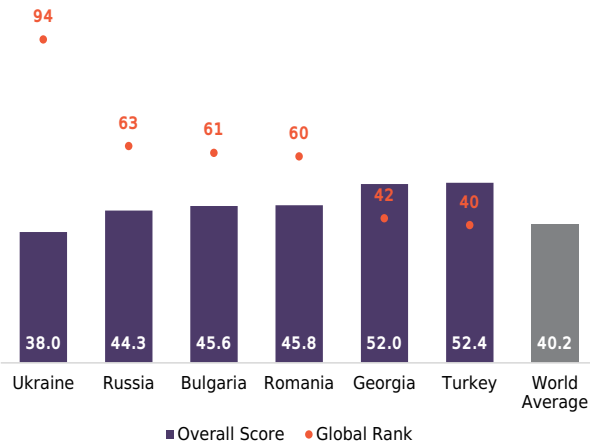


The spread of novel coronavirus COVID-19 has resulted in global pandemics, which was followed by an abrupt economic crisis, as economies stood still in order to overcome the threat to people's lives. In this bulletin, we overview the readiness to the healthcare and economic crisis, the evolution of the pandemic and characteristics of the lockdown for the six countries in the Black Sea Region.

### Preparedness for the crisis

Global Health Security Index 2019 and global rank in the index



First of all, it is of interest to observe, how prepared the countries were for the healthcare emergency like current pandemic. The Global Health Security (GHS) Index is a comprehensive assessment and a benchmarking tool of health security and related capabilities across 195 countries, and it can be used as a proxy of countries' readiness to the healthcare crisis. The average GHS index score for the whole world in 2019 was 40.2, which is bettered by each country in the region, except Ukraine, meaning that the Black Sea region overall can be thought to have an adequate health preparedness compared to the world. However, as the best-ranked country in the region (Turkey) is ranked 40th, the region is still far from advanced readiness to the healthcare crisis.

In a sub-pillar of the index called "Rapid response to and mitigation of the spread of an epidemic", which potentially indicates how successful the countries would be in tackling COVID-19, Turkey ranks the highest in the region, with a world rank of 30, followed by Bulgaria (ranked 39th) and Georgia (ranked 45th). Russia and Romania are ranked 50th and 55th respectively, while Ukraine is doing the worst in the region, ranked 97th in the world on this metric.

Based on EBRD monitor, which assessed both, healthcare and economic resilience of their members using a matrix tool, Bulgaria, Georgia, Russia and Ukraine have high number of physicians per 100K people, while, Romania and Turkey have "moderate" score on this metric. This implies that the number of healthcare workers are adequate for each country in the region.

	Public sector health expenditure as a share of GDP	Physicians per 100,000 people
Bulgaria	High	High
Georgia	Low	High
Romania	High	Moderate
Russia	Moderate	High
Turkey	High	Moderate
Ukraine	Moderate	High

Another measure which shows readiness of the healthcare sector is public sector health expenditure as a share of GDP, which measures how prioritised the healthcare sector is for the country. Georgia is one country which scores low on this metric, while Russia and Ukraine have moderate score and the rest of the countries in the region (Bulgaria, Romania, Turkey) score high.

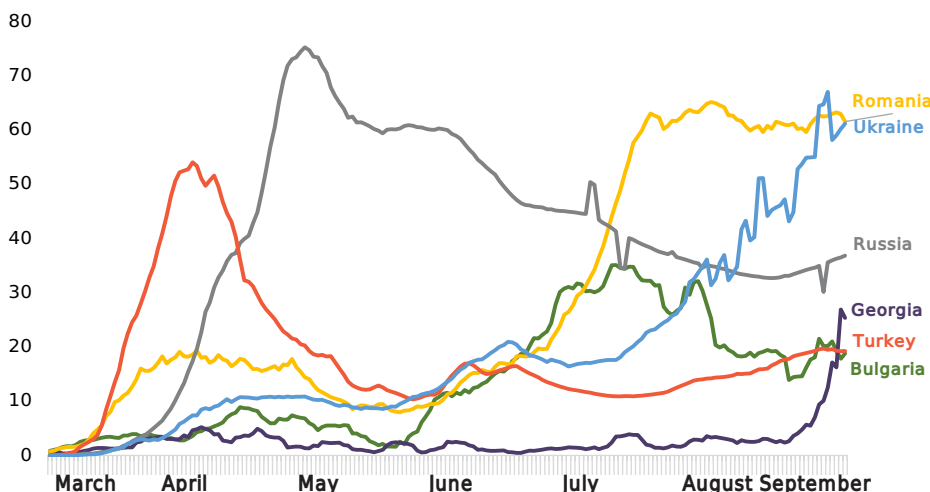
### Spread of the virus

It is of paramount importance to track the spread of the virus over time in the Black Sea region, as lockdown measures and economic impacts of the pandemic highly depend on the capacity of the healthcare system to take care of the infected at each point of time.

Instead of looking at cumulative cases, it is more interesting to analyze new cases per day, which shows the exact shape of the expansion of the virus, adjusted for millions of population, in order to make the figures comparable to each other, and presented as a 7-day rolling average, in order to smooth the curve. Please note that even though this analysis is useful for tracking the evolution of the virus, the number of confirmed cases are correlated with testing rates and are always less than the actual cases.

Turkey was a country which had the quickest emergence of the virus, however, in April, it managed to bend the curve and by the start of May, limited new cases per million to 20, stabilized at this number since then. Russia was the second country with a sharp rise in number of cases, and its peak of 75 new cases per million in May has been unmatched so far. Despite having managed to bend the curve quickly, the decline in number of cases has been slow. In July it stabilized at somewhat higher, around the 30-40 new case per day interval.

New cases of COVID-19 per million people, 7-day rolling average



Romania and Ukraine have managed to keep new cases relatively low until the start of July. Romanian figures jumped up to around 60 new cases per million people per day in July and has been stable at this high level since then, while in Ukraine growth was more gradual, just having peaked at around 65 in September.

Bulgaria was relatively successful in its efforts of tackling the spread of the virus, having a peak at 30 new cases per million in July, and managing to get down to around 20 cases per day in September.

Georgia has been extremely successful, keeping the new cases per day under 5 until the end of August, however, a sharp growth is observed since the start of September, but the figure is still relatively low at around 25 new cases per million per day.

