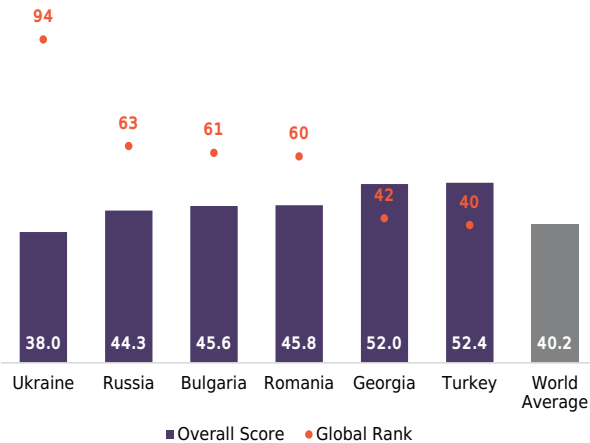


The spread of novel coronavirus COVID-19 has resulted in global pandemics, which was followed by an abrupt economic crisis, as economies stood still in order to overcome the threat to people's lives. In this bulletin, we overview the readiness to the healthcare and economic crisis, the evolution of the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

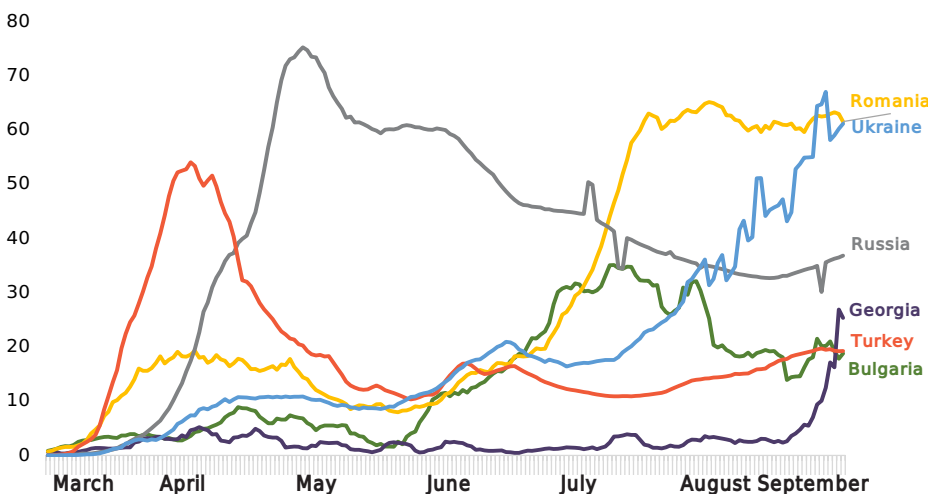
Spread of the virus

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.

Georgia, unsurprisingly, is also leading in terms of low total deaths (19) and low death rates when adjusted to the population in millions (5 cumulative deaths per million people).

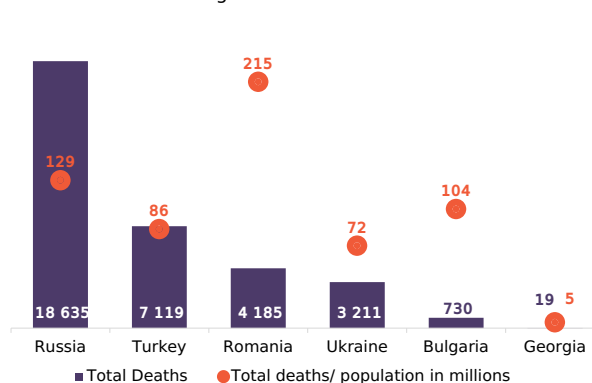
As of September 15th, Russia has the most registered deaths from COVID-19 (18 635), followed by Turkey (7 119).

However, it is Romania which has the highest death rate in the region, as about 215 people has died from COVID-19 per 1 mln people. Romania is followed by Russia (129 deaths per million).

Even though Bulgaria managed to keep the absolute number of deaths relatively low and is on the 5th place in this regard, it has 3rd highest death rate per million (104).

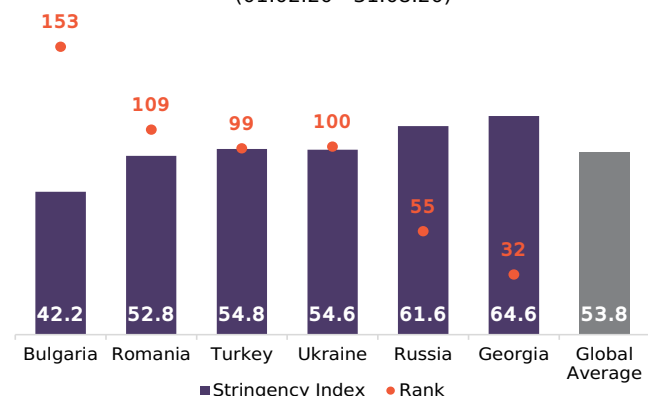
As for Ukraine, it is ranked 4th in terms of cumulative deaths (3 211) and 4th in terms of deaths per million (72).

Total deaths and total deaths per 1 million people in Black sea region as of 15.09.2020



Government response and mobility

Average Government Response Stringency Index score and respective rank of the country (01.02.20 - 31.08.20)



In order to keep the cases low, the governments had to act strictly and induce harsh lockdown measures for extended periods of time. Government Response Stringency Index assesses the overall strictness of the lockdown in 185 countries on a scale of 0-100 on a daily basis, by combining multiple criteria for strictness.

Average Stringency Index scores for Black Sea countries were calculated and analyzed for the period from February to August.

Georgia, which has the highest average score (64.6) in the region, and ranking 32nd in the world, managed to keep the cases low by turning to strict containment measures.

However, not turning to the most stringent measures does not always translate to elevated number of deaths: the case of Bulgaria is a good example, as it has the lowest Stringency Index score in the region (153rd in the world), but at the same time is second among Black Sea countries in terms of lowest deaths and active cases.

Since February, Google has been tracking mobility of people in different types of locations, and in order to see the impact of the COVID-19, has been comparing the figures to the baselines taken over the 5-week period in January-February for each day of the week. These mobility estimates can provide early insights into how huge the containment of economic activity was.

As the data does not account for seasonality, there is a huge growth in mobility in park areas for most countries, mostly attributable to improved weather compared to the baseline.

Turkey recorded the highest decline in the region in mobility of retail and recreation (-30.7%) and transit stations (-29.5%). Turkey also recorded the highest growth in residential mobility (7.9%), implying that time spent at home increased by the most.

Mobility in groceries and pharmacies did not rise on average over the period. In fact, apart from Russia and Ukraine, which registered a slight increase, the mobility saw a small decline.

Georgia had the highest decline in workplace mobility on average over the period (-29.4%), however, each of the six countries recorded a decline of more than 20%.

Google Mobility Report - Average percent changes from the baseline (15.02.20-11.09.20)

	Retail and recreation	Grocery and pharmacy	Parks	Transit stations	Workplaces	Residential
Bulgaria	-15.5%	-5.7%	36.8%	-21.0%	-22.9%	3.7%
Georgia	-23.7%	-8.4%	15.3%	-25.7%	-29.4%	6.4%
Romania	-24.8%	-9.0%	3.2%	-29.3%	-24.3%	5.3%
Russia	-12.3%	0.8%	33.2%	-14.6%	-22.8%	2.4%
Turkey	-30.7%	-3.4%	13.3%	-29.5%	-25.2%	7.9%
Ukraine	-12.7%	0.5%	36.1%	-15.0%	-21.8%	3.0%

The decisions about the measures taken by the government were made by keeping in mind a major trade-off between two priorities: people and the economy, or in other words, it was the question about saving more lives or more livelihoods. It is quite likely that gains in lives could be offset by the losses in the livelihoods, and vice versa. In the upcoming Black Sea bulletin, the economic implications of the spread of the virus and government responses to the virus, as well as the measures taken for the recovery from the economic crisis, will be explored in more depth for each country of the region.

Basic Economic Indicators, 2019

	Confirmed COVID-19 cases (16.09.20)	Nominal GDP (USD bin)	GDP Per capita, PPP (USD)	GDP Real Growth (%)	CPI (%)	Unemployment (%)
Bulgaria	18 216	67.9	24 561.2	3.4	3.1	4.2
Georgia	2 758	17.7	15 636.6	5.1	4.9	11.6
Romania	105 298	250.1	32 297.3	4.1	3.8	3.9
Russia	1 079 519	1 700	29 181.4	1.3	4.5	4.6
Turkey	296 391	754.4	27 875.2	0.9	15.2	13.7
Ukraine	162 660	153.8	13 341.2	3.2	7.9	8.2

Sources:

- Global Health Security Index 2019
- EBRD - Resilience to the Covid-19 shock in the EBRD regions
- Ourworldindata.org

- European Centre for Disease Prevention and Control (ECDC)
- Oxford COVID-19 Government Response Tracker

- Oxford COVID-19 Government Response Stringency Index
- Google Mobility Reports
- World Bank Open Data