Relationship between Unemployment and Inflation:

Final Report – 04/02/2024

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1. Did Belgium's 2013– 2022 average inflation rate fall below or exceed the EU27 median?

Average Inflation Rate (2013–2022) by Country
EU27 Median Inflation Shown as a Red Dashed Line

Belgium's average inflation exceeded the median of the 27 Europeans countries
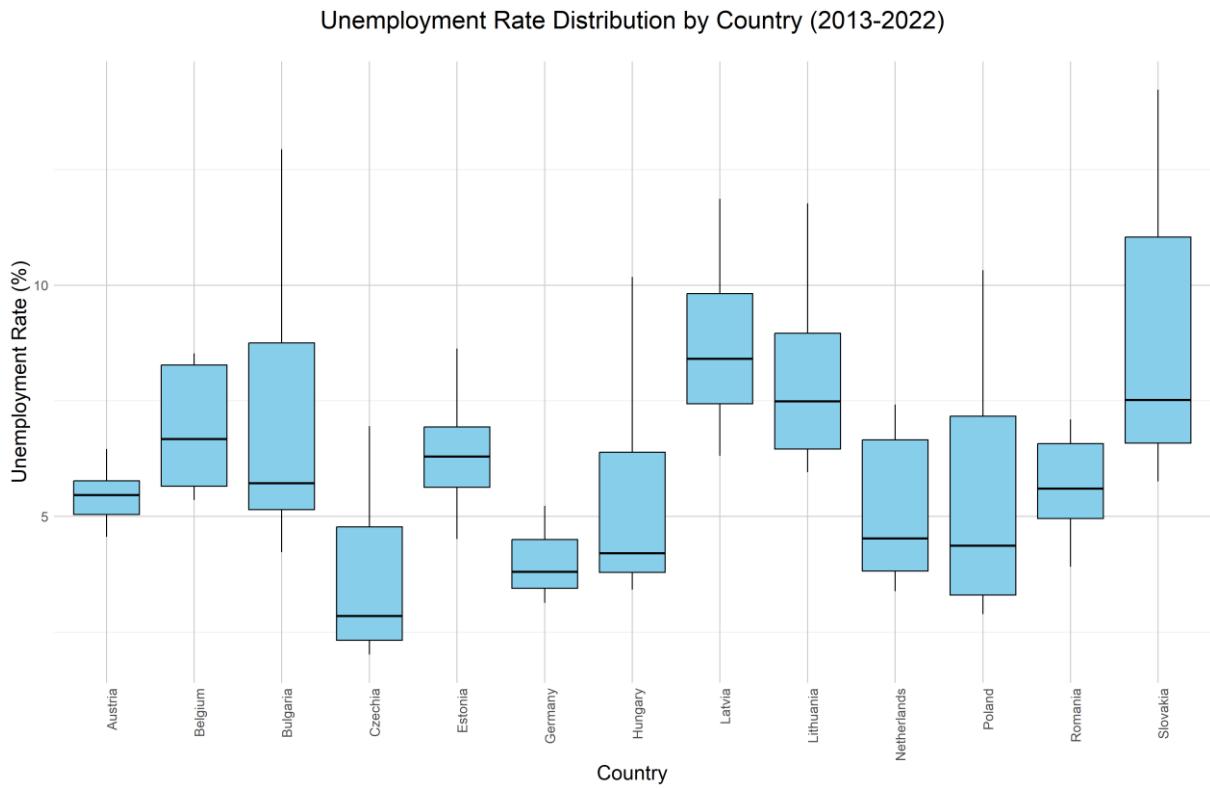
1.1. List of countries with an inflation average above the median

Country	inflation
Austria	Above
Belgium	Above
Bulgaria	Above
Czechia	Above
Estonia	Above
Germany	Above
Hungary	Above
Latvia	Above
Lithuania	Above
Netherlands	Above
Poland	Above
Romania	Above
Slovakia	Above
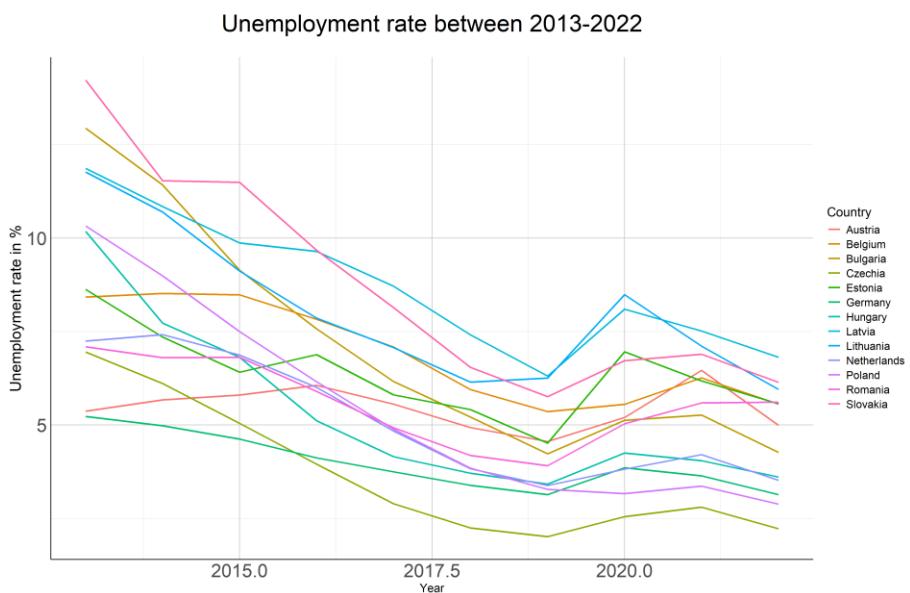
1.2. Average inflation and the median across all countries

Country	inflation	Median
Austria	2,370011489	
Belgium	2,238288805	
Bulgaria	2,684394122	
Croatia	1,730310341	
Cyprus	0,714026665	
Czechia	3,232436546	
Denmark	1,47443241	
Estonia	3,506847108	
Finland	1,51388046	
France	1,292487407	
Germany	1,818913284	
Greece	0,682591228	
Hungary	3,342168845	
Ireland	1,200994243	1,781336118
Italy	1,431844794	
Latvia	2,99873153	
Lithuania	3,551647566	
Luxembourg	1,781336118	
Malta	1,568827335	
Netherlands	2,406789253	
Poland	2,848222416	
Portugal	1,287801731	
Romania	3,418531971	
Slovakia	2,483031666	
Slovenia	1,688213863	
Spain	1,604603768	
Sweden	1,727559403	
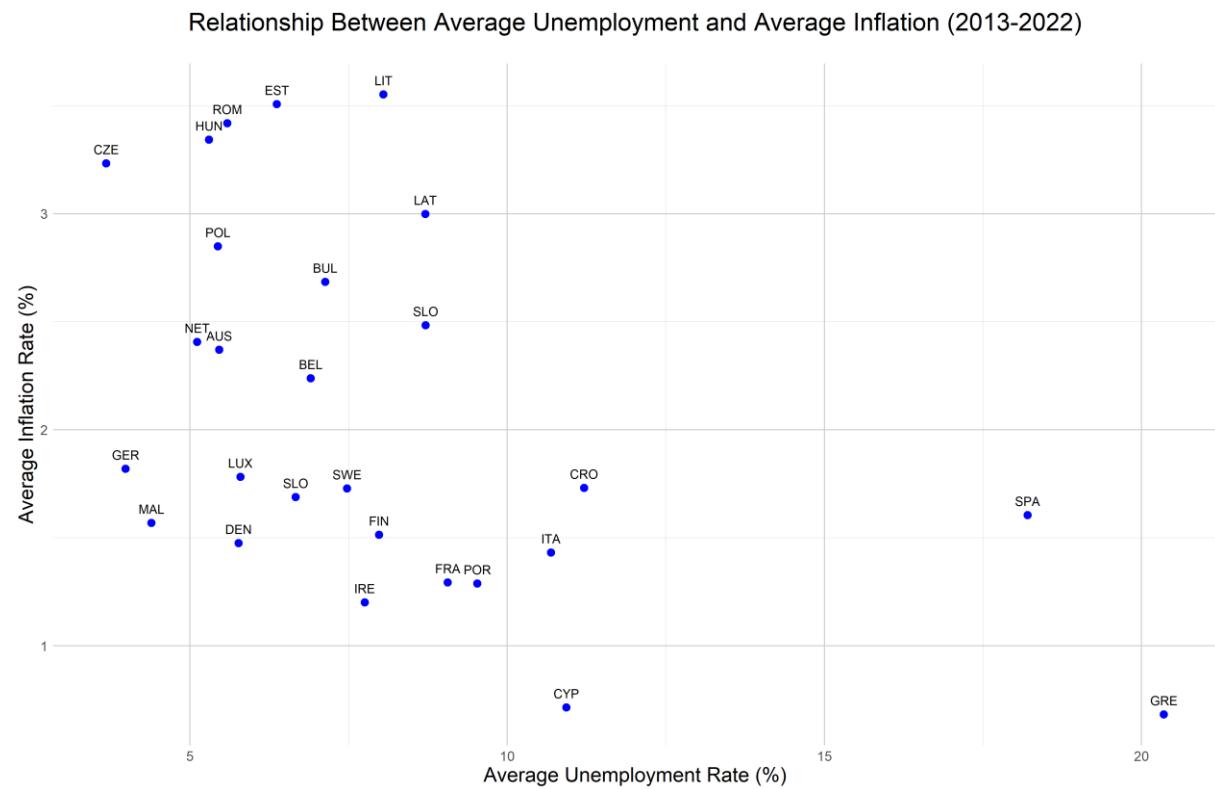
2. Unemployment distribution

Unemployment Rate Distribution by Country (2013-2022)

3. Unemployment rate between 2013-2022

Unemployment rate between 2013-2022

4. Relationship between Inflation and Unemployment

Relationship Between Average Unemployment and Average Inflation (2013-2022)
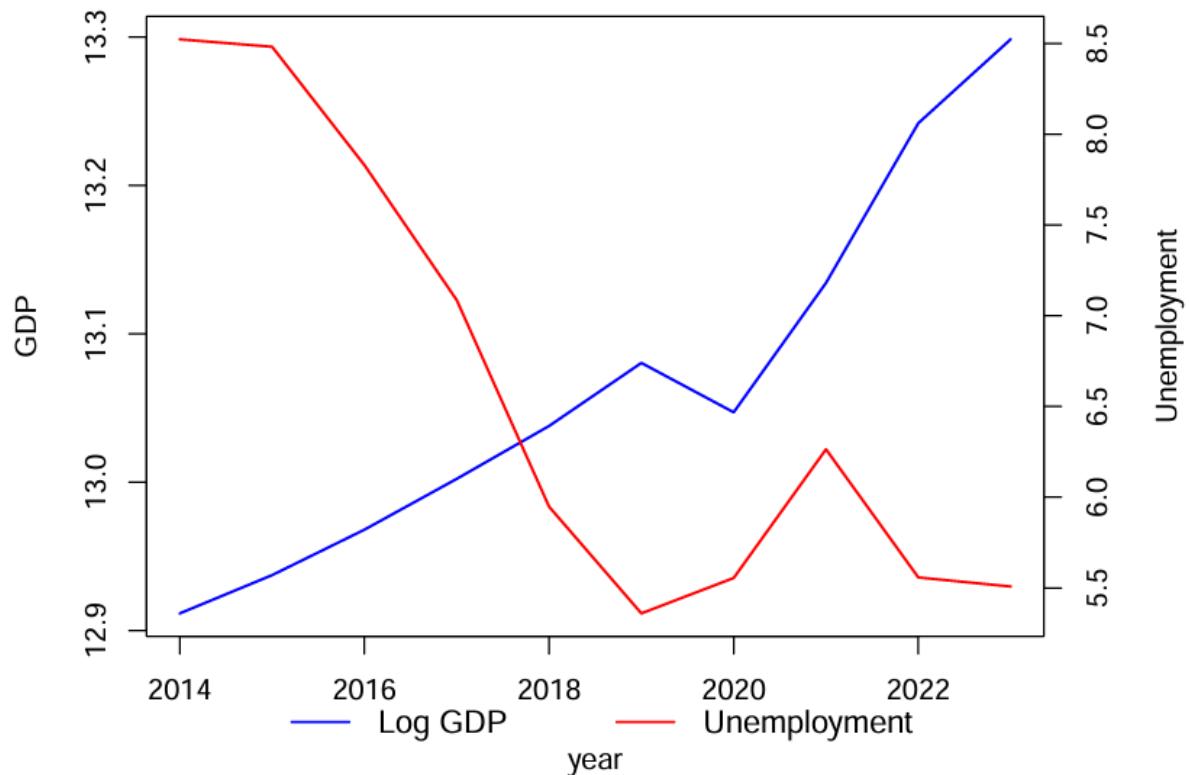
Comments:

This graph highlights a negative correlation between inflation and unemployment. When inflation rises, unemployment tends to decrease. And vice versa. As we can Spain (SPA) is well above the other countries. This can be a sign of other economic shocks or structural challenges that the countries are facing that drag inflation up while the unemployment rate is at a point where inflation shouldn't be that high.

5. The relationship between GDP and Unemployment.

We are only missing the data for 2024.

	MOYENNE		Unemployment			GDP		
year	Unemployment	GDP	Min	Max	Median	Min	Max	Median
2014	10,60%	439560,448	4,98%	26,71%	8,99%	8948,5	2985170,0	173186,7
2015	9,81%	455821,015	4,62%	24,98%	8,98%	10221,4	3085650,0	175362,9
2016	8,82%	468166,607	3,95%	23,51%	7,83%	10864,3	3196110,0	179145,9
2017	7,72%	487716,311	2,89%	21,41%	6,71%	12535,7	3331110,0	195509,1
2018	6,66%	504754,289	2,25%	19,18%	5,74%	13678,6	3431130,0	206201,2
2019	6,04%	523073,737	2,02%	17,05%	5,36%	14594,2	3534880,0	224767,4
2020	6,77%	502973,070	2,55%	15,90%	6,72%	14346,0	3449620,0	220310,6
2021	6,62%	547939,122	2,80%	14,78%	6,26%	16671,9	3676460,0	242260,4
2022	5,75%	597915,841	2,22%	12,92%	5,57%	18242,3	3953850,0	266124,0
2023	5,75%	636805,663	2,59%	12,14%	5,60%	20650,4	4185550,0	273320,0

Comments:

The relationship between GDP and unemployment is a negative correlation. When GDP is rising, the unemployment rate tends to decrease. Okun's Law is an empirical relationship between unemployment and GDP. Okun's law highlights a negative correlation between unemployment rate and GDP, which is what we observed in our sample after doing the analysis.