

## 4.3. Economic output and human losses in Greece during the pandemic

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#### 4.3.1. Introduction

The article looks into the evolution of the quarterly gross domestic product (GDP) figures and of the weekly mortality figures in Greece, in relation to other European states during the SARS-CoV-2 pandemic, from the first quarter of 2020 (2020<sup>Q1</sup>) to the first quarter of 2021 (2021<sup>Q1</sup>),<sup>1</sup> with the aim of describing what happened, and assessing the country's performance in terms of economic output and human losses.

To that end, the weekly mortality figures are converted to quarterly numbers so as to match the GDP time-series, and both sets of quarterly figures are: (a) Reshaped into indices through division with the respective (pre-pandemic) quarterly figures of 2019, (b) Compared

to the corresponding indices relating to the other EU member states (except for the Republic of Ireland for which the data are incomplete), and to six neighboring states for which Eurostat provides reliable, comparable data for three or more quarters. The neighboring states are Albania, Iceland, Norway, Serbia, Switzerland, and the United Kingdom.

The rationale is as follows: While monitoring and comparing country performances during the pandemic is often based on the number of infected people or on the number of confirmed virus-related deaths (e.g., NPHO;<sup>2</sup> Middelburg and Rosendaal, 2020; WHO, 2021), (a) the former may not be suitable for comparisons if the tests are not performed on representative samples or in similar manners etc., and (b) the latter may be misleading if deaths from other causes are underestimated or neglected due to the pressure placed on the health systems by the pandemic. As a result, it may be more appropriate to engage in comparisons based on the total number of deaths or in terms of the *additional deaths* that occur in relation to a pre-pandemic year (e.g., by ECDC, 2020; Karanikolos and McKee, 2020; Amoretti and Lalumera, 2021; Lau et al., 2021). Furthermore, it may be useful to take into consideration how economic activity unfolded as: (i) The govern-

**TABLE 4.3.1 The cumulative number of confirmed SARS-CoV-2 deaths in Greece at the end of 2020<sup>Q2</sup>, of 2020<sup>Q4</sup> and of 2021<sup>Q1</sup>**

	Deaths per 100,000 people	Rank based on the figures submitted by the various countries to the WHO
End of 2020 <sup>Q2</sup> : After the 1 <sup>st</sup> wave of the pandemic in Greece.	1.8	4 <sup>th</sup> lowest in the EU-27
End of 2020 <sup>Q4</sup> : Near the end of the 2 <sup>nd</sup> wave of the pandemic in Greece	43.7	8 <sup>th</sup> lowest in the EU-27
End of 2021 <sup>Q1</sup> : Amid the 3 <sup>rd</sup> wave of the pandemic in Greece	75.1	5 <sup>th</sup> lowest in the EU-27

Source: WHO (2020a, 2020b, 2021). Own calculations.

Note: WHO reports on the issue used to be occasional, but became weekly from October 2020 onwards.

1. All sets of data used in the Figures are collected and provided by Eurostat. The data are available up to 2021<sup>Q1</sup>.

2. The daily reports of the National Public Health Organization (<https://eody.gov.gr/en/npho>) are available via the Greek site: <<https://eody.gov.gr/epidimiologika-statistika-dedomena/ektheseis-covid-19>>.

ment stated that it took economic activity into account in its decision making,<sup>3</sup> (ii) It is generally accepted that by looking into both the GDP (the widely used proxy for economic performance) and mortality, one may look into prosperity and social choice issues in a more comprehensive way (e.g., Sen, 1998; Peltzman, 2009; Balmford et al., 2020).

In Greece, the authorities had very little time to evaluate the various approaches adopted in China and other Asian countries that dealt, in January 2020, with what is now known as *the first wave* of the pandemic. The novel virus was first confirmed on European soil on January 24<sup>th</sup> 2020, based on an infection in France; three days later in Germany; and by the end of the month in Italy, Spain, the United Kingdom and Sweden. As the virus spread within countries and across Europe, it reached Greece on February 26, 2020, and, eventually, Albania and Cyprus, on March 8<sup>th</sup> 2020 (the last two countries to report at least one SARS-CoV-2 infection, among the countries considered in the article). Without effective vaccines at their disposal, but alarmed by the disproportionately high death toll that devastated neighboring Italy, the Greek authorities initially ordered local lockdowns and, soon after, a national lockdown that restricted all but essential movement and economic activity. The equally alarmed community swiftly obliged. Consequently, the number of confirmed SARS-CoV-2-related deaths was initially kept at a relatively low level (Schellekens and Sourrouille, 2020; Table 4.3.1).

### 4.3.2. The numbers

It turns out that in 2020<sup>Q1</sup>, Greece's (i) quarterly GDP dropped to 98.6% of the respective 2019<sup>Q1</sup> figure, and (ii) the total number of deaths rose to 100.3% of the respective 2019<sup>Q1</sup> figure. By contrast, of the 31 European states considered: (a) Six states that were affected either earlier (Belgium, United Kingdom, Spain, Italy) or at the same time with Greece (Austria, Iceland), performed worse in both measures (output decreased and casualties increased compared to 2019<sup>Q1</sup>). (b) Six states that were affected either earlier (France, Germany) or at the same time with Greece (Portugal) or later (Albania, Slovenia, Slovakia) performed better in terms of human losses and worse in terms of GDP. (c) Three

states that were affected either earlier (Sweden) or at the same time with Greece (the Netherlands) or later (Cyprus) performed better in terms of GDP and worse in terms of human losses. (d) 16 states that were affected either earlier (Finland) or at the same time with Greece (Switzerland, Luxemburg, Denmark, Norway, Poland, the three Baltic states, Czechia, Romania, Croatia) or later (Malta, Bulgaria, Serbia, Hungary) performed better in both measures. See Figure 4.3.1(1).

In 2020<sup>Q2</sup>, as the nationwide restrictions remained in effect for the first month, and were eased afterwards, the quarterly GDP figure dropped to 84.4% of the respective 2019<sup>Q2</sup> figure, and the total number of deaths fell to 96.4% of the respective 2019<sup>Q2</sup> figure.<sup>4</sup> At the same time, of the 31 European states considered: (a) A cluster of five states (Italy, Spain, Portugal, France, the United Kingdom) performed worse in both measures. (b) Croatia performed better in terms of human losses and worse in terms of GDP. (c) 25 states performed better in terms of GDP and worse in terms of human losses. See Figure 4.3.1(2).

Early in 2020<sup>Q3</sup> the authorities turned their attention to salvaging the high tourist season and restoring operations in other sectors of the economy. To that end, they completed the gradual re-opening of economic activity (close to full normalization, except for large public events). Unsurprisingly, given the situation in other parts of the world, the number of visitors was lower compared to 2019<sup>Q3</sup>. However, to the extent (i) the restrictions were intended to slow the spread of the virus and mitigate the pandemic's effects on the healthcare systems (but not necessarily eliminate transmission of the virus), and (ii) the restrictions were eased and lifted in a manner that bred complacency in several segments of the population, the balancing act of opening up borders and activities in order to affect economic recovery etc., gave the virus a chance to continue to circulate. As a result, around mid-2020<sup>Q3</sup> the numbers of SARS-CoV-2 infected and of hospitalized people, as well as SARS-CoV-2 confirmed deaths began to rise. On the whole, the quarterly GDP dropped to 90.6% of the respective 2019<sup>Q3</sup> figure, and the total number of deaths rose to 104.8% of the respective 2019<sup>Q3</sup> figure. At the same time, of the 31 European states considered: (a) Two states (Croatia, Malta) performed worse in both measures. (b) A cluster of 16 central, northern and northeastern European

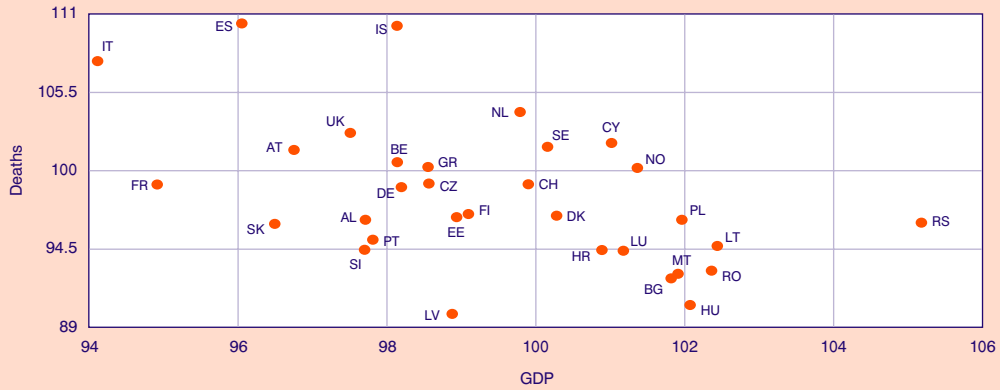
3. Indeed, it stated that by opening and closing economic activity where necessary, it aimed to both contain the economic downturn and manage the infection crisis. Moreover, in managing the situation it tried to avoid disrupting care for other diseases and potential causes of death.

4. In all likelihood, the increased hand hygiene, the wearing of masks, along with school and business closures and the gathering-traveling or other restrictions imposed (e.g., ECDC, 2020), affected a reduction in deaths from other causes (e.g., from other respiratory diseases, from fewer road accidents during lockdowns, etc.).

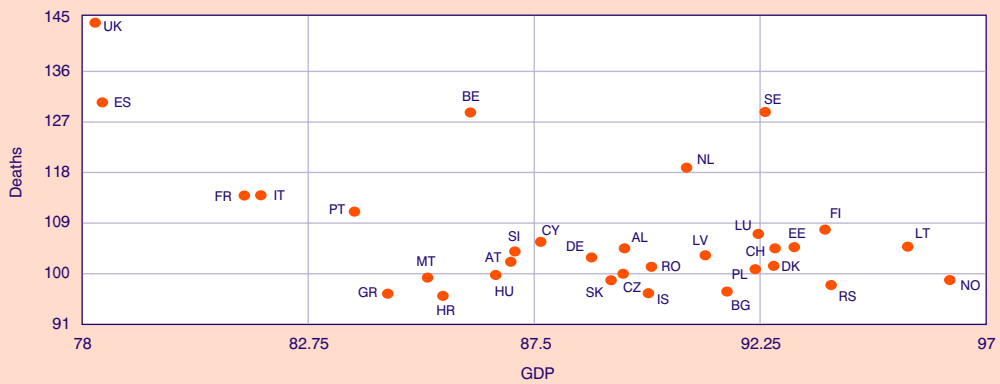
**FIGURES 4.3.1 (1-5)**

The relative position of Greece and of other European states in terms of real GDP (2015 prices) and the total number of deaths during the pandemic, compared to the same quarter in 2019

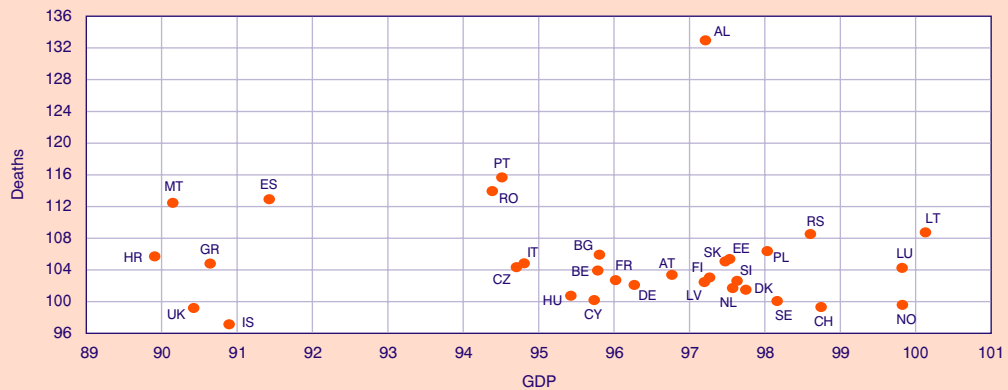
1. 2020<sup>Q1</sup> compared to 2019<sup>Q1</sup> (= 100), 32 states



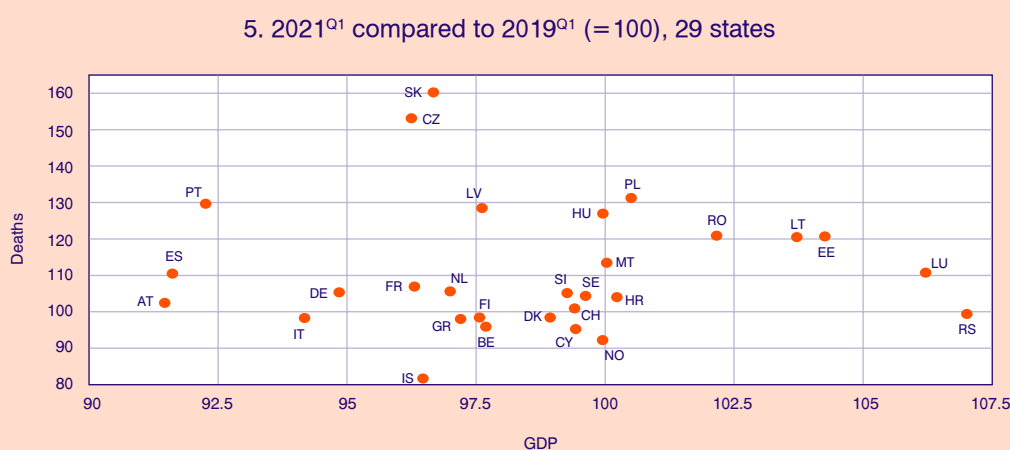
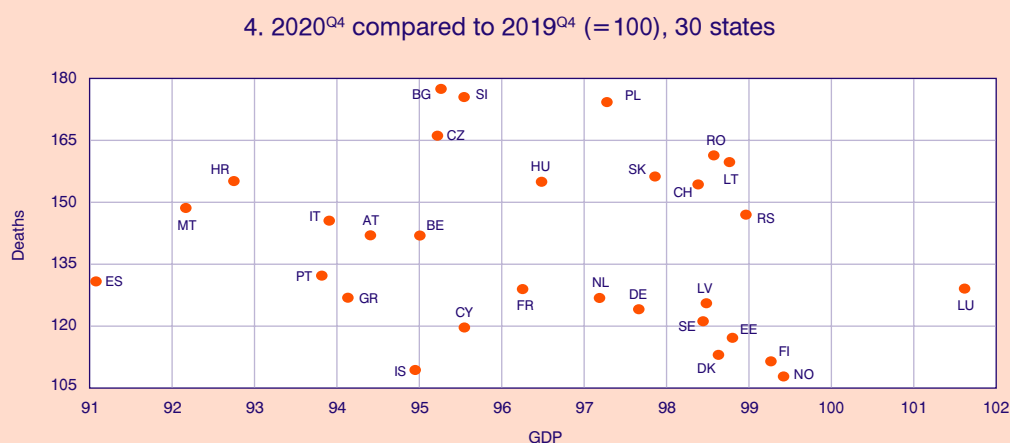
2. 2020<sup>Q2</sup> compared to 2019<sup>Q2</sup> (= 100), 32 states



3. 2020<sup>Q3</sup> compared to 2019<sup>Q3</sup> (= 100), 32 states



FIGURES 4.3.1 (1-5) (continued)



Source: Eurostat (the namq\_10\_GDP and demo\_r\_mwk\_ts datasets updated, respectively, on June 6<sup>th</sup> and June 10<sup>th</sup> 2021). Own calculations.

Key for country codes: Albania (AL), Austria (AT), Belgium (BE), Bulgaria (BG), Croatia (HR), Cyprus (CY), Czechia (CZ), Denmark (DK), Estonia (EE), Finland (FI), France (FR), Germany (DE), Greece (GR), Hungary (HU), Iceland (IS), Italy (IT), Latvia (LV), Lithuania (LT), Luxembourg (LU), Malta (MT), Netherlands (NL), Norway (NO), Poland (PL), Portugal (PT), Romania (RO), Serbia (RS), Slovakia (SK), Slovenia (SI), Spain (ES), Sweden (SE), Switzerland (CH), United Kingdom of Great Britain & Northern Ireland (UK).

states (France, Belgium, the Netherlands, Luxemburg, Germany, Switzerland, Austria, Hungary, Slovenia, Czechia, Denmark, Sweden, Norway, Finland, Latvia, Iceland) and Cyprus performed better in both measures. (c) 11 southern and eastern European states (Portugal, Spain, Italy, Albania, Serbia, Bulgaria, Romania, Slovakia, Poland, Lithuania, Estonia) performed better in terms of GDP and worse in terms of human losses. (d) The United Kingdom performed better in terms of human losses and worse in terms of GDP. See Figure 4.3.1(3).

In 2020<sup>Q4</sup>, as the numbers of confirmed infection cases and of related deaths continued to rise, Greece was pushed into the *second wave* of the pandemic. The government announced a new national lockdown in November that ran to the end of 2020<sup>Q4</sup> and beyond. The GDP dropped to 94.1% of the respective 2019<sup>Q4</sup> figure, and the total number of deaths rose to 117.9% of the respective 2019<sup>Q4</sup> figure. Of the thirty European states considered and for which data are available:<sup>5</sup> (a) Five southern EU states (Portugal, Spain, Italy, Malta, Croatia) performed worse in both measures. (b) A

5. The data regarding Albania and the United Kingdom are not available.

cluster of nine central, northern and northeastern European states (the Netherlands, Germany, Denmark, Sweden, Norway, Finland, Estonia, Latvia, Iceland) and Cyprus performed better in both measures. (c) 14 contiguous states (Belgium, Luxembourg, France, Switzerland, Austria, Slovenia, Serbia, Bulgaria, Romania, Hungary, Slovakia, Czechia, Poland, Lithuania) performed better in terms of GDP and worse in terms of human losses. See Figure 4.3.1(4).

Early in 2021<sup>Q1</sup>, the authorities commenced a mass vaccination campaign, and gradually lifted the lockdown restrictions. However, as the transmission of the virus had not been eliminated, and the virus continued to circulate, they had little choice but to re-introduce another lockdown in March in order to deal with the *third wave* of the pandemic. The lockdown ran to the end of the 2021<sup>Q1</sup> and beyond. (The restrictions were gradually lifted in May and June 2021; the third wave ran into June 2021.) During 2021<sup>Q1</sup> both the GDP and the total number of deaths fell to 97.2% and 97.3% of the respective 2019<sup>Q1</sup> figures. Of the 29 European states considered and for which data are available.<sup>6</sup> (a) Nine contiguous states (Portugal, Spain, France, Italy, Austria, Slovakia, Czechia, Germany, the Netherlands) performed worse in both measures. (b) Three states (Belgium, Norway, Cyprus) performed better in both measures. (c) 15 states (Denmark, Sweden, Finland, the three Baltic states, Poland, Hungary, Slovenia, Croatia, Serbia, Romania, Switzerland, Luxembourg, Malta) performed better in terms of GDP and worse in terms of human losses. (d) Iceland performed worse in terms of GDP and better in terms of human losses. See Figure 4.3.1(5).

### 4.3.3. Conclusions

As the SARS-CoV-2 pandemic spread across Europe in the course of seven weeks, it affected countries for unequal lengths of time – one for two months, another one for three weeks, Greece for about a month – in 2020<sup>Q1</sup>. We keep this in mind when comparing the 2020<sup>Q1</sup> output and mortality measures across countries.

In the four quarters that followed, Greece took both mild and more drastic steps to slow the spread of the virus and mitigate the pandemic's effects on the healthcare system. The restrictions disturbed economic and social life. As soon as the virus transmission went down, the restrictions were eased and lifted to allow for the

economy and society to recover. Yet, easing and lifting the restrictions and giving the virus a chance to circulate widely again may have affected new transmission waves. Currently (summer of 2021), with the *third wave* having run its course, the authorities are once again turning their attention to salvaging the high tourist season and restoring operations across the economy.

In reviewing the numbers, we note the country's rankings in 2020<sup>Q2</sup>: 2<sup>nd</sup> best in the mortality measure and 22<sup>nd</sup> in the output measure among the 26 EU member states. The performance suggests that the emphasis was placed squarely on the preservation of lives. The rankings of 2020<sup>Q3</sup> (15<sup>th</sup> place in the mortality measure and 24<sup>th</sup> place in the output measure among the 26 EU member states) are in line with the attempt to contain the decline in output (the decline was not avoidable). As activities opened up, mortality worsened. The two rankings of 2020<sup>Q4</sup> (9<sup>th</sup> place in the mortality measure and 21<sup>st</sup> place in the output measure among the 26 EU member states) and of 2021<sup>Q1</sup> (3<sup>rd</sup> place in terms of the mortality measure and 16<sup>th</sup> place in the output measure among 25 EU member states) suggest that subsequently the country's performance in terms of both measures improved: improved time and time again. So, based on the findings, and considering that other EU member states probably had similar aspirations, it appears that Greece's approach was not only consistent, but also effective.

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