problem Set

Spring 2024

The task is to analyze Spanish 2023Q4 Gross Domestic Product estimates.

<b>Grade:</b>	~10% of the final course grade
<b>Delivery:</b>	Campus Virtual
<b>Delivery date:</b>	March 3 <sup>rd</sup> , 23:59 Central European Time (CET)
<b>Requirements:</b>	Document named: problemset_your-NIU.pdf (i.e. problemset1_1512345.pdf)

### Expected result:

A **two-page (maximum)** document.

Must include:

- required tables,
- an example for each type of calculation done to arrive at the values, and
- the requested analysis texts.

### Suggestions:

Don't worry about the grade. You will get ~70% just for delivering the basics.

You may not achieve all the objectives. **Try to deliver as much as possible.**

### Analysis of Spanish GDP:

The following table shows Spain's GDP from a supply point of view:

	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4
GDP <sub>mp</sub>	360,022	349,769	366,458	359,688	386,155
GVA <sub>bp</sub> Agriculture	11,965	7,936	7,940	6,313	11,900
GVA <sub>bp</sub> Industry	59,432	58,390	52,558	51,796	59,930
GVA <sub>bp</sub> Construction	18,331	16,403	20,043	17,022	19,641
GVA <sub>bp</sub> Services	249,723	230,611	252,965	251,007	267,883
Net taxes on products	20,571	36,429	32,952	33,550	26,801

Source: Instituto Nacional de Estadística.

Notes: Values in millions of current Euros. Unadjusted data for seasonality and calendar.

1. Calculate base indices 100=2022Q4 of GDP and all its subcomponents.
2. Calculate changes between 2023Q4 and 2023Q3 for GDP and its subcomponents.
3. Comment on the problems of analyzing the calculated variations.

The following table shows seasonally adjusted volume indices of demand::

	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4
GDP <sub>mp</sub>	112.03	112.60	113.16	113.61	114.32
Household Consumption (C)	107.40	107.65	108.27	109.58	109.88
Government Consumption (G)	115.38	115.57	117.11	118.80	120.41
Gross Capital Formation	115.86	115.97	116.32	115.10	115.34
Exports (X)	121.75	127.43	124.24	119.68	123.17
Imports (M)	118.78	124.03	121.22	117.68	120.81

Source: Instituto Nacional de Estadística.

Notes: Base indices 2015=100. Seasonally and calendar adjusted data.

4. Calculate changes between 2023Q4 and 2023Q3 for all concepts.
5. Comment on the changes. Link to previous variations and identify trends.
6. Explain which components contributed to the observed expansion.