

WORKING PAPER

WHAT SHIFTS DID COVID-19 YEAR 2020 BRING TO THE LABOUR MARKET IN EUROPE?

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What shifts did covid-19 year 2020 bring to the labour market in Europe?*

By Stijn Baert ⁱ

Abstract

This article discusses the evolution of key labour market indicators in the EU-27 countries between 2019 and 2020, i.e. between the year before the covid-19 crisis broke out and the year in which it impacted the economy heavily. Whereas earlier policy-oriented studies have dealt with the evolution of unemployment in 2020, often country by country, this article focuses on the evolution of unemployment as well as inactivity across European countries. Indeed, previous crises have typically lead not only to more unemployment but also to larger numbers of discouraged unemployed and thus more inactivity. It appears that the Southern European countries, in particular, recorded increases in inactivity, while the Baltic States experienced higher unemployment. In many other countries, unemployment and inactivity remained remarkably stable despite covid-19.

Keywords: unemployment, inactivity, employment, covid-19, iceberg decomposition, discouragement effect.

JEL codes: J64, J23, J24, J68.

*The data in this article were also valorised in the context of a Dutch policy article with a greater focus on Belgium and the Netherlands.

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1. Introduction

The year 2020 will undoubtedly be remembered by many as the 'covid-19 year'. After all, the impact of this pandemic on the lives of citizens was enormous (e.g. Lippens et al., in print), as was the economic shock. Rarely has the economy of the OECD countries contracted as much in a single year as it did in 2020. In the EU-27, the average drop in real GDP was 6.1% (source: Eurostat, 'Real GDP growth rate - volume').

Based on previous crises, we know that the labour market typically 'follows' GDP patterns. That is, a decline in the demand for goods and services within the economy translates into a decline in demand for labour (Kamar et al., 2019; Kapsos, 2005; Pařová & Vejačka, 2018). However, the latter decline is often delayed, as firms initially try to avoid restructuring and layoffs through so-called 'labour hoarding', whereby they keep their workforces at the same levels despite reduced demand for their goods and services, although they often reduce the hours worked and/or output per worker. It is therefore uncertain as to whether the economic calamity brought about by the covid-19 crisis translated into labour market havoc in 2020.

The comparison of the performances of labour markets over time and between countries is often based on unemployment rates. Thus far, the short-term effects of the covid-19 crisis have been mostly traced through the evolution of this indicator over the months of 2020 and early 2021 (OECD, 2021). However, as argued in Baert (2021), doing so may yield a biased comparison. Indeed, the unemployment rate, by definition, indicates the percentage of the active population (i.e. those who are employed and those who are seeking work) without jobs at a given moment. In other words, those who neither have a job nor are looking for one (the 'inactive') do not appear in the numerator or the denominator of this calculation. As a result, two countries may have the same unemployment rate but different employment rates (i.e. the percentage of employed persons out of the total population within certain age categories). In Baert (2021), we compare this situation to an iceberg: for decades, policy has focussed on the visible labour reserve represented by the unemployed but forgotten about the latent reserve of inactive people below the water line. The size of this group of inactive people, however, has major implications for public financing, as inactive people typically do not contribute to it but are often

supported by it. In many OECD countries, the number of inactive people far outweighs the number of unemployed.¹

Moreover, during a crisis period, unemployment and inactivity follow different dynamics in terms of their development. As indicated earlier, rising unemployment is the direct consequence of a fall in the demand for labour (characterised by more dismissals and fewer vacancies). In contrast, rising inactivity during a crisis is linked to discouragement: citizens give up looking for a job because they suspect that the chances of finding one are slim. A limited increase in unemployment during the first months of the covid-19 crisis could therefore be hiding the fact that a segment of the unemployed simply gave up looking for a job, i.e. some disappeared from the unemployment figures but became part of the inactivity figures.

In this article we therefore examine how EU countries saw their labour markets evolve in 2020 according to the two measures substantiated in Baert (2021): the percentage of unemployed among the entire group of 25- to 64-year-olds ('unemployment-to-population ratio')² and the corresponding percentage of inactive persons ('inactivity-to-population ratio'). We will zoom in on how the rankings of European countries for these two indicators changed between 2019 and 2020.

2. Data

The analyses in this article are based on the figures that Eurostat publishes each year regarding: (i) the percentage of employed persons within various age categories (variable 'lfsa_ergaed'), (ii) the percentage of inactive persons within various age categories (variable 'lfsa_ipga'), and (iii) the main reasons provided by these inactive persons for their inactivity. Regarding (iii), more specifically, we

¹ We also explain this logic and the various indicators for measuring the health of a labour in an animated video that can be viewed at www.stijnbaert.eu or directly via [this YouTube-link](#).

² Whereas, the unemployment rate divides the number of unemployed by the number of working and unemployed people (within certain age groups), the unemployment-to-population ratio is calculate by dividing the number of unemployed by the number of people working, unemployed and inactive.

retained the percentage of individuals with the 'belief that jobs are not available'. For each of these statistics, the 25- to 64-year-old age group was examined, by analogy with Baert (2021).³ These data were released by Eurostat on 21 April 2021. Appendix Table A.1 summarises these source data.

3. Results

3.1 The iceberg in 2020

Figure 1 shows the percentage of unemployed and inactive people in covid-19 year 2020 according to the so-called 'iceberg decomposition', i.e. the entire population aged between 25 and 64 is divided into three groups: the employed, unemployed and inactive people. The resulting percentages correspond to the employment-to-population ratio (or employment rate), unemployment-to-population ratio and inactivity-to-population ratio, respectively (Baert, 2021). The unemployment-to-population ratio is calculated on the basis of the aforementioned source data by subtracting the percentages of employed and inactive people from 100%. For the sake of clarity: those who were temporarily unemployed due to covid-19 were counted as employed in the Eurostat measures, as they were only temporarily absent from work (i.e. their contracts continue to run).

< Figure 1 about here >

At the EU-27 level, the proportion of inactive persons (i.e. 20.3%) is more than four times higher than the proportion of unemployed (i.e. 5.0%). The lowest percentage of unemployed is 1.9% (in the Czech Republic) and the highest is 11.8% (in Greece). The percentage of inactive persons varies between 10.8% (Sweden) and 28.6% (Italy).

³ Baert (2021) argues: 'This choice is mainly motivated by the fact that we want to make comparisons across countries and not introduce biases due to differences in average graduation age across countries'.

3.2 Evolution of the iceberg between 2019 and 2020

Of course, what is of interest is the evolution of these fractions between 2019 and 2020. We study this evolution through Table 1 and Table 2, which show the rankings (from lowest to highest fractions) for the EU-27 countries by the unemployment-to-population ratio and inactivity-to-population ratio, respectively, as well as the evolution of these rankings between 2019 and 2020.

< Table 1 about here >

< Table 2 about here >

In line with the previously mentioned reports of rather limited increases in unemployment during 2020, Table 1 shows an increase in unemployment in the EU-27 of only 0.2 percentage point (from 4.8% to 5.0%), on average. Within the Eurozone, the average increase is limited to 0.1 percentage point.

This average obviously hides differences between the EU countries. Most strikingly, in the Baltic States, the increase is more than 1.5 percentage points and therefore substantial: Estonia (1.7 percentage points), Latvia (1.8 percentage points) and Lithuania (1.7 percentage points). Besides the Baltic States, only Romania (1.0 percentage point) and Sweden (1.2 percentage points) exhibit a growth in their unemployment-to-population ratios of 1 percentage point or more. These countries also drop down in the ranking of countries according to this ratio. For instance, Estonia drops seven places (from position 11 to position 18). Sweden, often seen as a 'model country' in terms of socio-economic policy, even ends up in the worst quartile in 2020 (unemployment-to-population ratio of 5.9% in 2020; ranking: 23 out of 27). Countries moving up in the ranking include Belgium (from 14th to 10th position, with barely 0.1 percentage point more unemployed), France (from 24th to 20th position, with even a small decrease in the percentage of unemployed) and Slovenia (from 12th to 8th position).

Although an increase of a few tenths of a percentage point in the unemployment-to-population ratio typically implies many thousands of additional unemployed, these changes can be considered limited. By comparison, between 2009 and 2010, when the labour market digested the Financial Crisis of 2007–2008, the unemployment-to-population ratio increased by 1.3 percentage points at the EU-27 level.

Thus, the question becomes: What happened to the percentage of inactive people in 2020? Did it also remain rather constant? Or did some of the unemployed become discouraged, partially masking the shift from employment to unemployment with a parallel shift from unemployment to inactivity?

Overall, the increase in the percentage of inactive persons at the EU-27 level also remained rather limited. In 2019, 20.0% of the population was considered inactive; in 2020, as indicated earlier, that percentage rose to 20.3%. In other words, there was an increase of 0.3 percentage point. This increase does imply, as Appendix Table A.1 indicates, that the downward movement in the percentage of the population considered inactive since 2017 has been reversed. That is, in 2017 (20.7%), 2018 (20.3%) and 2019 (20.0%), inactivity declined, but in 2020, it increased, albeit slightly. However, in absolute numbers, a 0.3 percentage point increase in inactive persons in the 25- to 64-year-old group is of course substantial: an increase of about 720,000 inactive persons.⁴ Within the Eurozone, the average increase in inactivity-to-population ratio is somewhat higher: 0.6 percentage point (from 19.8% to 20.4%).

Again, however, we see important differences between countries. Inactivity rose more sharply in Southern Europe: Spain (1.1 percentage points), Italy (1.5 percentage points), Portugal (0.6 percentage point) and Greece (1.0 percentage point). This pattern is not simply the continuation of an evolution that was already underway: Appendix Table A.1 shows that inactivity in Italy, Portugal and Greece had decreased in recent years – often by more than the European average – while, in Spain, it remained very stable between 2017 and 2019.

Bulgaria (0.8 percentage point) and Ireland (0.8 percentage point) are also close to 1.0 percentage point increases in inactive persons. Interestingly, the Baltic States, with, as mentioned previously, the largest increases in their unemployment-to-population ratios, all did favourably in terms of the percentage of inactive persons, which even fell by 1.4 percentage points in Latvia. The improvements in inactivity in these and some other countries could have a demographic explanation (e.g. a large

⁴ According to Eurostat ('Population by age group'), the percentage of 25- to 64-year-olds in the total population is 53.8%. For a total population of 447,319,916 EU-27 citizens, including 240,658,115 citizens aged 25-64, there are 721,974 extra inactive people aged between 25 and 64.

group of youngsters entering the labour market replacing a smaller group leaving it due to retirement).

Figure 2 summarises the movements in unemployment and inactivity of the 12 largest EU countries, i.e. those countries with populations over 12 million (source: Eurostat, 'Population on 1 January'). A number of country clusters can be distinguished according to their evolution. First, consider Belgium and the Netherlands: here, unemployment and inactivity remained largely at the same level between 2019 and 2020. Second, there are countries for which unemployment rose but inactivity remained at the same (low) level: the Czech Republic, Germany and Sweden. In the former two countries, the unemployment-to-population ratio rose slightly, while, as discussed earlier, there was a more substantial increase in unemployment in the latter country. Third, in Spain and Portugal, both unemployment and inactivity rose, albeit more sharply in Spain than in Portugal. Fourth, two other southern European countries also saw an increase in inactivity, but it was accompanied by a decrease in unemployment: Greece and Italy. The same is true, albeit to a lesser extent, for France. In Romania, the opposite happened: higher unemployment but (slightly) lower inactivity. Finally, Poland is a 'unique case' too – but a favourable one – inactivity and unemployment slightly decreased.

< Figure 2 about here >

3.3 Importance of the discouraged unemployed among inactive persons

Basically, in terms of the fraction of inactive people, the covid-19 crisis did not hit most countries substantially in 2020. This is a first indication that the discouragement among the unemployed has not been that bad. A second indication is provided in Figure 3. This figure shows the percentages of individuals 25–64 years old that were inactive due to the belief that there would be no jobs, for the 12 largest EU countries in 2019 and 2020.

< Figure 3 about here >

Figure 3 makes it clear that the fluctuations in the percentages of discouraged people are very limited. The largest increase is found in Greece, which went from 0.6% to 1.0%. In the other Southern European countries, this percentage rose with

0.1 or 0.2 percentage point. On the level of the entire EU-27 (Appendix Table A.1), this percentage remained stable at 1.1%.

4. Conclusion and discussion

The figures in this article indicate that, in terms of unemployment-to-population and inactivity-to-population ratios, most European countries did not receive a huge blow from covid-19 in 2020. Still, in absolute numbers of citizens, the increase of 0.3 percentage point in the percentage of inactive persons implies an increase of about 720,000 persons. Moreover, there are important differences between countries: inactivity rose more sharply in Southern Europe, while unemployment rose more sharply in the Baltic States. In general, the striking thing is that countries often resemble their neighbours in terms of their evolution.

Does the small overall effect that covid-19 year 2020 had on our population according to employment status mean that the ominous reports that resounded at the start of covid-19 should be classified as misconceptions? Not necessarily. First of all, as indicated earlier, the labour market almost always follows the pattern in economic growth at some distance. During the Financial Crisis of 2007–2008, unemployment peaked about a year after the deepest trough of the crisis in the real economy. If the downturn in economic activity in the EU-27 continues, it will not be possible to sustain the current level of labour hoarding, especially if support measures are removed. Much also depends on how the European countries deal with their accumulated debt: hard savings can be expected to deal an extra blow to the labour market, while well-considered investments could, through their multiplier effect, provide stimuli for the labour market (Baert et al., 2020).

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Appendix

< Appendix Table A.1 about here >

Table 1. Evolution of the unemployment-to-population ratio (among 25- to 64-year-olds)

	2020		2019		Evolution	
	Percentage	Ranking	Percentage	Ranking	Percentage	Ranking
EU-27	5.0		4.8		+0.2	
Eurozone	5.6		5.5		+0.1	
Austria	3.8	11	3.2	8	+0.6	▼3
Belgium	3.7	10	3.6	14	+0.1	▲4
Bulgaria	3.8	12	3.3	10	+0.5	▼2
Croatia	4.7	15	4.3	17	+0.4	▲2
Cyprus	5.7	21	5.3	23	+0.4	▲2
Czech Republic	1.9	1	1.6	1	+0.3	status quo
Denmark	4.0	13	3.5	13	+0.5	status quo
Estonia	5.1	18	3.4	11	+1.7	▼7
Finland	5.2	19	4.6	18	+0.6	▼1
France	5.4	20	5.8	24	-0.4	▲4
Germany	2.9	5	2.4	7	+0.5	▲2
Greece	11.8	27	12.7	27	-0.9	status quo
Hungary	2.9	6	2.3	5	+0.6	▼1
Ireland	3.6	9	3.2	9	+0.4	status quo
Italy	5.8	22	6.5	25	-0.7	▲3
Latvia	6.9	25	5.1	21	+1.8	▼4
Lithuania	6.8	24	5.1	22	+1.7	▼2
Luxembourg	4.4	14	3.7	15	+0.7	▲1
Malta	2.9	4	2.3	3	+0.6	▼1
Netherlands	2.4	3	2.3	4	+0.1	▲1
Poland	2.0	2	2.2	2	-0.2	status quo
Portugal	5.0	17	4.8	20	+0.2	▲3
Romania	3.3	7	2.3	6	+1.0	▼1
Slovakia	4.8	16	4.2	16	+0.6	status quo
Slovenia	3.6	8	3.4	12	+0.2	▲4
Spain	11.2	26	10.4	26	+0.8	status quo
Sweden	5.9	23	4.7	19	+1.2	▼4

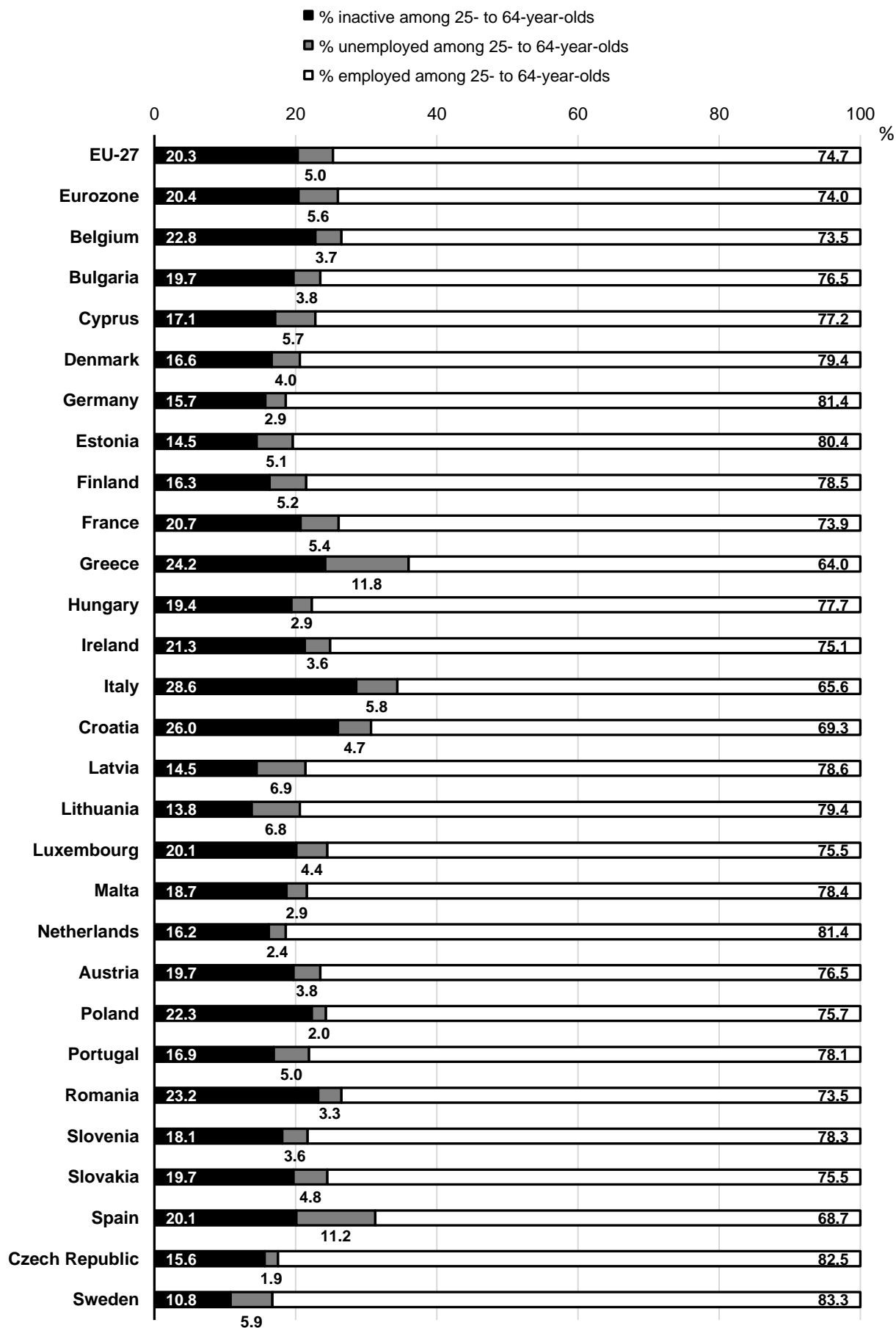
Notes. Source: Own calculations (see Section 1) based on Eurostat data (see Appendix Table A.1).

Table 2. Evolution of the inactivity-to-population ratio (among 25- to 64-year-olds)

	2020		2019		Evolution	
	Percentage	Ranking	Percentage	Ranking	Percentage point evolution	Ranking
EU-27	20.3		20.0		+0.3	
Eurozone	20.4		19.8		+0.6	
Austria	19.7	16	19.1	15	+0.6	▼1
Belgium	22.8	23	22.8	22	+0.0	▼1
Bulgaria	19.7	15	18.9	13	+0.8	▼2
Croatia	26.0	26	26.7	26	-0.7	status quo
Cyprus	17.1	11	16.7	11	+0.4	status quo
Czech Republic	15.6	5	15.6	4	+0.0	▼1
Denmark	16.6	9	16.6	10	+0.0	▲1
Estonia	14.5	3	15.2	3	-0.7	status quo
Finland	16.3	8	16.5	9	-0.2	▲1
France	20.7	20	20.3	18	+0.4	▼2
Germany	15.7	6	15.6	5	+0.1	▼1
Greece	24.2	25	23.2	23	+1.0	▼2
Hungary	19.4	14	19.7	17	-0.3	▲3
Ireland	21.3	21	20.5	20	+0.8	▼1
Italy	28.6	27	27.1	27	+1.5	status quo
Latvia	14.5	4	15.9	6	-1.4	▲2
Lithuania	13.8	2	14.3	2	-0.5	status quo
Luxembourg	20.1	19	20.6	21	-0.5	▲2
Malta	18.7	13	20.3	19	-1.6	▲6
Netherlands	16.2	7	16.5	8	-0.3	▲1
Poland	22.3	22	23.2	24	-0.9	▲2
Portugal	16.9	10	16.3	7	+0.6	▼3
Romania	23.2	24	23.9	25	-0.7	▲1
Slovakia	19.7	17	19.6	16	+0.1	▼1
Slovenia	18.1	12	18.2	12	-0.1	status quo
Spain	20.1	18	19.0	14	+1.1	▼4
Sweden	10.8	1	10.9	1	-0.1	status quo

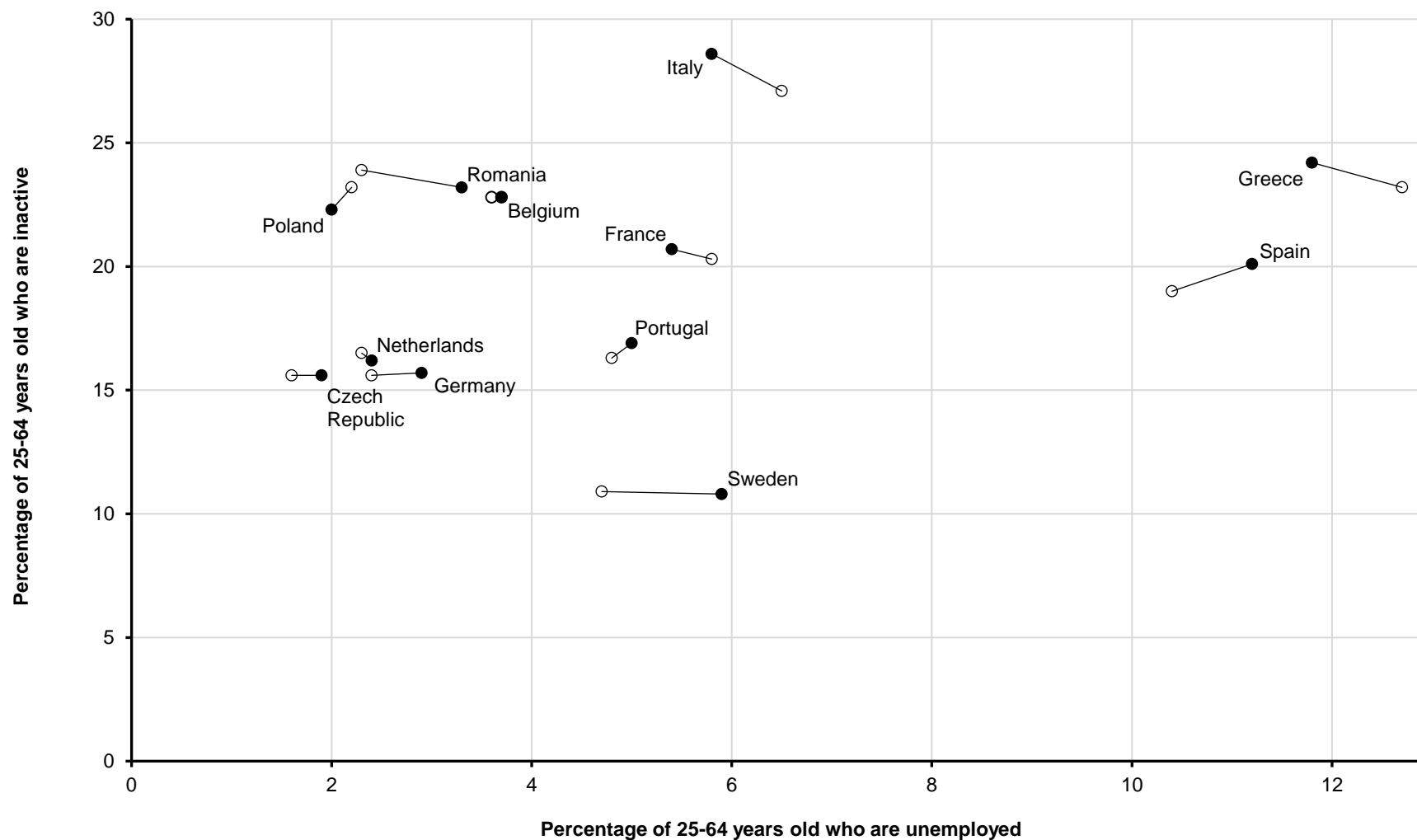
Notes. Source: Own calculations (see Section 1) based on Eurostat data (see Appendix Table A.1).

Figure 1. Iceberg decomposition for 2020



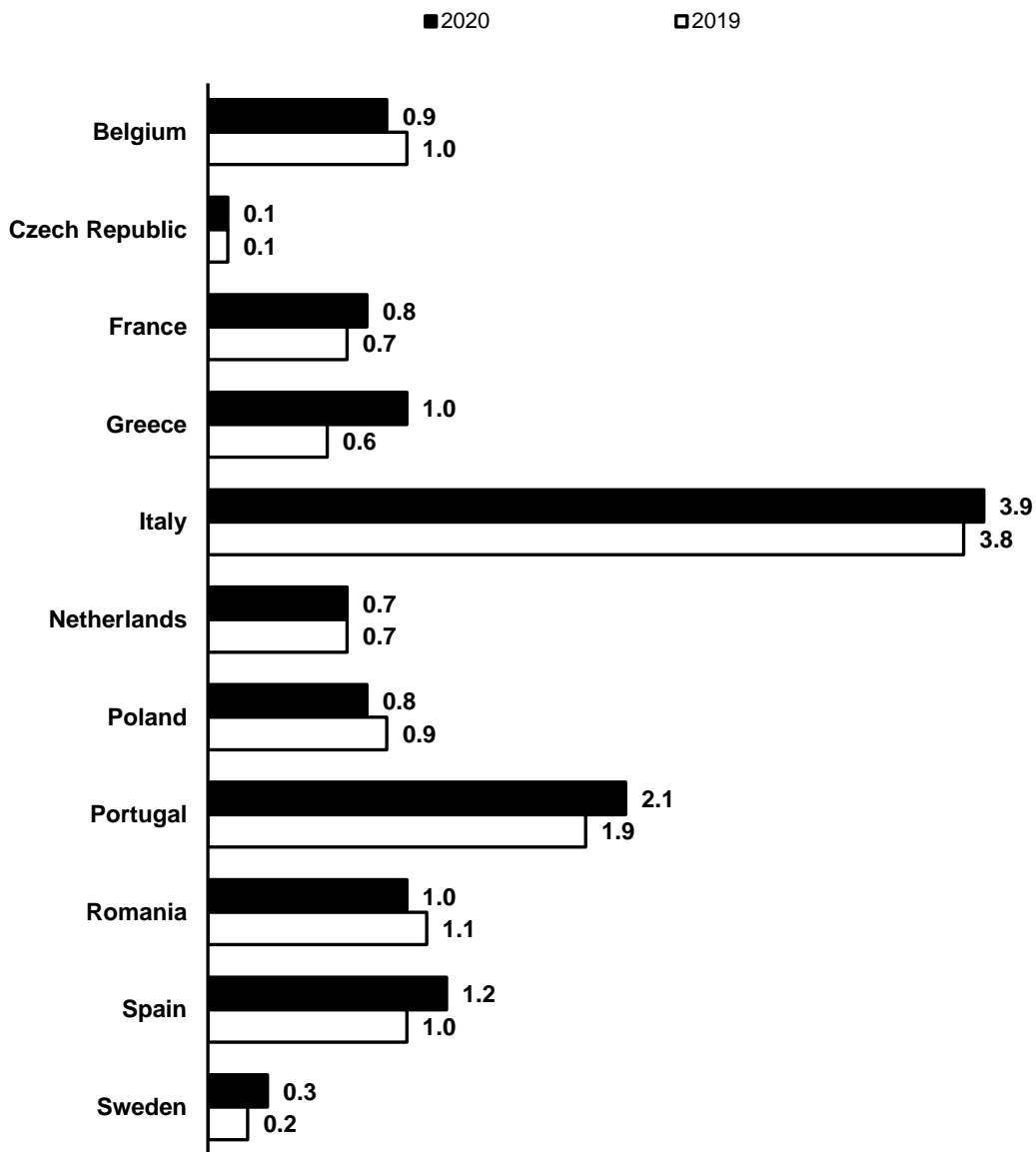
Notes. Source: Own calculations (see Section 1) based on Eurostat data (see Appendix Table A.1).

Figure 2. Evolution of the unemployment-to-population and inactivity-to-population ratios (among 25- to 64-year-olds) in the 12 largest EU countries



Notes. Source: Own calculations (see Section 1) based on Eurostat data (see Appendix Table A.1). Black dots represent positions in 2020, open circles represent positions in 2019.

Figure 3. Changes in the percentage of 25- to 64-year-old inactive persons with as a main reason the belief that jobs are not available for the 12 largest EU countries



Source: See Appendix Table A.1. Germany is not included because its percentage for 2020 was not yet available on 21 April 2021.

Appendix Table A.1. Source data

	Employment-to-population ratio among 25- to 64-year-olds				Inactivity-to-population ratio among 25- to 64-year-olds				Percentage of inactive 25- to 64-year-old persons with as a main reason for their inactivity: 'belief that jobs are not available'			
	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020
EU-27	73.5	74.4	75.2	74.7	20.7	20.3	20.0	20.3	1.4	1.3	1.1	1.1
Eurozone	73.0	74.0	74.7	74.0	20.4	20.1	19.8	20.4	1.5	1.3	1.2	1.2
Austria	76.4	77.2	77.7	76.5	19.6	19.3	19.1	19.7	0.1	0.1	0.1	0.2
Belgium	71.9	73.0	73.6	73.5	23.4	23.0	22.8	22.8	1.3	1.1	1.0	0.9
Bulgaria	74.1	75.3	77.8	76.5	21.3	20.8	18.9	19.7	2.6	1.9	1.5	1.2
Croatia	65.7	67.8	69.0	69.3	27.2	27.0	26.7	26.0	2.4	2.4	1.6	1.0
Cyprus	73.4	76.2	78.0	77.2	18.4	17.7	16.7	17.1	1.0	0.8	0.5	0.5
Czech Republic	81.2	82.5	82.8	82.5	16.7	15.8	15.6	15.6	0.1	0.1	0.1	0.1
Denmark	78.3	79.1	79.9	79.4	17.8	17.3	16.6	16.6	0.1	0.1	0.1	0.1
Estonia	80.1	80.5	81.4	80.4	15.4	15.4	15.2	14.5	0.8	0.7	0.6	0.7
Finland	75.9	78.0	78.9	78.5	18.2	16.8	16.5	16.3	1.0	0.8	0.7	1.3
France	72.9	73.5	73.9	73.9	20.6	20.3	20.3	20.7	0.9	0.7	0.7	0.8
Germany	80.6	81.3	82.0	81.4	16.4	16.0	15.6	15.7	0.4	0.4	0.3	-
Greece	60.6	62.3	64.1	64.0	24.0	23.7	23.2	24.2	0.7	0.7	0.6	1.0
Hungary	75.8	77.0	78.0	77.7	21.3	20.4	19.7	19.4	1.0	0.9	0.9	1.2
Ireland	74.0	75.3	76.3	75.1	21.4	20.9	20.5	21.3	0.6	0.6	0.5	0.8
Italy	65.3	65.8	66.4	65.6	27.5	27.3	27.1	28.6	4.5	4.0	3.8	3.9
Latvia	76.4	78.2	79.0	78.6	16.7	15.7	15.9	14.5	1.3	1.0	0.9	1.1
Lithuania	78.8	80.4	80.6	79.4	15.4	14.6	14.3	13.8	0.5	0.4	0.3	0.4
Luxembourg	74.7	74.9	75.7	75.5	21.6	21.3	20.6	20.1	0.1	0.3	0.2	0.2
Malta	73.7	76.1	77.4	78.4	23.9	21.6	20.3	18.7	-	0.2	-	-
Netherlands	79.0	80.3	81.2	81.4	17.6	17.1	16.5	16.2	0.9	0.8	0.7	0.7
Poland	72.9	74.0	74.6	75.7	23.9	23.5	23.2	22.3	1.4	1.1	0.9	0.8
Portugal	76.0	78.0	78.9	78.1	17.4	16.8	16.3	16.9	2.5	2.2	1.9	2.1
Romania	71.5	72.6	73.8	73.5	25.4	24.8	23.9	23.2	1.9	1.6	1.1	1.0
Slovakia	73.8	75.0	76.2	75.5	20.4	20.2	19.6	19.7	0.5	0.4	0.6	0.7
Slovenia	75.1	77.2	78.4	78.3	19.8	18.8	18.2	18.1	0.5	0.4	0.3	0.3
Spain	68.1	69.5	70.6	68.7	19.1	19.2	19.0	20.1	1.3	1.1	1.0	1.2
Sweden	84.1	84.7	84.4	83.3	11.2	10.9	10.9	10.8	0.2	0.2	0.2	0.3

Notes. Source: Eurostat (variables lfsa_ergaed, lfsa_ipga and lfsa_igar).