Deutsche Bank Research



Cross-Discipline

Corona Crisis Daily



Date 4 May 2020

4th May 2020

How cases have developed globally

- Global cases rose 2.4 per cent to over 3.5m over the last 24 hours. Fatalities rose by 1.8 per cent to over 248,000. Both are slowing even if the deceleration is steady rather than spectacular. The five-day average growth of new cases globally is 2.7, compared with 3.0 per cent two weeks ago, while the five-day average rise in fatalities is 2.7 per cent, compared with the daily rise 14 days ago of 3.1 per cent.
- With the recent rise in fatalities, covid-19 has moved from 24th to 23rd in the list of worst pandemics in history as measured by fatalities as a percentage of the global population (24 in total over the last 2000 years). We have included the chart of the fatality rate of each in the PDF of this note and DB clients can click here (link) to see the original publication. Massive global mitigation is expected to keep covid-19 at the very lower end of our table. As we showed in the note, an unmitigated global strategy could have put it as high as 13th. For covid-19 to reach 22nd, passing Yellow Fever in the late 1800s, the global death toll would have to pass 626,100.
- In terms of regional cases, four out of the top ten most infected countries saw cases grow by less than one per cent over the last day. Meanwhile, five countries of the top ten are under two per cent on average. Shutdowns are going to start being lifted in many of these countries this week and next, so it will be interesting to gauge how case numbers respond, particularly as testing is set to increase.
- On the topic of testing, the UK reached its goal of testing 100,000 patients a day by the end of April, with over 225,000 tests achieved over the first two days of May even if a setback yesterday saw it at 76,500. Could this be another weekend issue? We'll see over the next few days. The country has been testing roughly 15,000 people per 1,000,000 of the population daily over the past three days. If sustained this would be more than Italy and the US, which had been leading the world.
- The UK saw cases rise by 1.7 per cent over the last day, the lowest rate during the outbreak. We should note that prior weekends have shown some variable figures so we will have to see what the result is of increased testing. A good sign for the country was that the reported new 241 virus deaths was the lowest since late March, rising 0.8 per cent also a low bringing the total to 28,446. The weekend impact likely lowered this number but it is still down on prior weekends.
- Similarly, New York had the fewest deaths in a day (280) and the lowest percentage increase in deaths (1.1 per cent) since 30 March. Meanwhile, cases in one of the most heavily affected regions of the world rose 1.4 per

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- cent to 323,883. This is in-line with the seven-day range and down from 2.0 per cent 14 days ago.
- More broadly the US as a whole saw cases grow by 2.2 per cent to over 1.15 million, just below the 5 day average of 2.7 per cent. Fatalities in the country rose by 3.3 per cent, a little higher than the five-day average of 3.0 per cent.
- German cases rose by 0.4 per cent, the slowest daily rise yet. Meanwhile fatalities in the country rose by 0.8 per cent, the first daily rise of less than 1.0 per cent.
- Russia and Brazil continue to be areas of concern as two heavily affected areas are still seeing relatively high case growth. Russia added over 10,000 cases over the last 24 hours the most in a single day yet increasing for a fifth day in a row. Total confirmed cases in Russia rose 8.6 per cent to 134,687, the biggest one day percentage rise in the last week. Nearly half of the new cases are asymptomatic, according to Moscow. The capital now accounts for nearly 56 per cent of new infections.
- Brazil saw a 4.9 per cent increase to over 100,000 confirmed cases, while this is slower than the 5 day average of 6.9 per cent, the trend for the country is still flat to rising when compared with case growth 14 days ago. Fatalities in the country rose 4.3 per cent, the lowest levels since the start of the country's outbreak.
- Singapore is another region of the world that has seen an uptick in virus activity in recent weeks. The country confirmed 657 new virus cases over the last day. The 3.7 per cent increase is below the five-day average of 4.0 per cent. The country announced that the vast majority of cases are foreign workers living in dormitories. Fatalities seen in the city-state remain very contained with only 18 confirmed deaths.
- Italy, the second most affected country in the world, has seen cases grow by less than one per cent on average during the last week. Over the last 24 hours, Spain saw 164 new fatalities, bringing total deaths to 25,264, a 0.7 per cent increase. This is the lowest the country has seen in the recovery. Spanish cases grew by 0.6 per cent, the lowest yet, to just over 247,000.
- Italy had 174 new coronavirus deaths over the last 24 hours (0.6 per cent), which is the lowest toll since 168 on the day that the lockdown started on March 10. Cases in Italy have also slowed in a similar way, with a 0.7 per cent rise in cases over the last day, also the lowest since the start of the lockdown.



Figure 1: Change in coronavirus cases over the last five days across major affected areas of the world

Country/Territory	Confirmed Cases	Cases/1M Population		Last 5 Day	s Daily Rate	of Change	Rate of		Tests/ 1M	
			T-1	T-2	T-3	T-4	T-5	Change 14 days ago	Total Testing	Population
United States	1,157,945	3,498	2.2%	2.7%	3.2%	3.0%	2.6%	3.7%	7,196,740	21,742
New York	323,883	16,660	1.5%	1.3%	1.4%	1.5%	1.6%	2.0%	900,636	46,328
Spain	247,122	5,285	0.6%	1.1%	1.3%	1.2%	2.1%	0.8%		
Italy	210,717	3,485	0.7%	0.9%	1.0%	0.9%	1.0%	1.3%	2,153,772	35,622
United Kingdom	186,599	2,750	1.7%	2.7%	4.3%	2.9%	2.5%	3.9%	1,206,405	17,776
France	168,693	2,584	0.2%	0.6%	0.1%	0.4%	1.0%	1.6%	1,100,228	16,856
Germany	165,664	1,977	0.4%	0.5%	0.7%	0.9%	1.0%	0.9%	2,547,052	30,400
Russia	134,687	923	8.6%	8.4%	7.4%	7.1%	6.2%	10.0%		
Turkey	126,045	1,499	1.3%	1.6%	1.8%	2.2%	2.6%	5.4%	1,135,367	13,498
Brazil	101,826	480	4.9%	5.3%	9.8%	5.8%	8.9%	5.4%	339,552	1,600
Iran	97,424	1,160	1.0%	0.8%	1.1%	1.0%	1.2%	1.6%		
China	82,880	58	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Belgium	49,906	4,311	0.8%	1.0%	1.1%	1.4%	1.1%	3.9%	423,971	36,622
India	42,505	31	7.1%	6.6%	10.9%	1.7%	5.5%	5.2%	1,046,450	758
Netherlands	40,571	2,362	0.3%	1.1%	1.2%	1.3%	1.0%	2.3%	225,899	13,149
Switzerland	29,905	3,455	0.3%	0.4%	0.4%	0.6%	0.5%	0.7%	280,220	32,378
Sweden	22,317	2,210	1.1%	2.6%	2.0%	3.9%	3.5%	2.7%	119,500	11,833
Mexico	23,471	182	6.3%	6.5%	16.5%	6.3%	7.9%	6.2%	93,791	727
Singapore	18,205	3,228	3.7%	2.6%	5.8%	3.4%	4.6%	21.6%	143,919	25,522
Japan	14,877	118	2.1%	1.9%	2.4%	0.5%	1.2%	3.1%	183,251	1,449
South Korea	10,801	211	0.1%	0.1%	0.1%	0.0%	0.1%	0.1%	630,973	12,307
Worldwide	3,566,004	459	2.4%	2.5%	2.9%	3.5%	2.4%	3.0%		

Source : Deutsche Bank, WHO, CDC, ECDC, JHU



Figure 2: Change in coronavirus fatalities over the last five days across major affected areas of the world

	Confirmed	Deaths/1M		Rate of Change					
Country/Territory	Deaths	Population	T-1	T-2	T-3	T-4	T-5	14 days ago	
United States	68,598	207	3.3%	2.2%	3.6%	1.6%	4.1%	4.8%	
New York	24,648	1,268	1.1%	1.4%	1.1%	1.3%	1.4%	3.4%	
Spain	25,264	540	0.7%	1.1%	1.1%	1.1%	1.9%	2.0%	
Italy	28,884	478	0.6%	1.7%	1.0%	1.0%	1.2%	1.9%	
United Kingdom	28,446	419	0.9%	2.3%	3.0%	2.6%	2.2%	2.8%	
France	24,895	381	0.5%	0.5%	1.0%	1.2%	1.8%	2.8%	
Germany	6,866	82	0.8%	1.1%	2.6%	1.5%	2.4%	4.7%	
Russia	1,280	9	4.7%	4.5%	8.9%	10.4%	12.1%	12.2%	
Turkey	3,397	40.4	1.8%	2.4%	5.7%	0.0%	3.0%	6.1%	
Brazil	7,051	33	4.3%	5.4%	8.7%	7.0%	8.5%	5.1%	
Iran	6,203	73.9	0.8%	1.1%	1.0%	1.2%	1.4%	1.8%	
China	4,638	3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Belgium	7,844	678	1.0%	0.8%	1.4%	1.2%	2.3%	2.6%	
India	1,391	1	5.1%	8.2%	13.3%	0.0%	7.0%	5.9%	
Netherlands	5,056	294	1.1%	1.9%	2.0%	2.1%	3.2%	1.8%	
Switzerland	1,762	203.6	0.0%	0.5%	1.0%	1.2%	1.0%	2.6%	
Sweden	2,679	265	0.4%	0.6%	2.6%	5.0%	4.5%	2.6%	
Mexico	2,154	17	4.5%	4.5%	13.9%	0.0%	10.4%	3.8%	
Singapore	18	3.2	5.9%	6.3%	14.3%	0.0%	0.0%	0.0%	
Japan	487	3.9	2.7%	4.2%	7.1%	2.9%	4.8%	11.4%	
South Korea	252	4.9	0.8%	0.0%	1.2%	0.4%	0.0%	0.4%	
Worldwide	248,282	32	1.8%	2.1%	2.3%	2.6%	4.8%	3.1%	

Source : Deutsche Bank, WHO, CDC, ECDC, JHU

Exit Strategy

- Ireland: Prime Minister Varadkar said that the economy will start reopening on 18 May in a five phase plan. Construction and other outdoor work will begin first in roughly three weeks, with rolling reopenings thereafter. Schools and colleges are likely to open by September and October.
- Governor Newsom of California announced he will outline a plan to reopen the state in phases as soon as next week. The state would be the fifth-largest stand-alone economy in the world.
- UK: The Telegraph newspaper reported that English primary schools could reopen as soon as 1 June.
- South Korea: The Prime minister said on Sunday that the country would further relax social distancing measures on 6 May.
- Israel: The Ministry of Finance outlined the re-opening of Israel's economy over the weekend that would ease restrictions on malls and universities as soon as this week. The schedule would speed up the country's exit from nearly eight weeks of shutdowns.

Medical Updates

 The US FDA has now approved Gilead Science's experimental antiviral drug, remdesivir, for emergency use in hospitalised patients. American patients could receive the drug as soon as this week, after Gilead works with



the government to determine which cities are most vulnerable and need the medicine. Chief executive O'Day indicated that the government has not mandated that the US be given priority over foreign markets in receiving the medicine.

- Roche said its antibody test has received emergency use authorisation from the FDA
- As the European Commission prepares to hold an online donor conference in a bid to raise €7.5bn to fund research on a coronavirus vaccine and treatment, President Von der Leyen said "We know we can only defeat the virus with a vaccine...We need global cooperation, and the pledging conference is on filling the funding gap."

Major virus updates over the weekend

- US: Secretary of State Pompeo said in an ABC interview that "there is a significant amount of evidence that this came from a laboratory in Wuhan".
- Japan: Prime Minister Abe is expected to extend the national state of emergency until 31 May.
- France: Health Minister Veran said that lockdowns could be extended if virus circulation has not dropped further by 11 May.
- France: the government announced on Saturday the extension of the state
 of health emergency until 24 July. The bill, which contains seven articles,
 makes compulsory a fortnight isolation for people arriving on national
 territory.
- The app that France is developing to trace potentially infected individuals, known as StopCovid, could be ready by the end of this month. That is after France is currently scheduled to lift the first phase of restrictions (11 May).
- Saudi Arabia: Finance minister Mohammed Al-Jadaan warned that there
 will be deep cuts to government spending, and that the country needs to
 "take very tough and strong measures, and they might be painful, but
 they're necessary."
- Philippines: Commercial overseas flights out of the country have been suspended from Sunday until May 9. Cargo and maintenance flights are permitted to continue.

Company Updates

- ExxonMobil reported a first-quarter loss of \$610m, down from their \$2.4bn profit reported in the same quarter a year earlier.
- Ryanair said that it will cut up to 3,000 jobs, and that the recovery of passenger demand and pricing back to 2019 levels would take at least two years.
- Delta, American Airlines, and United Airlines will require all fliers to wear face masks starting this month.
- Reports indicate Amazon has told staff who are able to perform their jobs from home that they can continue to do so until at least 2 October.
- Berkshire Hathaway reported a \$49.7bn loss in the first quarter.
- From today, Eurostar passengers will be required to wear a face mask or face covering.

Economic Data Highlights



- US: The ISM manufacturing index fell to 41.5 in April, down from 49.1 in March and its lowest level since April 2009. The employment index fell to 27.5, its lowest level since June 1949.
- UK: Net consumer credit fell by £3.8bn in March, the first monthly decline since October 2012. Meanwhile the number of mortgage approvals in March fell to its lowest level since March 2013.
- South Korea's manufacturing PMI fell to 41.6, the lowest point since the financial crisis.

Fiscal and Monetary Updates

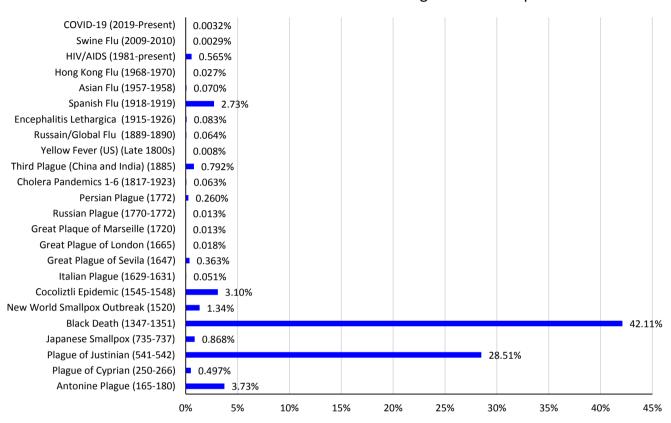
- The ECB published a range of alternative scenarios of the likely economic impact of the pandemic. These would see a fall in real GDP for the Euro Area in 2020 of 5, 8, and 12 per cent under the mild, medium and severe scenarios respectively.
- The ECB's chief economist Philip Lane said that under the "severe" scenario modelled by the ECB entailing a 12 per cent decline in eurozone GDP this year the economy would not still return to its level at the end of last year before 2023.
- EU: Last week, the commission had approved €1.9tn of state aid measures, via 95 decisions, covering 26 member states plus the UK. Germany has accounted for half of state aid approved by the European Commission.

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Figure 3: Covid-19 has moved from 24th to 23rd in the worst pandemics in history in terms of fatalities as a percentage of the global population

Estimated Death Toll of Pandemic as a Percentage of Global Population



 $Source: Deutsche \ Bank, Federal \ Reserve \ Bank \ of \ San \ Francisco, \ wikipedia. or g/wiki/List_of_epidemics \ and \ various \ online \ references \ within \ in the property of the p$



Figure 4: Much of Northern Europe's experience has been very similar on a population adjusted measure

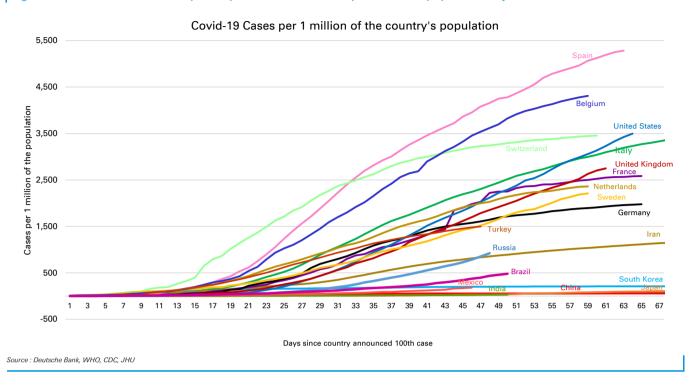


Figure 5: France is no longer tracking the same fatality path as Italy on a population adjusted basis, with the rate of new deaths slowing

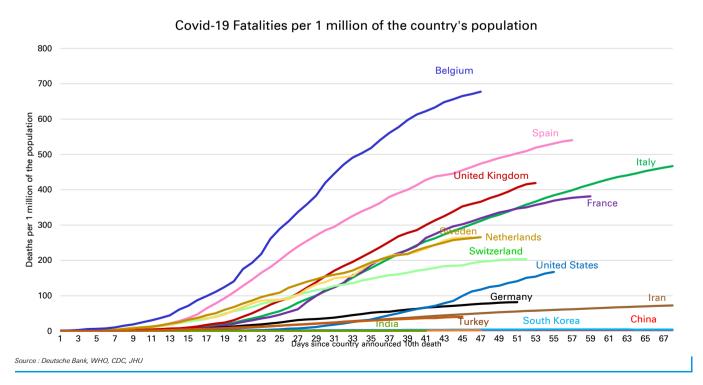




Figure 6: Italy, Spain, and France shut down more completely than any of the other most heavily affected nations in terms of individual mobility

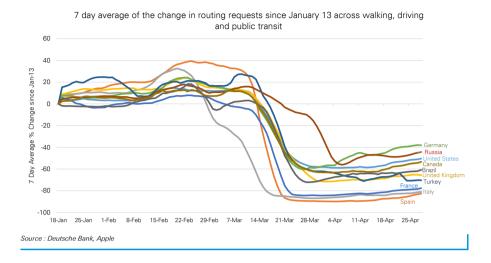
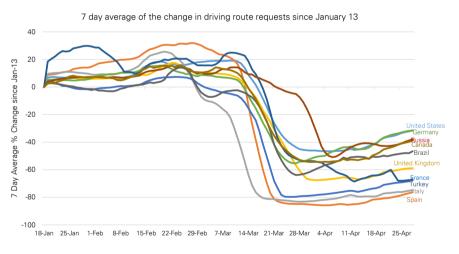


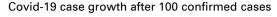
Figure 7: Since the beginning of April there has been a steady rise in drivers, particularly in Germany. The US also did not shut down in this regard nearly as much as other parts of the world.



Source : Deutsche Bank, Apple



Figure 8: There has been increasing case growth in regions like Singapore and Russia just as Western Europe and the US flatten out



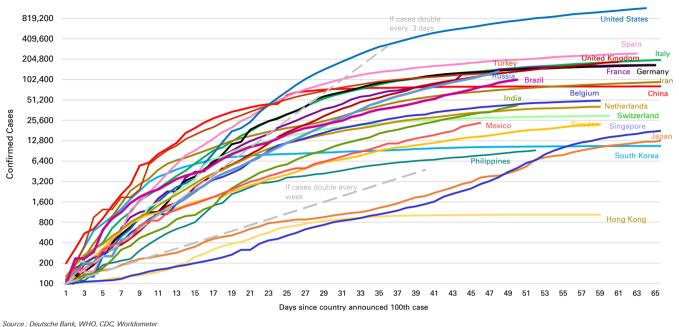
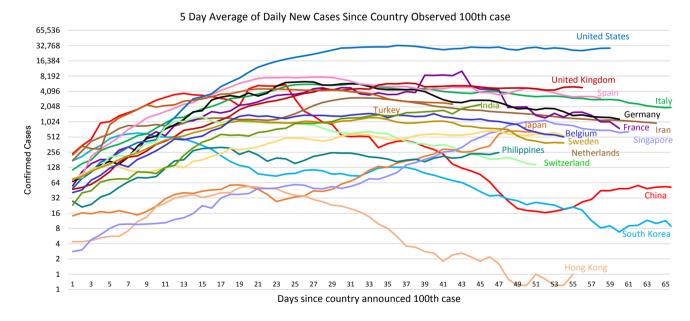


Figure 9: New cases in the US have been flat for over two weeks and Europe seems to be slowing across the board on a 5 day average basis



Source : Deutsche Bank, WHO, CDC, Worldometer



Figure 10: Fatalities across the world have slowed substantially compared to where we were 2 weeks ago with hospitals seeing less strain in different regions

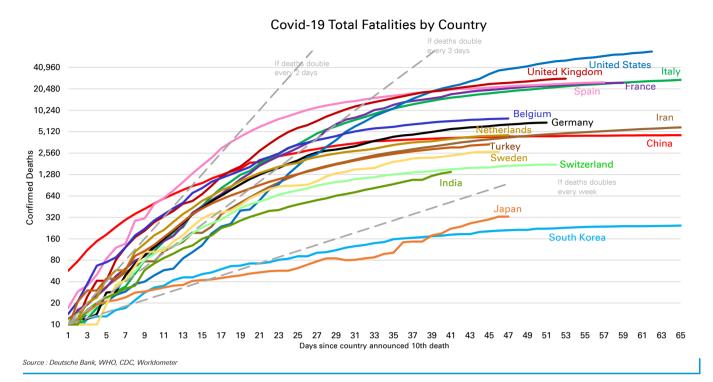
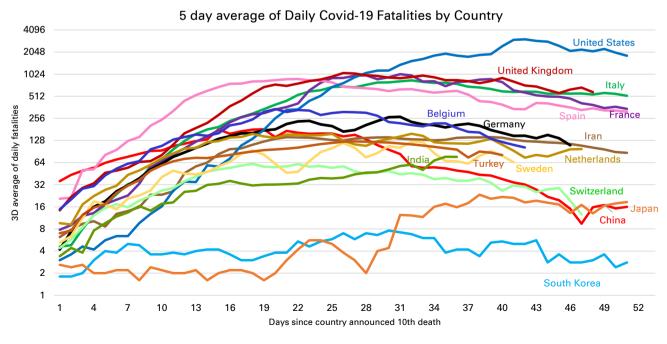


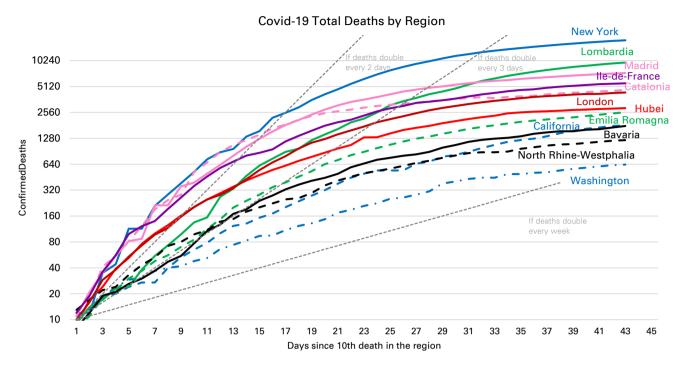
Figure 11: The growth in fatalities in the US and Europe have slowed on a 5 day average basis, yet we have seen the trend in fatalities lag the trend in new cases across the world



Source: Deutsche Bank, WHO, CDC, Worldometer

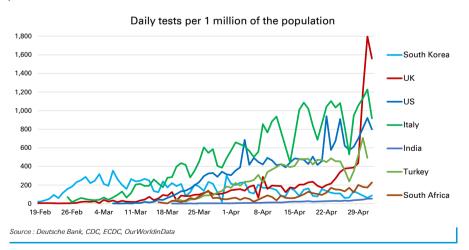


Figure 12: New York State and England were the last two major regions we are watching that have seen their rate of new fatalities start to flatten



Source : Deutsche Bank, NHS, Covid Tracking Project, ECDC, Santepubliquefrance, Interaktiv.morgenpost

Figure 13: The UK has seen a spike in testing over the weekend, after the government sought to reach the milestone of 100K tests a day



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Appendix 1

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