

International developments

The first institutional data available for Q1 2020 testify to a severe drop in activity in the advanced economies, all affected by the lockdowns imposed in March. This decline in activity resulted in several hundreds of thousands of job losses in March 2020 in the European countries and the United States. High-frequency indicators are a source of information on the drop in activity that continued into April and on the modest recovery accompanying the end of lockdown in some countries.

Caution is recommended when comparing GDP flash estimates for different countries in Q1

In the first half of March, the main Eurozone economies adopted measures restricting economic activity, the first being introduced on 11 March in Italy, on 14 March in Spain and 15 March in France, to stem the spread of the coronavirus. On 23 March, the United Kingdom also adopted measures to contain the epidemic, with the United States following on from 19 March, although to varying degrees in different States. The same happened in Japan, which declared a state of emergency on 7 April.

The first estimates from the accounts for Q1 2020 published by the national statistical institutes indicate a severe drop in economic activity. In France, activity shrank by 5.8% in Q1 2020 due to a sharp decline in all demand items, especially investment (-11.8%). In Spain and Italy, the fall was of a similar order of magnitude, i.e. -5.2% and -4.7% respectively. Although national statistical institutes followed Eurostat's recommendations for the GDP flash estimate, the differences in growth rate between countries must be interpreted with caution. Estimates produced in this unprecedented context have relied on less conventional methods and indicators which are therefore less comparable than usual. These estimates are therefore liable to be revised more substantially than usual. However, estimates for the Spanish and French GDPs, for example, appear to be similar in various methodological aspects: alternative sources used for completing missing information in March 2020 (e.g. bank card data) and the adjustment of models to better take into account the downward shock in the indicators.

In the United States, lockdown was imposed in the second half of March, although to differing

degrees in the different States, and GDP fell back 1.2% in Q1 2020, particularly badly penalised by the drop in consumption (-1.9%), especially consumption of services (-2.5%) and durable goods (-4%). Consumption of non-durable goods increased (+1.7%). According to the US Congress, GDP could fall dramatically by 12% in Q2.

The economic consequences of the lockdown measures, which were already visible in March, were also felt in April, especially in the IHS Markit business surveys. Thus the composite PMIs, advance indicators for all economic activity, fell again in April in all the advanced countries, after a drastic fall in March (*Graph 1*). In the Eurozone, the index lost 16 points in April after a drop of 22 points in March. In Germany, the index lost almost 18 points after plummeting by 16 points in March (against -23 then -18 points in France). The index tumbled by 14 points in the United States (after a drop of 9 points in March) and plummeted by 22 points in the United Kingdom, reaching some very low levels (after a drop of 17 points in March). In April, in all these countries, the index reached a particularly low level, well below 50, the threshold below which activity falls back.

The decline in activity resulted in heavy job losses in the advanced countries

This sharp drop in activity also resulted in net job losses in the advanced economies. In Spain, the Ministry of Labour recorded an increase of just over 300,000 jobseekers in March 2020, or +9% compared with February 2020 and March 2019. The Spanish statistical institute also estimated the decline in employment, in terms of hours worked, at -5.0% compared with the previous quarter and at -1.8% in full-time equivalents. In France, according to Pôle Emploi, the number of Category A jobseekers grew by 243,000 in March 2020, a 7.5% increase compared with February. At the end of Q1 2020, payroll employment in the private sector in France fell by 2.3%, or more than 450,000 net job destructions in one quarter. In addition, companies have applied for the short-time working scheme for more than half of private sector employees. In Germany, according to the IAB (research centre for the German employment office), the number of jobseekers is expected to increase by 520,000 across the whole of 2020 and according to a survey by the University of Mannheim, the proportion of jobs turned over to short-time working increased from 3.4% to 10.8% between mid-March and mid-April.

International developments

In the United Kingdom, between 16 March and 13 April, about 1.8 million people applied for Universal Credit, a single allowance combining several of the social benefits that existed previously. This allowance is conditional upon job search or training and workers on low salaries can also receive it. According to a survey by the Office for National Statistics, it appears that 27% of employees were put on leave between 23 March and 5 April. 40% of companies reduced their workforce and 29% reduced working hours.

In the United States, new requests for unemployment benefits between 15 March and 25 April exceeded 30 million (more than 18% of the labour force and almost 19% of the population in employment). Faced with this sharp increase in numbers registering for unemployment insurance and the paralysis of a large proportion of economic activity, some States relaxed lockdown measures, and allowed non-essential businesses to reopen. According to the Congressional Budget Office, the nonpartisan economic agency of economic and budgetary analysis of the US Congress, the unemployment rate is likely to peak at 16% in Q3 2020. A drop in the participation rate to 59.8% in Q3 (after 63.2% in Q1) is expected to absorb part of the job losses; without this fall in the participation rate, the unemployment rate could be even higher. Job losses are very high in accommodation-catering, retail trade and services to businesses, sectors that have been particularly badly affected by the drastic drop in activity.

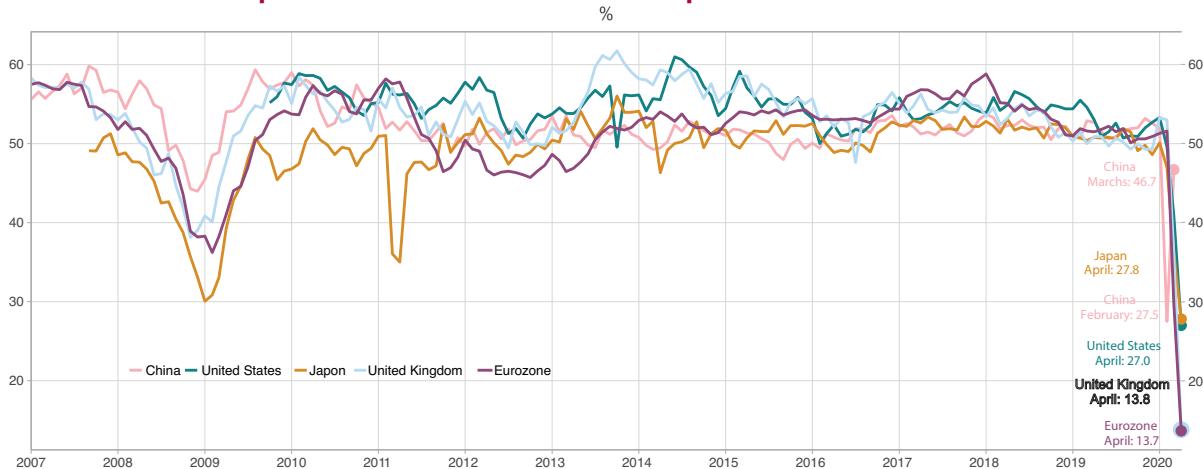
It should be noted that these points relate to the period of lockdown experienced by these countries until at least mid-April and therefore do not include lockdown exit measures initiated at the end of the month, both in Europe and the United States. However, by using high-frequency indicators their first effects can be measured.

A slight recovery in activity started in late April in some European countries, as the high-frequency indicators show

Towards the end of April, some countries were already starting the process of bringing the population out of lockdown and were lifting restrictions on activity (*Graph 2*). The Stringency Index of restrictions produced by the University of Oxford's Blavatnik School of Government identifies and combines in a single measurement all lockdown health measures and closures of businesses, administrations and schools in around a hundred countries. According to this index, lockdown remains very restrictive in France, Italy and Spain, but is easing in Germany and the United States. In Germany in particular, the first phase of a lockdown exit began at federal level on 20 April with the reopening of businesses with a surface area of up to 800 m², and also car dealers, bicycle shops and bookshops, with no surface area requirements; a second phase began on 4 May with the gradual reopening of schools and hairdressers. However, the lifting of lockdown also depends on the Länder: whereas in North Rhine-Westphalia, even local non-food shops have been welcoming customers since 20 April, in Bavaria and Hamburg, they remained closed until 27 April. In Italy, only strategic businesses and exporting companies were able to resume their activities on 27 April (e.g. some factories in the Fiat-Chrysler group or Valentino), and then only after inspection and approval by the Prefecture. On 4 May, the chemicals, plastic materials, metallurgy, machine tools, construction and telecommunications branches were also allowed to resume their activities.

In Spain, from 11 April, productive activities were able to start up again gradually, but the population remained in lockdown until 9 May. In France, phase 1 of the lifting of lockdown is set

1 - Composite PMIs continue to tumble in April in the advanced countries



Source: IHS Markit

International developments

to begin on 11 May. In the United States, some States, mainly those in the South and in the Great Plains (Alaska, Alabama, Colorado, Georgia, Tennessee, South Carolina, etc.) decided to reopen non-essential businesses, some on 21 April.

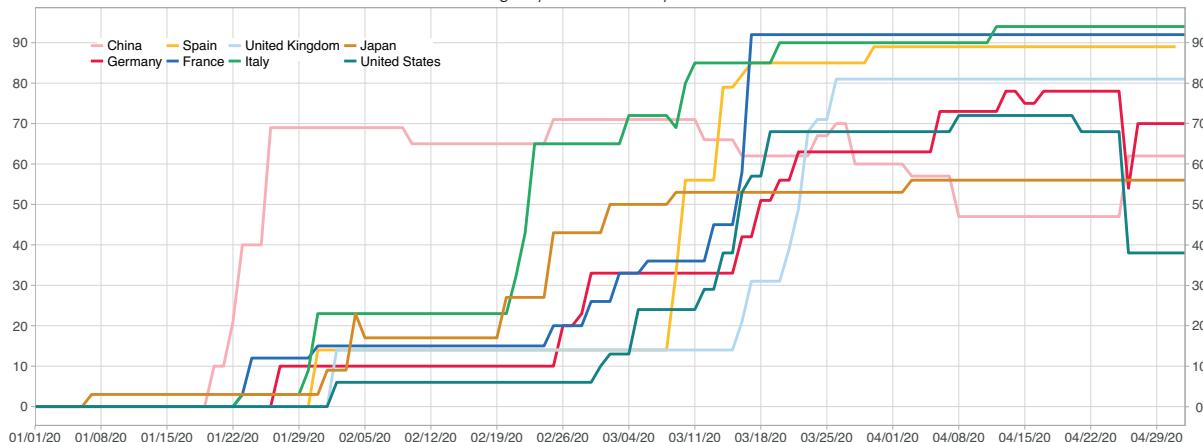
The effect of opening some businesses on 20 April in Germany, ahead of the other European countries, is reflected particularly in the Google search queries relating to shopping centres (*Graph 3*), which give an indication of retail sales and household consumption. The number of search queries in the week of 20 April for German shopping centres was "only" 35% lower than the same period in 2019, against 70% the previous week. In the other three major Eurozone economies, and in the United Kingdom and the United States, this indicator remains very low

indeed, 70% to 80% lower than in 2019 for the same week.

Another index that is representative of activity overall is electricity consumption. This indicator reveals the same type of difference between Germany on the one hand and France, Italy and Spain on the other. The drop in electricity consumption that started in mid-March was greater in Italy, Spain and to a lesser extent in France, than it had been in Germany (*Graph 4*). As the lockdown began to be lifted, on 20 April in Germany and 11 April in terms of resuming productive activity in Spain, the loss of electricity consumption compared with 2019 was 12% and 34% respectively in these two countries. The gradual recovery of activity was then accompanied by an increase in consumption. Thus, in Germany, electricity consumption in the

2 - Lockdown eases a little in Germany

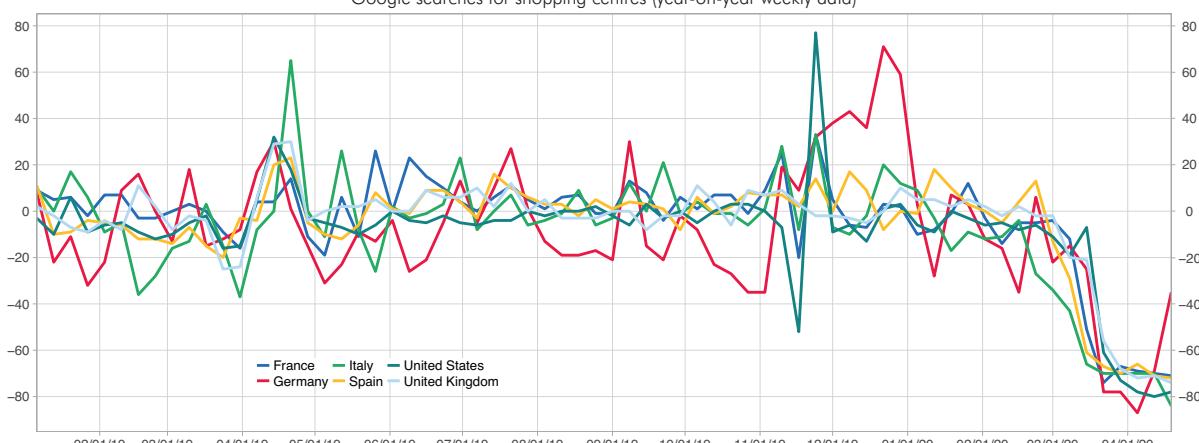
Stringency Index University of Oxford



Source: Hale, T., Webster, S., Petherick, A., Phillips, T., et Kira, B. (2020). Oxford COVID-19 Government Response Tracker, Blavatnik School of Government

3 - Google Trends search queries for shopping centres suggest an upswing in activity in Germany

Google searches for shopping centres (year-on-year weekly data)



Note: search volumes are the average number of searches for different shopping centres in the largest cities in the countries.

Source: Google Trends, calculs Insee

week of 22 to 26 April was only 6% lower than its 2019 level over the same period, and 17% for Spain. In France, whereas electricity consumption in the week before lockdown was a little over 2% more than in 2019 over the same period, at the end of April 2020 it was 16% less than in 2019. With lockdown still in force, electricity consumption in France stabilised at a low level. In any case, monitoring electricity consumption gives an initial indication of economic activity and production, as businesses and factories are the primary consumers of electricity (see *Focus on electricity in the case of France*). However, in most countries, it has not been possible to differentiate electricity consumption according to institutional sector.

The numbers of people frequenting public places is a third high-frequency indicator of the collapse then the gradual upswing in activity, especially in transport services and shops, but also in the economy as a whole, via the movements of workers and/or consumers. In this respect, Germany once again stands out, even during lockdown: here, the numbers frequenting public

places, both shops and public transport, seem to be much less affected than in the other European countries. For example, the decline in numbers on public transport was 49% in Germany against around 80% in the other three largest Eurozone countries (*Table 1*). However, although the numbers in public places showed some variation during April, there was no significant rebound, either in Germany or in the other countries.

This difference between Germany and the other three major Eurozone economies is also reflected in the daily air pollution data determined by measuring concentrations of nitrogen dioxide (*Graph 5*). Nitrogen dioxide emissions are due mainly to combustion phenomena occurring in road transport and the heating of buildings. Thus its concentration can reflect road transport activity, and hence economic activity in general. At the end of April 2020, nitrogen dioxide levels in Germany were 29% lower than for the same period in 2019, against 45% in France, two countries that had previously seen only small changes in climate conditions over a year.

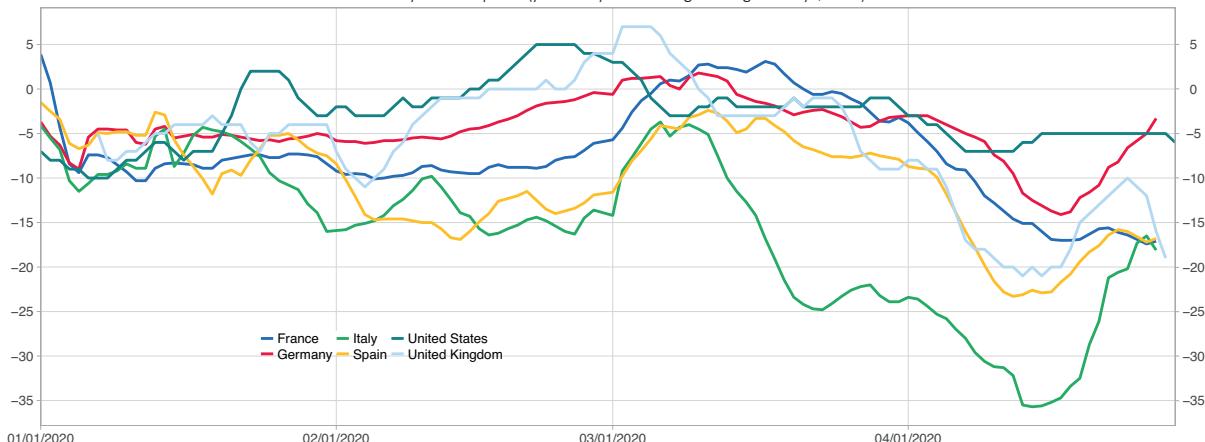
1 – Indicator of people frequenting public places in April in the advanced countries
in %

Indicators	Google Maps Mobility: retail trade and entertain- ment			Google Maps Mobility: food shops and pharmacies			Google Maps Mobility: public transport		
	6 apr.	17 apr.	26 apr.	6 apr.	17 apr.	26 apr.	6 apr.	17 apr.	26 apr.
Germany	-56	-55	-52	0	-4	3	-48	-49	-39
France	-86	-81	-83	-39	-33	-58	-79	-79	-77
Italy	-86	-79	-92	-42	-34	-74	-78	-76	-81
Spain	-92	-89	-92	-44	-45	-66	-84	-81	-82
United States	-45		-42	-7		-16	-49		-48
United Kingdom	-82	-75	-78	-41	-30	-37	-70	-71	-64
Japan	-30	-31	-45	4	4	-9	-48	-46	-58

Note: Comparison of numbers of people frequenting different places on a given date compared with a reference situation. For the most recent data, this situation is given by the median number of people visiting these places each Tuesday (corresponds to Tuesday of the week of 25 April).

Source: Google Maps Mobility

4 - Change in electricity consumption in the main advanced countries
electricity consumption (year-on-year moving average 7 days, in %)



Note: Each point represents the difference between average daily electricity consumption in 2020 compared to the corresponding day in 2019 (2015-2019 average for the United States). Data for the Eurozone are adjusted for effects of temperature.

Source: Data from the ENTSO-E transparency platform for electricity consumption in EU countries, website of the US Energy Information Administration (EIA) for electricity consumption in the United States

International developments

Comparisons monitoring the effect of changes in meteorological situations have been proposed by CREA (Centre for Research on Energy and Clean Air), a Finnish independent research body: after excluding the effects of meteorological conditions, the concentration of nitrogen dioxide appears to have decreased by almost 45% in France and Italy in April, against a drop of 51% in Spain and 21% in Germany.

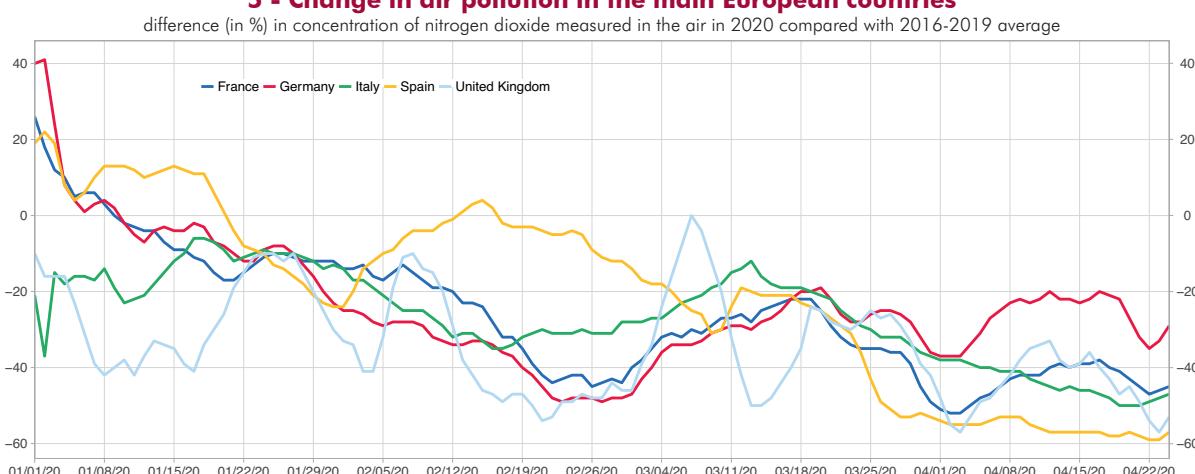
Outside the Eurozone, in the United Kingdom, with the exception of the peak in temperature from 24 to 26 April (-10% in electricity consumption), the drop in electricity consumption compared with 2019 has varied between -15% and -20% since 7 April and the concentration of nitrogen dioxide in the air is down to almost half of the average for the same period in 2016-2019. According to CREA, the concentration of nitrogen dioxide in the United Kingdom declined by 36% in April compared with previous years, once meteorological factors are taken into account. In the United States, between the end of March and 28 April, electricity consumption fell by only 6% compared with its daily average from 2015 to 2019. However, by late March, after containment measures were introduced in the States concerned, pollution on the north-east coast of the United States was 30% below its 2015-2019

average. Finally, in Japan, electricity consumption was about 10% lower than in 2019.

The recovery can also be monitored using road traffic indicators. Road traffic in major German cities seems to have picked up in the week of 20 April, as shown by the road congestion levels published in the TomTom Traffic Index ([Table 2](#)). The index is only 2% lower than the average index for 2019 between 20 and 27 April, whereas it was almost 34% lower between 13 and 19 April. In France, Italy and Spain, traffic conditions have changed only very slightly. At the end of April, the congestion index was still between 60% and 75% lower than the average index for 2019 compared with a drop of between 66% and 80% in the preceding week. The same scenario emerges from data on car journey searches with Apple Maps ([Graph 6](#)). In the United Kingdom, road traffic seems to have increased slightly but was still far below 2019 levels. This was also the case in the United States.

Finally, air traffic is an indicator of recovery in trade between countries. At this time, commercial passenger air traffic is still at a standstill in most European countries, with the exception once again of Germany. It is also at a standstill in the United Kingdom and the United States and is still very much below normal levels in China. ■

5 - Change in air pollution in the main European countries



Note: Each point represents the difference between the average weekly concentration (moving average 7 days of daily data) of nitrogen dioxide (NO₂) measured in the air at monitoring stations across the entire country in 2020 compared with the average of this concentration in the same week in the years 2016-2019. The calculated average is the simple average, without adjustment for meteorological variations or demographic weighting. From 18 to 24 April, the concentration of nitrogen dioxide in the air in the United Kingdom was on average 53% lower than the average for 2016-2019.

Source: European Environment Agency, INSEE calculations

International developments

Table 2 - Indicator of road traffic conditions in major cities and air traffic

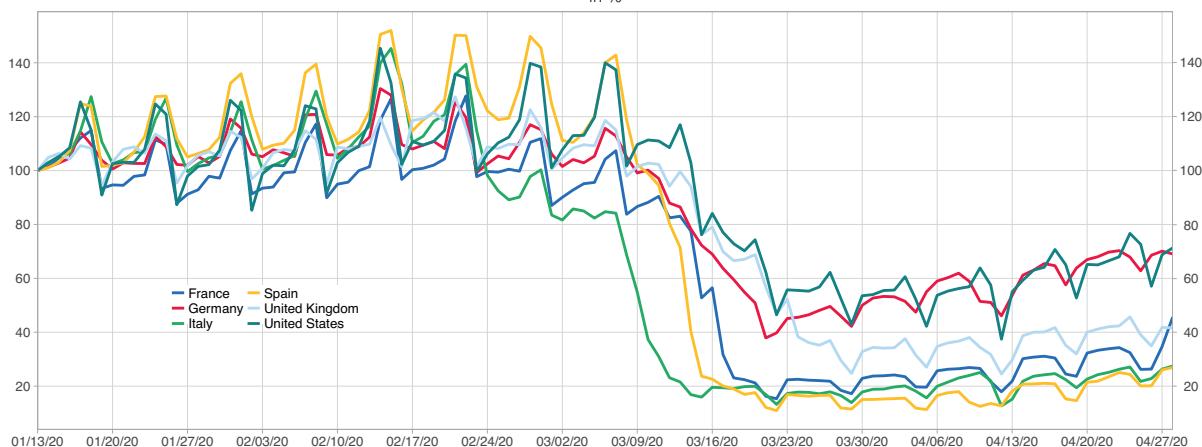
in %

Indicators	Road traffic (congestion index)		Air traffic	
	week of 13 April	week of 20 April	week of 13 April	week of 20 April
Germany	-34	-2	-40	-52
France	-80	-75	-74	-79
Italy	-75	-70	-75	-80
Spain	-66	-61	-77	-84
United States	-85	-80	-70	-75
United Kingdom	-80	-70	-92	-91
Japan	-48	-60	-60	-75
China	-7	-5	-58	-58

Source : TomTom website for road traffic in major cities, difference between daily average of traffic congestion index from 20 to 27 April and average of the index in 2019; Flightradar24 website for air traffic, ratio of the number of flights cancelled to the number of flights usually scheduled in the country's 3 largest airports between 27 March and 20 April.

6 - Change in searches for journeys on Apple Maps since 13 January 2020

in %



Note: This is the number of searches for car journeys on Apple Maps, as a proportion of the level on 13 January 2020. In the United States on 28 April, the number of searches was down 29% (100-71) compared with its level on 13 January

Source: Apple Maps

Bibliography

Contact restriction extended,(2020) Chancellerie allemande, 15 avril 2020, <https://www.bundeskanzlerin.de/bkin-en/news/fahrplan-corona-pandemie-1744276>

CBO's Current Projections of Output, Employment, and Interest Rates and a Preliminary Look at Federal Deficits (for 2020 and 2021), Congressional Budget Office (CBO), 24 avril 2020

Hale, T., Angrist, N., Webster, S., Petherick, A., Phillips, T., et Kira, B (29 avril 2020), "Variation in Government Responses to COVID-19", Version 5.0., Blavatnik School of Government Working Paper.

Hale T., Webster S., Petherick A., Phillips T., et Kira B. (2020). Oxford COVID-19 Government Response Tracker, Blavatnik School of Government

Short-term data development of economy and Labor Market, IAB (Centre de recherches de l'Office pour l'emploi), avril 2020.

<https://www.iab.de/en/daten/arbeitmarktentwicklung.aspx>

Myllyvirta L. et Thieriot H.,(2020) 11,000 air-pollution related deaths avoided in Europe as coal, oil consumption plummet, Centre for Research on Energy and Clean Air, 30 avril 2020.

<https://energyandcleanair.org/air-pollution-deaths-avoided-in-europe-as-coal-oil-plummet/> ■