International developments

In 2020, the economies of all countries were deeply affected by the health crisis. Economic activity plummeted in H1 to an unprecedented low, before rebounding to varying degrees in Q3, followed by a range of changes at the end of the year. In Europe, the measures introduced by governments at the height of the crisis were able to limit the negative consequences for employment and preserve a large proportion of household and corporate income. However, the upsurge in the epidemic in recent months is threatening this economic recovery in 2021, as can be seen from the consumption and mobility behaviour highlighted by "high-frequency" indicators.

Economic activity in all countries was deeply affected by the pandemic in 2020

In Q4, the upswing in activity in western economies was slowed by the second wave of the epidemic (► **Figure 1**). In Germany and Spain, GDP grew slightly (+0.1% and +0.4% respectively). The nationwide lockdown introduced towards the end of October in France, and the regional lockdowns in Italy had a greater effect on the economic activity of these two countries, as it contracted once again at the end of the year (–1.3% and –2.0% respectively).

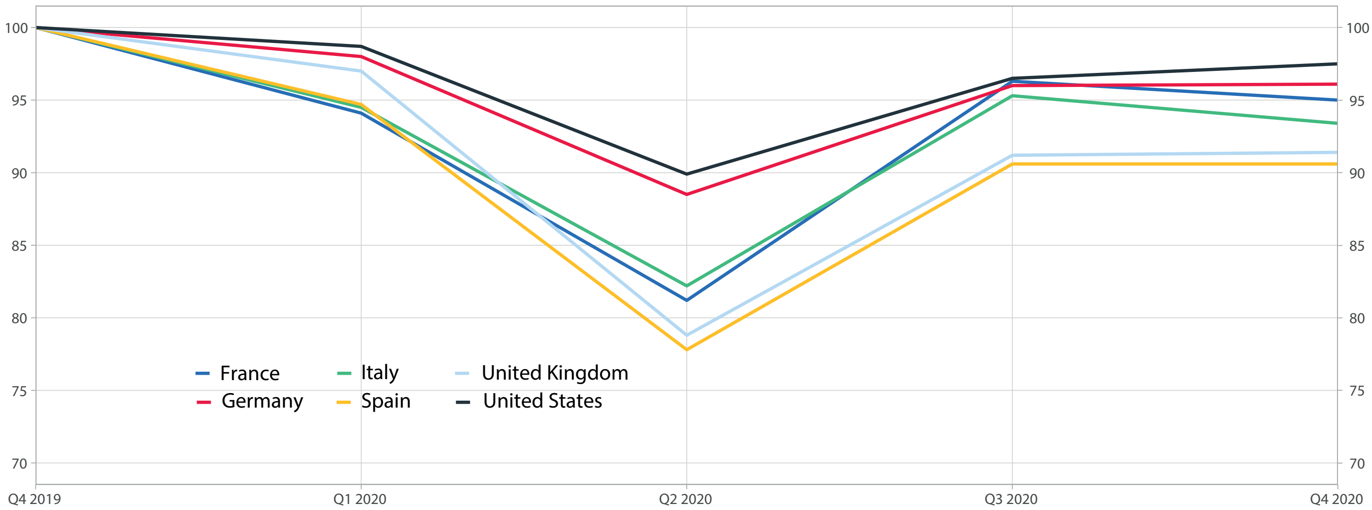
In Germany, activity slowed sharply after the rebound in Q3 (+0.1% after +8.5%) and GDP remained at 3.9% below its level of a year ago. According to Destatis, private consumption was particularly hard hit, partly as a result of the lockdown put in place in mid-December, while exports of goods and investments in construction supported the economy. On average over 2020, German activity fell by 5.3% (after +0.6% in 2019).

As in Germany, growth in Spain slowed sharply compared to Q3 (+0.4% after +16.4%). Activity was supported by consumption, whether by households or general government, but was slowed by foreign trade and investment. GDP in Spain remained below its pre-crisis level (–9.1% year-on-year) and over the whole of 2020 it was down by 11.0%.

In Italy, activity contracted by 2.0% in Q4 2020 after a sizeable rebound in the summer (+15.9%). This decline stems from the downturn in both domestic demand and foreign trade. GDP was 6.6% below Q4 2019 and across 2020, it contracted by 8.9%.

In the United Kingdom, the first estimate of end-of-year growth in 2020 is not yet available. However, the monthly GDP indicator released by the ONS decreased by 2.6% in November (after rising +0.6% in October), penalised by the November lockdown in England. One month from the end of the year, activity was therefore at 8.3% below its pre-crisis level (Q4 2019). Nevertheless, this decline resulted in a slightly positive growth overhang (+0.3%) in Q4 2020. The balances of opinion obtained by IHS Markit revealed an improving

► 1. Agents' accounts are not yet available for the last quarter of 2020.
on the basis of 100 in the Q4 2019



Note: for the United Kingdom, the last point is a growth overhang in the second month (as growth for December and hence for the whole of Q4 is not yet available).
Source: INSEE, Destatis, Istat, INE, ONS, BEA

short-term outlook in December, when lockdown restrictions in the United Kingdom were gradually lifted (49.4 after 47.6 for services, 57.5 for the manufacturing sector). British activity benefitted in particular from effects of inventories, in anticipation of *Brexit*.

Economic recovery was also slowed in the United States (+1.0% after +7.5%). The loss of activity in Q2 (–9.0%) was thus only partially offset (–2.5% year-on-year in Q4, –3.5% across the whole of 2020). Investment made a strong contribution to this growth, both by households (+4.3%, contributing 0.8 points) and businesses (+3.3%, contributing 0.4 points). The main driver behind the upswing in Q3, private consumption, was also held back by the intensification of the epidemic in Q4 (+1.0% after +8.9%) and is still below its pre-crisis level (–2.6% year-on-year).

During the first wave of the epidemic and at the height of the crisis (in April), industrial output plummeted in the different countries by between 17% (in the United States) and 42% (in Italy) below their pre-crisis level (► **Figure 2**). The shock was particularly strong in countries where production in certain branches came to a virtual standstill (in France, Italy and Spain[1]). However, the industrial production index picked up from May in all of the main western economies and this recovery continued, at different rates depending on the country, until the end of the summer. German industry in particular recovered more slowly than that of other countries due to the automobile and machinery and equipment sectors. They usually drive industrial production, but remained worse affected than the other sectors after the first lockdown. From August onwards, –with the exception of Italy, where the production index exceeded its pre-crisis level (+1.9%) before declining once again– the recovery of industrial production slowed in the major western economies. In November, the indices of total industrial production in France, Italy, Spain and, to a lesser extent, the United Kingdom were once again quite far from their pre-crisis level (–0.9%, –1.4%, –0.6% and –0.1% respectively, reductions out of all proportion to those in the spring), while these indices continued to make slow progress in Germany and the United States (+0.8% and +0.4% respectively). Thus in November 2020, industrial production settled at about 3% below its pre-crisis level in the Eurozone and around 5% in the United Kingdom and the United States. In December, the level of the US production index was only 3.5% below its level at the end of 2019.

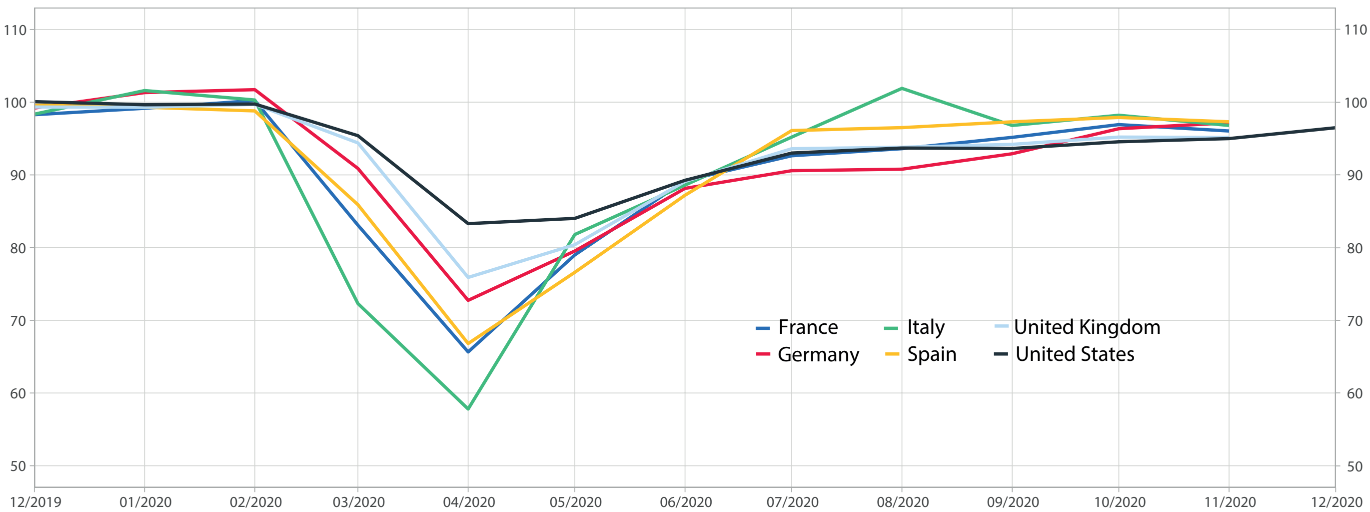
Although activity was slowed, China nevertheless continued its economic development in 2020

Despite the appearance of the pandemic on its territory, China is an exception among the G20 countries as its economic activity increased in 2020 (+1.9% for annual GDP). In fact, after the shock of Q1 (–10.1% as a quarterly variation) came a sharp rebound (+12.0% in Q2) which continued into H2 (+1.7% then +3.8% for the last two quarters respectively). In Q4, economic activity increased by 6.2% year-on-year compared to Q4 2019.

1 See the Focus on the effects of the health crisis on the European regions in Economic Outlook of 8 September 2020.

► 2. Industrial production in the main western economies continued its slow recovery but remained below its pre-crisis level at the end of 2020

on the basis of 100 in the Q4 2019



Note: The index studied here includes extractive industries, manufacturing industry and the supply of electricity, gas, steam and air conditioning.
Source: Eurostat, BEA

This economic rebound concerned production more than domestic consumption. Unlike the western economies, industrial production very quickly wiped out the traces of the health crisis, regaining a positive year-on-year change in April (► **Figure 3**) and improving over the whole year by 2.8% compared to 2019. The upturn in production notably benefited from strong exports of medical and electronic equipment to western countries (+18% in December year-on-year), as demonstrated by a record trade surplus in 2020 despite the ongoing trade war with the United States.

Household consumption, on the other hand, experienced a more sluggish recovery, like retail sales, where the year-on-year change only became positive once again in August (► **Figure 3**) and which appear overall to be down 3.9% across the year.

2020 ends with a deteriorating employment market

Affecting the functioning of several economic sectors as it did, the epidemic crisis exerted considerable pressure on the labour markets of the different economies. The latest available estimates, covering September, November or December depending on the country, show significant job losses, although limited in the different countries by the support measures in place.

In France, payroll employment at the end of September stood at almost 300,000 jobs below its level at the end of 2019, with an unemployment rate in Q3 reaching 9.0% of the active population. The short-time activity scheme enabled companies to retain many workers, resulting in a much smaller drop in employment than in activity (*Economic Outlook* of 15 December 2020).

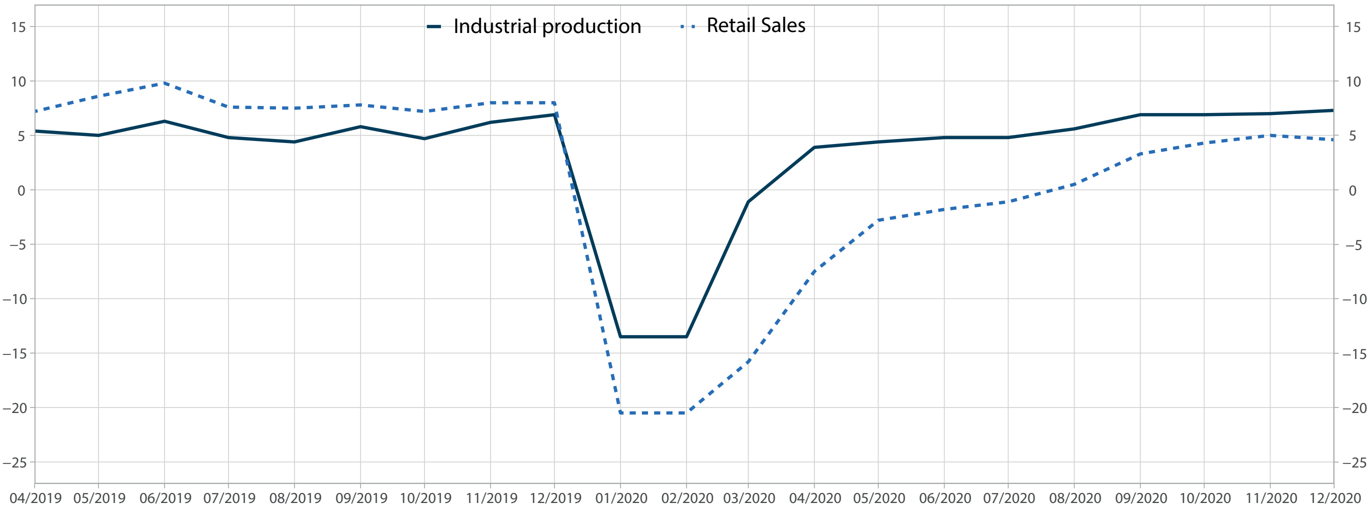
In Germany, the number of jobs lost between March and December, as estimated by Destatis, rose to 743,000. Since May, the number of people in employment has levelled off: in December, it remained 1.6% below its pre-crisis level. However, the massive use of short-time working has succeeded in slowing the number of layoffs: according to the federal employment agency, the number of people on short-time working rose to 17.9% of employees subject to social contributions at the height of the crisis (in April), then declined gradually over the rest of the year and settled in October at the still high level of 6.7%. However, in Q4, the unemployment rate reached 4.6%, its highest level since 2015.

The Italian economy lost 541,000 jobs between February and June, before picking up slightly until November (+241,000 since June). Despite this increase, employment remains below its pre-crisis level (–390,000 compared to November 2019). In Spain, after more than a million job destructions in Q2, the labour market recovered part of its losses (+569,000 in Q3). The recovery was more tenuous in Q4 (+168,000). Thus the level of employment remains lower than before the crisis (–220,000 in Q4 2020 compared to Q4 2019).

The number of UK jobs lost between March and November is estimated at 819,000 by the ONS and the employment rate fell 1.3 points between the end of 2019 and November. As in the aforementioned countries, the short-time working scheme, which was extended until March 2021 before the second wave of

► 3. In China, the epidemic crisis affected retail sales more than industrial production in 2020

year-on-year change



How to read it: in March 2020, industrial production (or retail sales) was down 1.1% (or 15.8%) compared to its March 2019 level.
Note: since the NBSC published an index of industrial production and growth in retail sales for January and February combined at –13.5% and –20.5% respectively year-on-year, here we assume a drop in these values in both January and February compared to 2019.
Source: NBSC

the epidemic, helped to prevent unemployment from exploding. The unemployment rate reached 5.1% in November, 1.2 points higher than a year earlier. Over the September-November period, the number of hours worked remained a long way from its pre-crisis level (–6.8% compared to Q4 2019).

In the United States, employment varied in 2020 in unprecedented proportions: March and April were notable for the loss of 22 million jobs, half of which were recovered between May and November (+12.4 million). However, this trend was reversed in December (–140,000 jobs), mainly due to the resurgence of the epidemic affecting the leisure and accommodation sector (–498,000 jobs). The crisis contributed to increasing the number of long-term unemployed (4.0 million in December) and the number of people laid off permanently (3.4 million), making employment one of the priorities of the new President's recovery plan, with a strengthening of unemployment insurance and the short-time working scheme, which remains virtually unused.

In 2020, budget support measures severely limited the decline in household and corporate income

Through its impact on activity, the health crisis greatly reduced the global income of national economic agents: cumulated over the first three quarters of 2020, the losses in disposable income of households, businesses and general government (as a deviation from the average in 2019) were 5.0% in Germany, 5.7% in France and as much as 9.2% in Spain. With the exception of Spain, these losses were not distributed evenly among households,[2] businesses and general government. Most of the loss was borne by general government, due to the numerous budget support measures taken by governments to avoid too many job losses and bankruptcies. These measures mainly consisted in setting up short-time working compensation or subsidies paid to businesses whose activity was restricted. As more resources filtered down, businesses and households experienced a more moderate drop in income, with households even seeing an increase in disposable income compared to 2019 (in Germany and the United Kingdom).

Likewise in the United States, the extent of budget support, especially aid to households and unemployment insurance, increased gross household disposable income by +7.2% in 2020.[3] However, in the European countries, situations were varied ((► **Figure 4**). In Italy and Spain, income losses by economic agents were around 9% over the first three quarters of 2020,[4] particularly in connection with the more severe drop in activity that these countries experienced in Q2 (severity of restrictive measures and greater dependence on tourism). The distribution of these losses appears to be relatively uniform in Spain, whereas in Italy, general

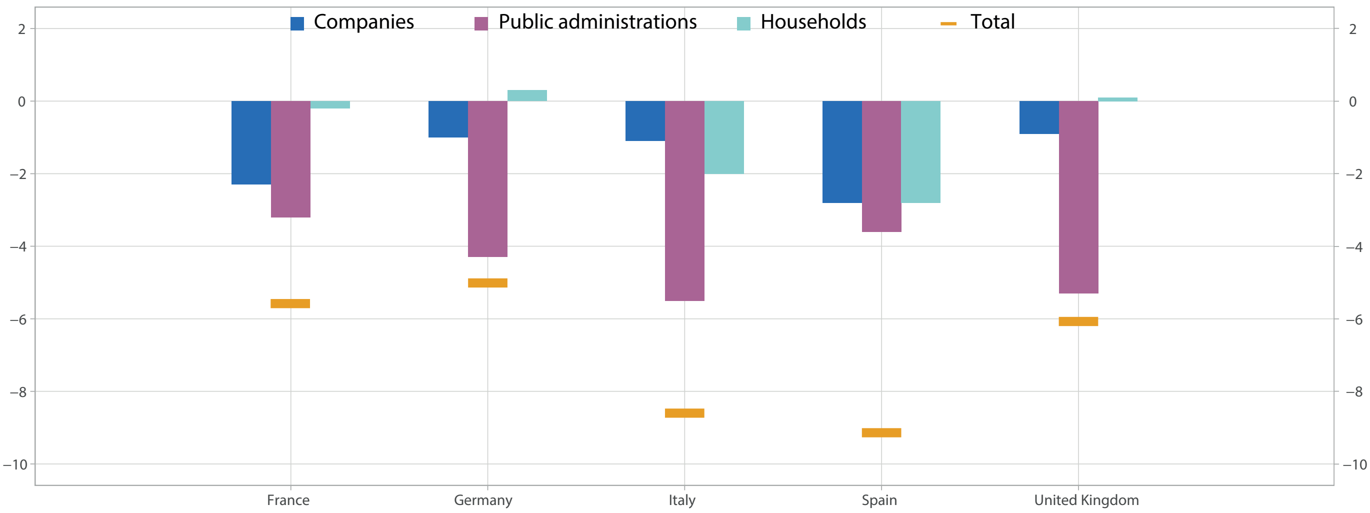
2 In this analysis, households also include non-profit institutions serving households (NPISH) except for France where this distinction is made by the quarterly national accounts.

3 Because the American and European accounts are constructed differently, this study is devoted exclusively to European countries.

4 Agents' accounts are not yet available for the last quarter of 2020.

► 4. General government withstood the shock better than other institutional sectors, except in Spain

difference by institutional sector between cumulated GDI for the first three quarters of 2020 and average GDI in 2019, in points of GDI 2019



Note: except for France, households also include non-profit institutions serving households (NPISH).
Source: INSEE, Destatis, Istat, INE, ONS

government has borne a large share of overall loss and businesses have been preserved above households. In France, Germany and the United Kingdom, while the administration has borne a great majority of the overall loss of income, as in Italy, households have been particularly well protected.

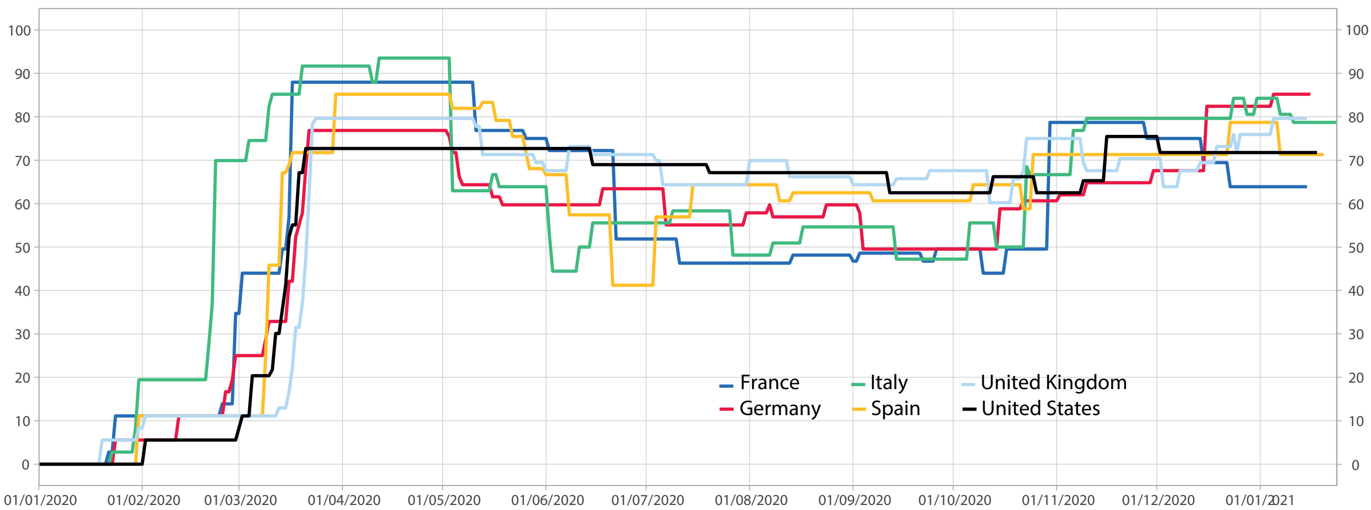
With health measures intensifying in January, activity looks set to be worse affected in Europe than in the United States

In most of the main western countries, the health situation deteriorated in December, leading to a tightening of health measures, as reflected in the Oxford Stringency Index, which synthesises the degree of strictness of measures put in place in the different countries ((► **Figure 5**). In Germany, a lockdown was declared in mid-December, then strengthened on 5 January with new restrictions on movement, with the result that the Oxford Stringency Index was higher than during the first lockdown. Significant restrictive measures are also in force across the Channel: the four UK nations have been in lockdown since 4 January, after a sudden rise in the number of daily new cases in late December linked to the appearance of a variant of the virus (more than 50,000 cases daily between 29 December and 10 January), all this despite the vaccination campaign getting off to a faster start than elsewhere in Europe. As in Germany, the accommodation-catering sector is at a standstill and schools and "non-essential" businesses are closed.

In France, despite the earlier nationwide curfew at 6pm since 16 January, the Oxford Stringency Index shows that containment measures at this stage are less strict than elsewhere in Europe. In Spain, restrictions are decided at local level: cultural activities and mobility are limited, but less so than in France, and restaurants remain open under certain conditions in some regions. In Italy, where restrictions also vary by region, the situation is tending to improve: during the second half of January the majority of regions were classified as orange, or even red in the case of four regions, meaning that restaurants and "non-essential" businesses must close, but now only four regions are still classified as orange.

Finally, in the United States, the epidemic is particularly virulent in California and Texas, reaching record levels in January with more than 200,000 cases daily, before declining slightly at the end of the month. To the local measures, like the lockdown in California or the curfew in

► 5. The Oxford Stringency Index shows a deteriorating health situation since late December



Note: this index identifies and combines in a single indicator all restrictive health measures, such as restrictions on movement and the closure of businesses, administrations and schools. The last point is between 15 and 24 January, depending on the country.
Source: Hale, T., Webster, S., Petherick, A., Phillips, T., et Kira, B. (2020). Oxford COVID-19 Government Response Tracker, Blavatnik School of Government

Ohio, a federal response must now be added, led by the new President's administration, as well as the start of a massive campaign to vaccinate the population.

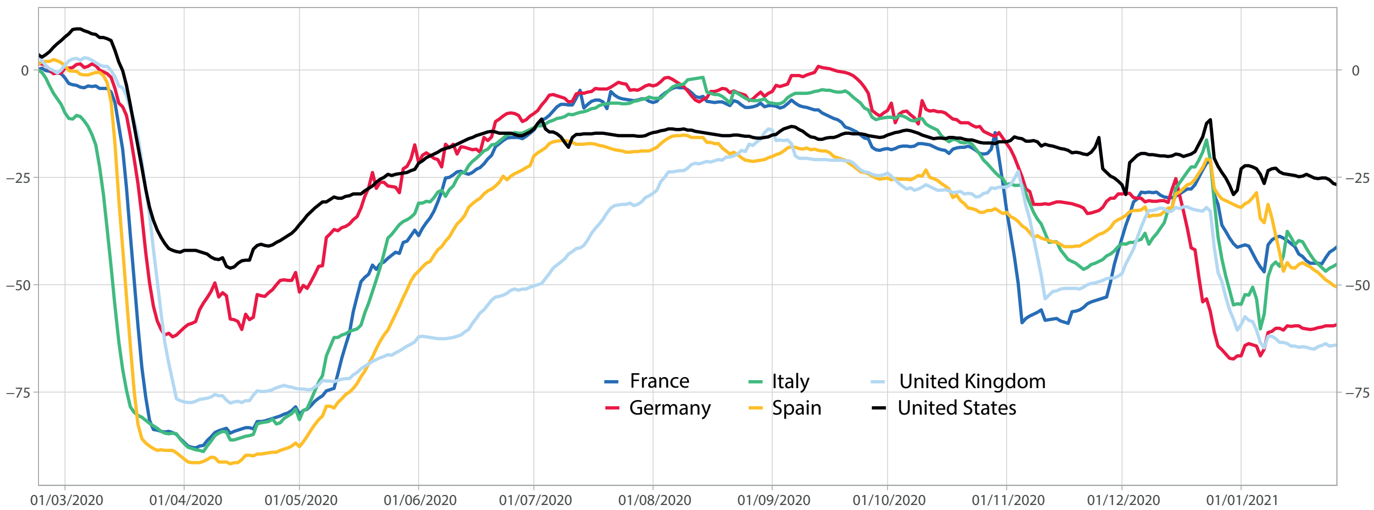
In line with the intensification of health measures, economic activity seems to be deteriorating in Europe, except for Italy: PMIs for January declined slightly in France and Germany, and more severely in Spain and the United Kingdom, but in smaller proportions than during the first wave of the epidemic. The services branch remains particularly affected: in January, the flash UK PMI lost practically 10 points and was well below its expansion threshold (39.5 after 49.4) and the index for Spain contracted by 6.3 points to 41.7. The indices for France and Germany also fell below their expansion threshold (–1.8 points to 47.3 and –0.3 points to 46.7 respectively). In Italy, on the contrary, the services PMI increased by 5 points to 44.7 after two months below 40 points. In the manufacturing branch, PMIs for the main European countries remained above their expansion threshold in January (57.1, 51.6, 54.1 and 55.1 in Germany, France, the United Kingdom and Italy respectively), with the exception of Spain, whose index dropped to 49.3. On the other side of the Atlantic, the upturn in economic activity continued in the United States in January: in the manufacturing branch, the PMI reached 59.2 (after 57.1 in December), its highest level historically; and in services, it stood at 58.3 (after 54.8).

"High-frequency" indicators reflect the effects of tightening restrictive measures at the start of 2021 in the different countries

The deterioration in the health situation is once again affecting consumption behaviour in Europe. In all the countries monitored here, the Google Maps Mobility indicator predictably shows a peak in the frequency of trips to retail stores before Christmas, then a sharp drop on the following days (**Figure 6**). In addition to this seasonal effect, which cannot be corrected with the data provided by Google, we see a decline in trips to retail stores, especially in Germany and the United Kingdom. In these two countries under lockdown, according to this indicator, numbers of trips to shops in January are likely to be at less than half of the pre-crisis level. In France, Italy and Spain, numbers going to retail stores appear to be less than before the crisis. The United States seems to be the country where consumption behaviour concerning goods is expected to be least affected by the resurgence of the epidemic.

► 6. The deterioration in the health situation affects consumption behaviour, especially in Germany and the United Kingdom

in %



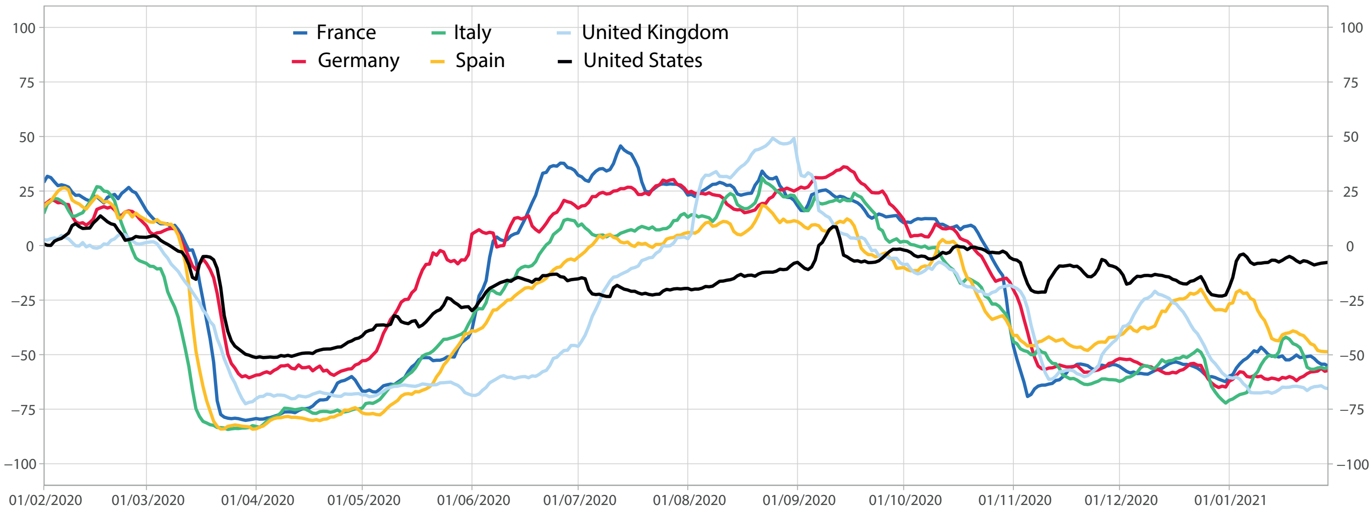
How to read it: visits to non-food retail outlets and leisure venues in Germany on 11 January were 60% down as a 7-day moving average compared to the median value calculated by Google between 3 January and 6 February 2020.
Note: the date of the last point is 26 January 2021.
Source: Google Maps Mobility

In addition, the number of *Google* searches for the word "restaurant" illustrates the low demand in the catering sector (**Figure 7**): since December, the situation in this sector appears to have deteriorated significantly in the United Kingdom, Germany and France, since only takeaway services are offered. In Spain, after experiencing an upturn during the holiday period with the opening of restaurants in some regions, searches associated with catering plummeted again in January. Lastly, in the United States, searches for restaurants did not decline in January, remaining similar to their pre-crisis level.

In general, mobility is once again strongly affected by the health crisis. The Google Maps Mobility indicator for numbers of people taking public transport shows a partial recovery of mobility after the holidays (**Figure 8**). Use of public transport seems to be affected slightly less in France, Spain and the United States than in the other countries considered: it increased hardly at all in the United Kingdom after the holidays and remains at about half of its pre-crisis level in Germany and Italy. The situation regarding travel to the workplace has also deteriorated in the United Kingdom, given the lockdown put in place on 4 January

►7. In early January searches associated with the word "restaurant" were half as frequent as before the crisis in most countries

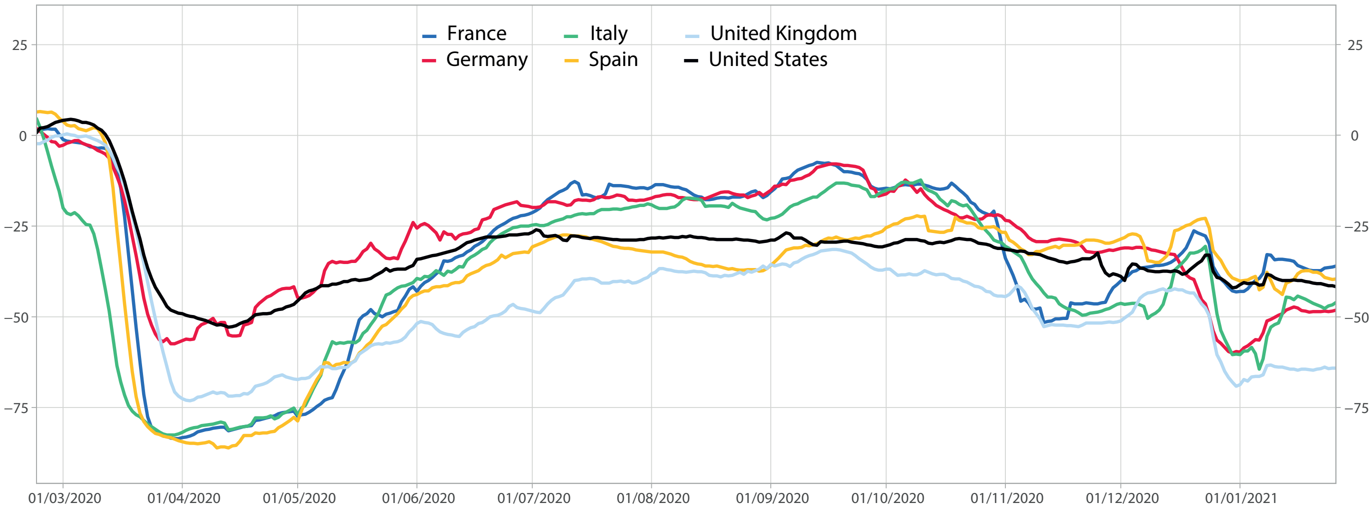
in %



How to read it: on 15 January, the 7-day moving average of the number of searches for "restaurant" on Google in France was half that of the average of the 7-day moving averages for 15 January between 2016 and 2019.
Note: the date of the last point is 26 January 2021.
Source: Google Trends

► 8. Public transport use nosedived after Christmas, picking up only tentatively in January

in %

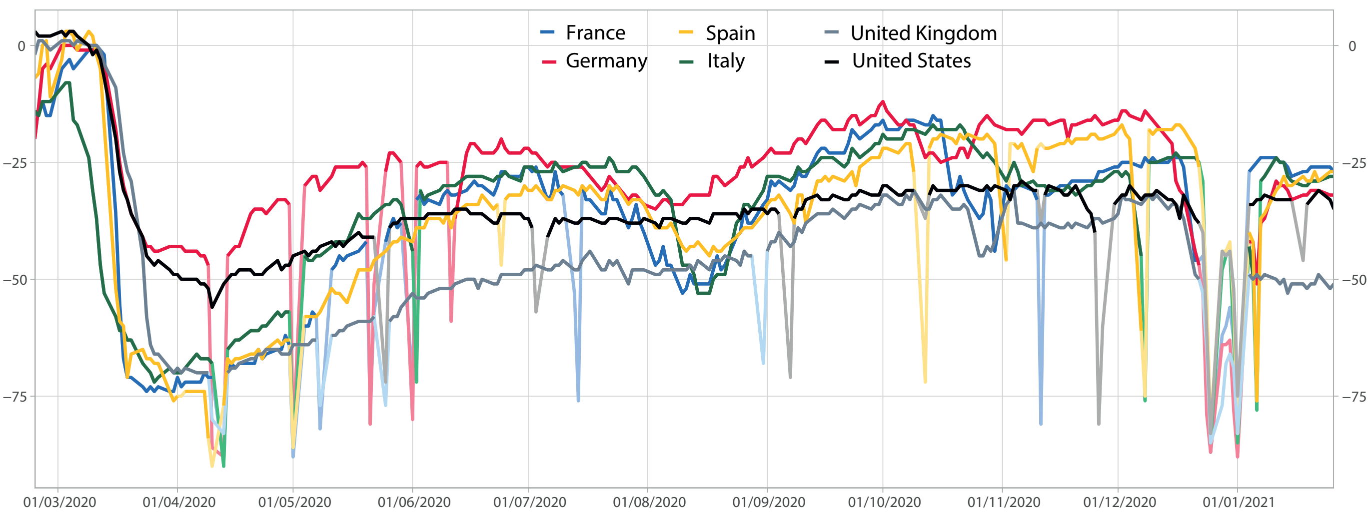


How to read it: public transport use in Germany and Italy on 11 January was 60% down as a 7-day moving average compared to the median value calculated by Google between 3 January and 6 February 2020.
Note: the date of the last point is 26 January 2021.
Source: Google Maps Mobility

(**Figure 9**): after the Christmas holiday period, numbers in the workplace recovered, notably in France, Italy and the United States, where it reached similar levels to those achieved in December. In January, the upturn in mobility associated with work was affected more by the health situation in Spain and Germany.

► 9. After Christmas, travel to the workplace picked up only partially in January

in %



How to read it: frequency of travel to the workplace in the United Kingdom on 13 November was 50% less compared to the median value calculated by Google between 3 January and 6 February 2020.
Note: in contrast to the other graphs showing "high-frequency" indicators, the methodology used for this indicator is not based on a moving average (in order to observe the effects of measurements exactly to the day) but public holidays, which can cause problems when analysing travel to the workplace, are shown in paler colours. The date of the last point is 26 January 2021.
Source: Google Maps Mobility

The unprecedented nature of the health crisis has altered the relationship between activity and investment, probably only temporarily

In 2020, the health and economic crisis resulted in a fall in investment in all European countries and in the United States. This decline started in Q1, especially in those countries most affected by the epidemic (–10.5% in France, –7.6% in Italy) and continued into Q2: compared to Q4 2019, investment tumbled by 23.4% in France, 7.0% in Germany, 24.5% in Spain, 23.2% in Italy, 23.5% in the United Kingdom and 8.9% in the United States. It then rebounded in Q3 but remained below its pre-crisis level, apart from Italy.

The accelerator effect refers to the relationship observed from the early 20th century linking the variation in economic activity with that in investment. In fact, these two quantities usually move in the same direction, with variations in investment usually greater than variations in GDP. For example, between 2000 and 2019 in the western economies, there was indeed a greater range of variations in investment compared to variations in GDP (► **Figure 10**), both during periods of acceleration or slowdown in GDP and during the 2008 crisis.

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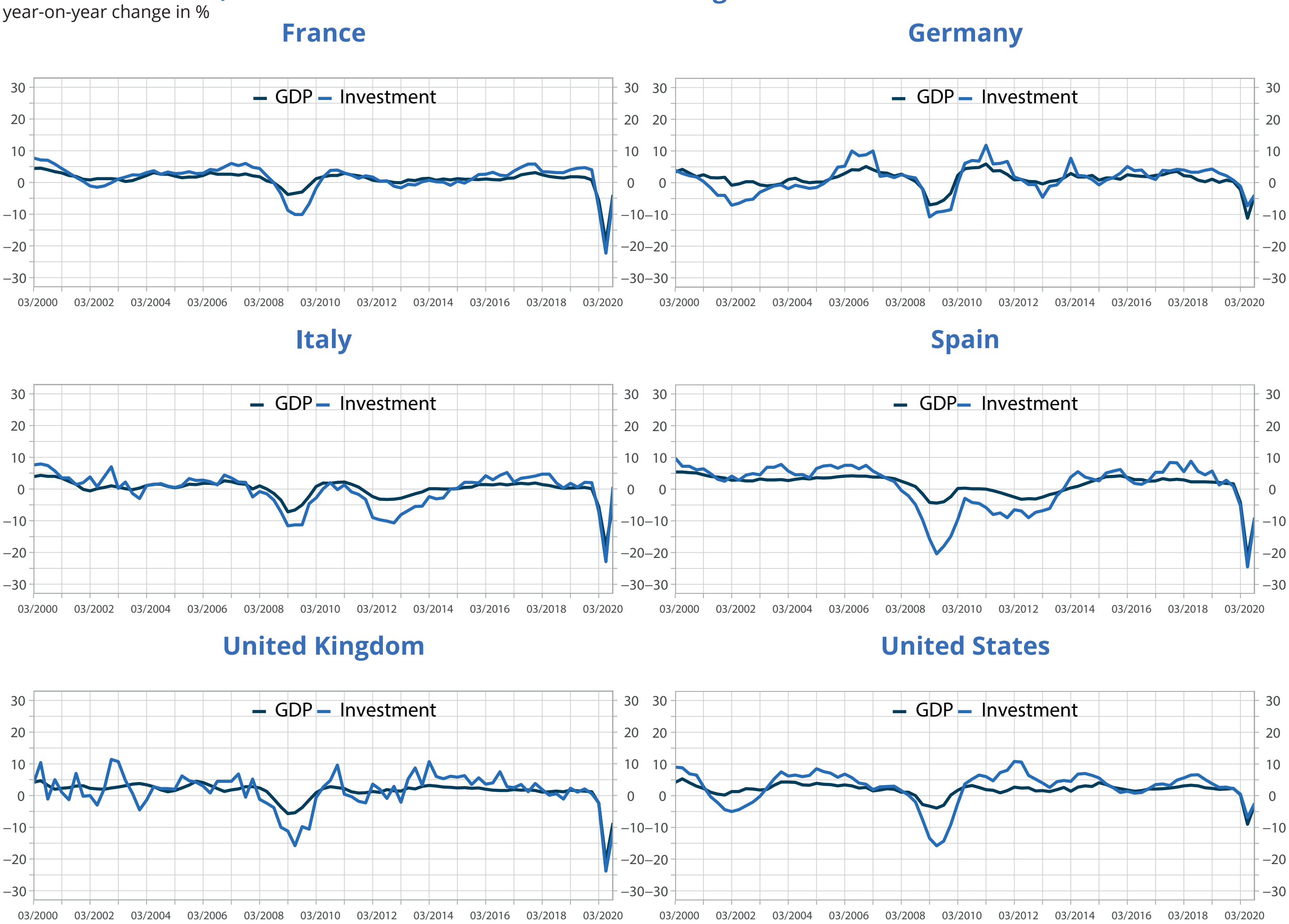
► 10. Before 2020, variations in investment were on a larger scale than variations in GDP

year-on-year change in %



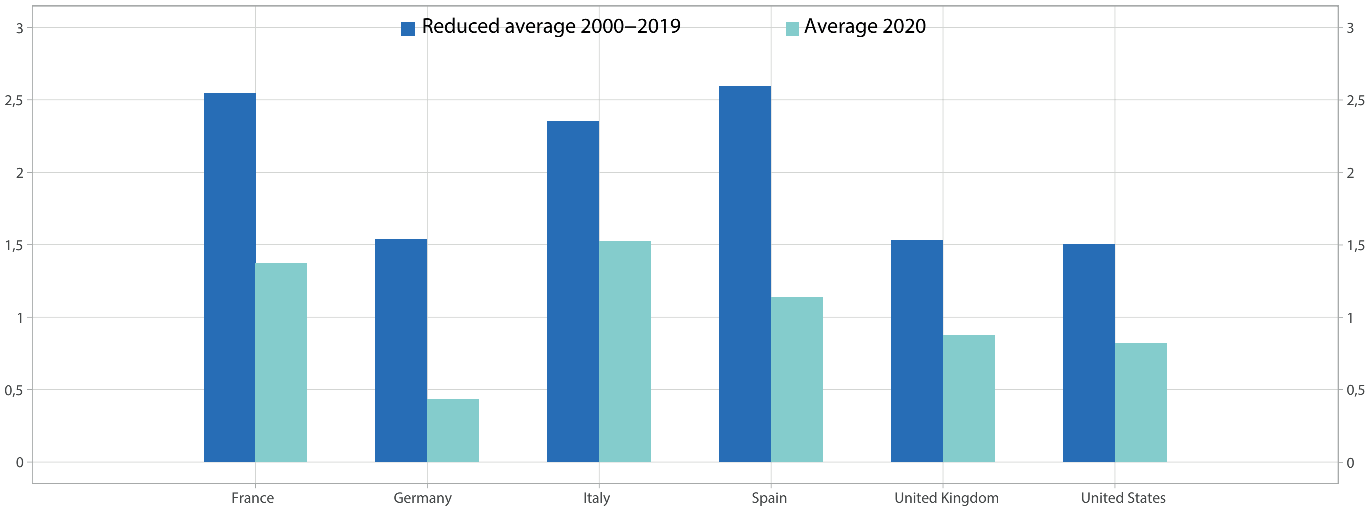
Source: INSEE, Destatis, Istat, INE, ONS, BEA port

However, the coronavirus crisis has called this empirical fact into question, probably only temporarily: in 2020, in the major western economies, variations in investment were on a similar scale to those in activity year-on-year. This difference in investment behaviour can be quantified by considering the coefficient of elasticity of investment with respect to activity: this is the ratio of the quarterly variation in investment to that in GDP (► **Figure 11**). The average of this elasticity over the period 2000-2019[1] is then compared to its average over the first three quarters of 2020, as data for Q4 are not yet all available. In accordance with the observations made in the preceding figures, the elasticity of investment compared to activity appears to have declined during the health crisis in all the countries under consideration: it was virtually halved in France, the United Kingdom and the United States, more than halved in Spain and almost divided by 4 in Germany. Even in Italy, where this ratio remains high, it declined sharply compared to the previous period.

This small-scale drop in investment, compared to what could have resulted from such variations in GDP, does not seem to be able to be explained by the possibly greater momentum of one of its components. For example, in France, the decline in investment in Q2 (–14.4%) concerned not only households (–17.6%, contribution of –3.7 points), but also companies (–13.0%, contribution of –8.1 points) and general government (–13.0%, contribution of –2.0 points). Similarly, in the United States, the decline in investment in Q2 (–7.1%) was due both to the fall in household investment (contribution of –4.0 points) and corporate investment (contribution of –3.0 points), while the momentum of public investment is not enough to explain this closeness to loss of activity (contribution of –0.03 points). This blurring of the relationship between activity and investment, specific to the current health crisis, complicates the traditional forecasting exercise which is usually based on economic theory and on empirical consistency estimated over a long period. ●

1 Over the period 2000-2019, we consider the elasticity average from which we have trimmed 10% of extreme values to avoid cases where a very weak variation in GDP results in an extremely large ratio, which would not make economic sense.

► 11. In 2020, elasticity of investment compared to activity declined



Note: to construct the trimmed mean, for each quarter between 2000 and 2019 we consider the ratio "quarterly variation in investment/quarterly variation in GDP", excluding the eight quarters (10%) corresponding to the four minimum and four maximum values in this set. We then take the mean of the ratio for the remaining quarters. For 2020, the mean covers the first three quarters as data for Q4 are not yet all available.
Source: INSEE, Destatis, Istat, INE, ONS, BEA