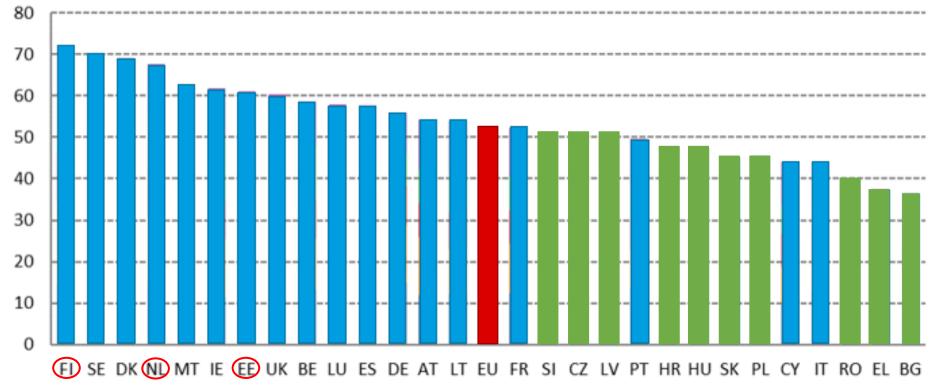


27TH DUBROVNIK ECONOMIC CONFERENCE JULY 17-19, 2021 "THE STATE IS BACK TO STAY?"

YES, IT MUST

EUROPE'S OVERALL DIGITAL PERFORMANCE





The Structure of Digital Economy and Society Index (DESI)

- Connectivity: Fixed broadband take-up, fixed broadband coverage, mobile broadband and broadband prices
- **Human capital:** Internet user skills and advanced skills
- Use of internet: Citizens' use of internet services and online transactions
- **Integration of digital technology:** Business digitization and e-commerce
- Digital public services: e-Government

PISA 2018 MATHEMATICS RESULTS

RANK	COUNTRY	POINTS	RANK	COUNTRY	POINTS
1.	China (Beijing, Shanghai, Jiangsu, Zhejiang)	591	21.	Ireland	500
2.	Singapore	569	22.	Austria	499
3.	Macao	558	23.	Czechia	499
4.	Hong Kong, China	551	24.	Latvia	496
5.	Taiwan	531	25.	France	495
6.	Japan	527		OECD average	489
7.	South Korea	526	31.	Italy	487
8.	Estonia	523	32.	Slovakia	486
9.	Netherlands	519	33.	Luxembourg	483
10.	Poland	516	34.	Hungary	481
11.	Switzerland	515	35.	Lithuania	481
12.	Canada	512	36.	Spain	481
13.	Denmark	509	37.	United States	478
14.	Slovenia	509	40.	Croatia	464
15.	Belgium	508	45.	Greece	451
16.	Finland	507	46.	Serbia	448
17.	Sweden	502	49.	Bulgaria	436
18.	United Kingdom	502	70.	Brazil	384
19.	Norway	501			
20	Germany	500		Source: PISA 20	18 Results

500

20.

Germany

PISA 2018 SCIENCE RESULTS

					WAY
RANK	COUNTRY	POINTS	RANK	COUNTRY	POINTS
1.	China (Beijing, Shanghai, Jiangsu, Zhejiang)	590	21.	Czechia	497
2.	Singapore	559	22.	Ireland	496
3.	Macao	544	23.	Switzerland	495
4.	Estonia	530	24.	Denmark	493
5.	Japan	529	25.	France	493
6.	Finland	522	26.	Portugal	492
7.	South Korea	519	27.	Austria	490
8.	Canada	518	28.	Norway	490
9.	Hong Kong, China	517		OECD average	489
10.	Thaiwan	516	29.	Latvia	487
11.	Poland	511	30	Spain	483
12.	New Zealand	508	31.	Lithuana	482
13.	Slovenia	507	32.	Hungary	481
14.	United Kingdom	505	36.	Croatia	472
15.	Australia	503	41.	Slovakia	464
16.	Germany	503	43.	Malta	457
17.	Netherlands	503	44.	Greece	452
18.	United States	502	65	Brazil	404
19.	Belgium	499			
20.	Sweden	499		Source: PISA 20	18 Results

THE VIRUS CLAIMED MANY LIVES BUT THE LEVEL OF DEATH TOLL IS VERY DIFFERENT (AS OF JUNE 30, 2021)



	Excess Death (per cent)	Covid Deaths per 100 thousand inhabitant
Denmark	2,3	43,4
Finland	2,5	17,4
Latvia	6,6	129,2
Sweden	7,3	141,1
Germany	7,4	108,3
Canada	9,2	65,9
Greece	9,3	116,3
Estonia	9,9	95,3
Cyprus	11,6	42,1
Luxembourg	11,8	130,6
United Kingdom	12,1	189,5
Austria	12,2	119,9
Croatia	13,0	201,1
Netherlands	13,3	103,4
France	13,3	165,0
Lithuania	14,0	155,8
Belgium	14,1	217,3
Malta	15,8	81,4
Hungary	16,1	306,4
Portugal	16,3	165,6
Slovenia	18,7	210,3
Italy	18,9	211,0
United States	19,0	184,5
Romania	19,1	165,4
Spain	19,2	170,2
Bulgaria	23,6	258,0
Slovakia	26,5	228,0
Poland	27,4	196,6
Czechia	28,5	282,9
Brazil	31,53	248,5

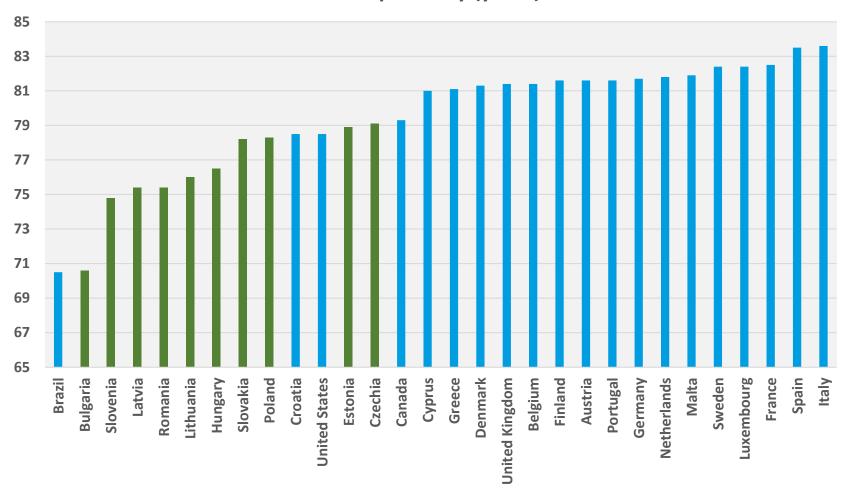
Excess Death:
Number of deaths
observed since
February 2020 minus
the average deaths
over the previous
five years.

Source: MNB calculations on the basis of Our World in Data

LIFE EXPECTANCY IS LOWER IN CEE COUNTRIES

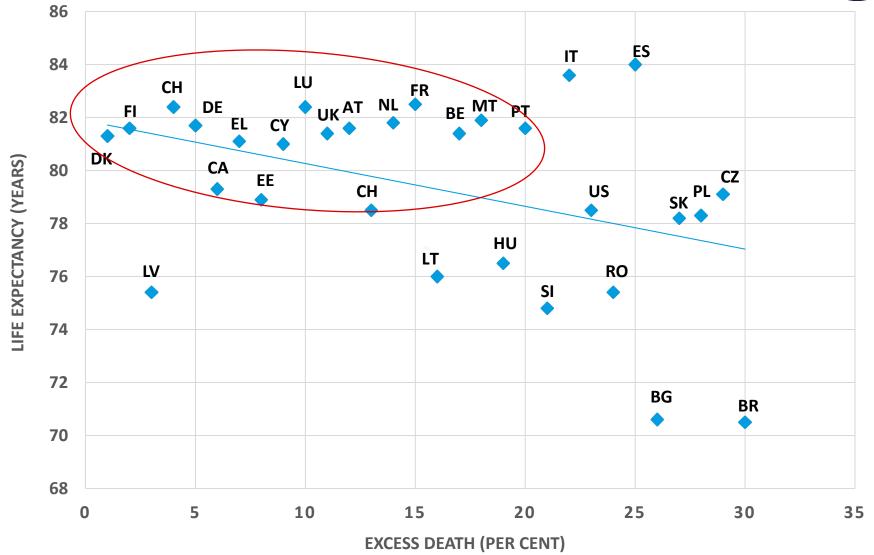


Life expectancy (years)



WHERE LIFE EXPECTANCY IS HIGH EXCESS DEATH IS LOW BECAUSE LIFESTYLE, PREVENTION AND TIMELY ACCESS TO HEALTH CARE IS BETTER

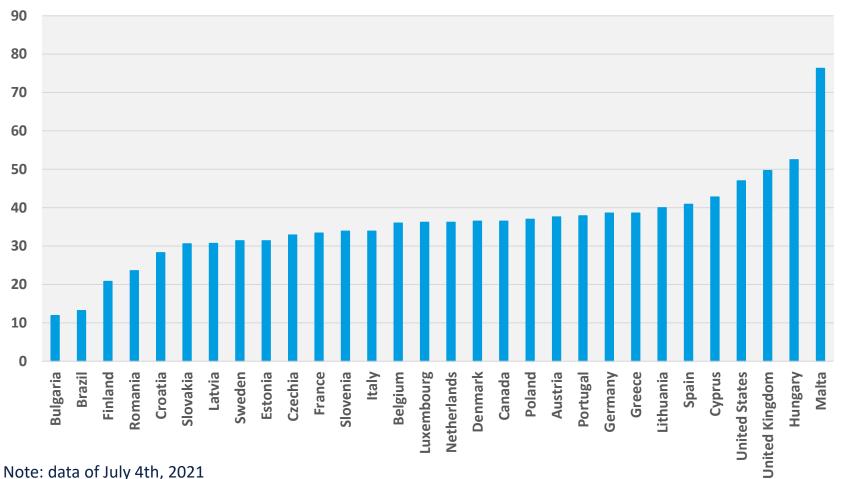




DEGREE OF VACCINATION VARIES GREATLY

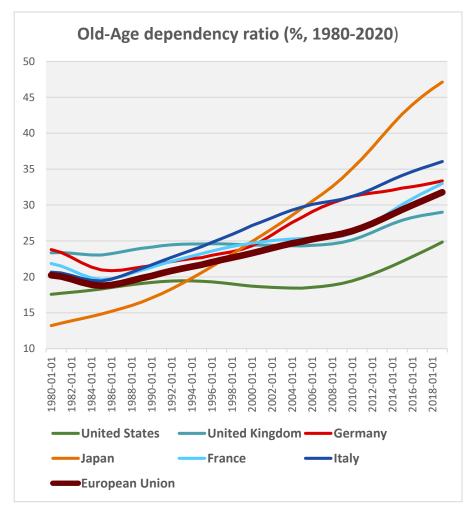


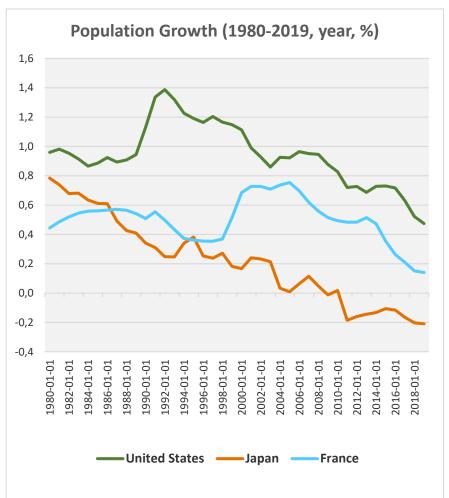
Fully vaccinated (per cent)



DEMOGRAPHIC TRENDS: AGING POPULATION







Note: Ratio of dependents (over 65) and the working age population (15–65-year-olds)

IS THE STATE BACK TO STAY? - YES, IT MUST

The pandemic has brought to the fore that governments have to play a greater role in areas that are important for facing post-Covid challenges. I would like to highlight two areas.

- **I. Digitalization:** The digital economy is one of the foundations of future development, for which innovation is essential. In countries where the education system is better, the capacity to innovate and rely on digitalization is higher.
- **Chart 1.** total digital performance varies greatly within the EU. Striking that the degree of digitalization is low in the New Member States of East-Central Europe.
- **Charts 2-3.** Digitalization is linked to education. PISA 2018 tests: in the first ten countries only Estonia, Finland, NL, Poland. Mostly Chinese +South Korea. Estonia, Finland, and the NL also high on the list of digital performance.

Conclusion:

- a) Governments must improve education. Needed reforms vary according to countries, but spending more on educational infrastructure, research and salaries of teachers seems indispensable.
- b) Governments must spend more to digitalize government services and promote the use of digitalized services by the population in new areas, such as for example telemedicine, and e-prescriptions, the need for which was highlighted by Covid.
- c) With a few exceptions, CEE countries must especially focus on digitalization and the attended role of education.

II. Healthcare.

Chart 4. A comparison of total Covid death per 100 thousand inhabitants and excess death, defined as death in excess of normal conditions, reveal the strength and weaknesses of the health system to deal with the pandemic. Countries use different methodologies to count Covid death, but considering the law of large numbers, the Chart allows to make some useful observations. Low excess death points to greater success in handling the pandemic. High total Covid death points to health problems such as unhealthy lifestyle, lack of prevention, difficulties in timely access to health services.

Finland, Estonia: low excess death and low Covid death.

Brazil, Czechia: high excess death, high Covid death.

Hungary: high Covid death, average excess death.

Chart 5. Life expectancy is lower in CEE countries: lifestyle, lack of prevention and of timely access to health services, cultural factors.

Chart 6.

Where life expectancy is higher, excess death is low because lifestyle, prevention, timely access to health services is better.

Chart 7. The degree of vaccination varies greatly across Europe. At this point (July 4. 2021), no apparent correlation between vaccination and excess death, because it takes some time before the vaccine's protection takes effect. However, the Chart points to the very uneven performance of governments to provide vaccination. There are countries where about half or more of the population is vaccinated and there are countries where 20% or less are vaccinated.

Conclusion:

The pandemic has brought to the fore the necessity to improve the access and the timely use of health services, research and innovation in health care, and the development of vaccines. This requires increased spending by governments. This is especially so because Europe has an aging society and older people are particularly vulnerable to pandemic (**Chart 8**). Since government debt has ballooned in many countries fighting the pandemic, the choice on what we spend for the future is particularly important. **SPEND BUT SPEND WELL**