

# Recovery, but with constraints

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## Economic outlook



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# Recovery, but with constraints

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## Recovery, but with constraints

The global economic recovery continues, but the key areas for vigilance, whether inflationary tensions or increased uncertainty over the health situation, are becoming more prominent. The US economy rebounded faster than that of the Eurozone as a result of even more massive fiscal support, but it is now experiencing the downside with higher inflation. In China, recovery has been held in check, in contrast to the United States, by sluggish domestic demand and a more restrictive health strategy. In the United Kingdom, the rise in hiring difficulties – which most western countries are experiencing – has been accentuated by *Brexit*, and foreign trade remains very poor.

In the main Eurozone economies, recovery was strong over the summer. Overall, France was back to its pre-crisis level of activity (Q4 2019) from Q3 2021, while GDP in Germany and Italy came close, to within about 1 point. In Spain, the economy has remained more restricted, at more than 6 points below its pre-crisis level. The latest business tendency surveys remain favourable overall in Europe, although some of the data were collected before the resurgence in health concerns. By the end of the year, growth is expected to slow in most countries. The potential for catch-up has certainly lessened now (except in Spain) and supply chain difficulties, which have so often been flagged in surveys, continue to hamper industry. In addition, uncertainty over the health situation is likely to delay the continuing recovery in some services, as suggested by the data from search engine queries.

This edition of the *Economic Outlook* includes forecasts for France up to Q2 2022, assuming that by then, health restrictions are unlikely to be tightened further and will have only a peripheral effect on the momentum of recovery at macroeconomic level, and that supply chain difficulties will persist to some extent, dissipating only slowly. In this context, the rebound in the French economy looks set to continue, at a rate of +0.5% in Q4 2021, +0.4% in Q1 2022 and +0.5% in Q2. In spring 2022, French GDP is expected to be 1.4% above its pre-crisis level. The mid-year carry-over effect (i.e. the annual growth rate that would be obtained for 2022 if economic activity in Q3 and Q4 were to remain frozen at the level forecast for Q2) is expected to be 3.0% (after GDP growth of +6.7% as an annual average in 2021).

Growth in France is likely to be driven mainly by market services, and to a lesser extent by industry. The rebound in some services that were severely affected in 2020-2021 by the measures taken to contain the epidemic, such as international tourism, is likely to remain uncertain due to the health context. Household consumption is expected to return to its pre-crisis level in H1 2022, while corporate investment, which has already exceeded its pre-crisis level, is likely to slow after its very sharp increase in 2021. While exports are expected to lag behind compared to pre-crisis, they should increase substantially in Q4 2021 then in Q2 2022 as a result of some major naval deliveries.

After a very strong rebound, employment should continue to improve, but at a slower pace, like economic activity in general. Thus, payroll employment is expected to rise by a little over 150,000 in H2 2021, then by 80,000 in H1 2022. The active population looks set to stabilise over the forecasting period, after its sharp rise this summer when the labour force participation rate reached an unprecedented level. The unemployment rate should fall to 7.8% of the active population in Q4 2021, then decline gradually in H1 2022 to 7.6%.

After standing at zero in December 2020, the year-on-year increase in consumer prices reached 2.8% in November 2021 in France, driven mainly by energy prices. This increase in inflation has affected all western countries, first and foremost the United States. Global demand for goods certainly rebounded strongly, although supply was still limited. In France, under the conventional assumption that fuel and commodities prices remain stable, inflation is expected to remain above 2.5% in H1 2022, but its composition will change slightly: the contribution of energy is likely to decline, whereas that of manufactured products is expected to increase, reflecting with some delay the very sharp rise in production prices in industry (+14% year-on-year in October 2021). Indeed, in the business tendency surveys, balances of opinion on expected prices are at their highest in several sectors, including industry.

Given this situation, nominal wages are expected to be relatively dynamic, but their increase in real terms looks set to be more restrained. The purchasing power of households' gross disposable income is expected to fluctuate from quarter to quarter, driven by both rising consumer prices and the timing of income support measures. After stability in Q3 2021, purchasing power per consumption unit is likely to increase in Q4 2021, affected by the "inflation indemnity" among other things, before falling back automatically in reaction in Q1 2022, then rebounding slightly in Q2. Given the expected change in consumption, the household savings ratio, which was very high during the periods of lockdown, is likely to drop back to 16% by mid-2022, still a little higher than before the crisis (15%).

Thus the short-term situation remains unusual in many respects, and there are several uncertainties that may affect the forecast, which could go up or down. Economic activity may be more resistant now to a resurgence of Covid-19, but the fifth wave of the epidemic and the appearance of a new and dangerous variant which is still not properly understood will only serve to heighten uncertainty. Supply chain constraints emerged very early in the recovery: a possible normalisation of the health situation, especially in Asia, could help reduce them. At the same time, inflationary tensions, especially in the United States, raise the question of the timing of monetary policy tightening. And finally, consumption could prove to be more dynamic than expected if households were to draw on some of the savings they accumulated during the lockdowns. ●

# French economic outlook



# Synthesis France

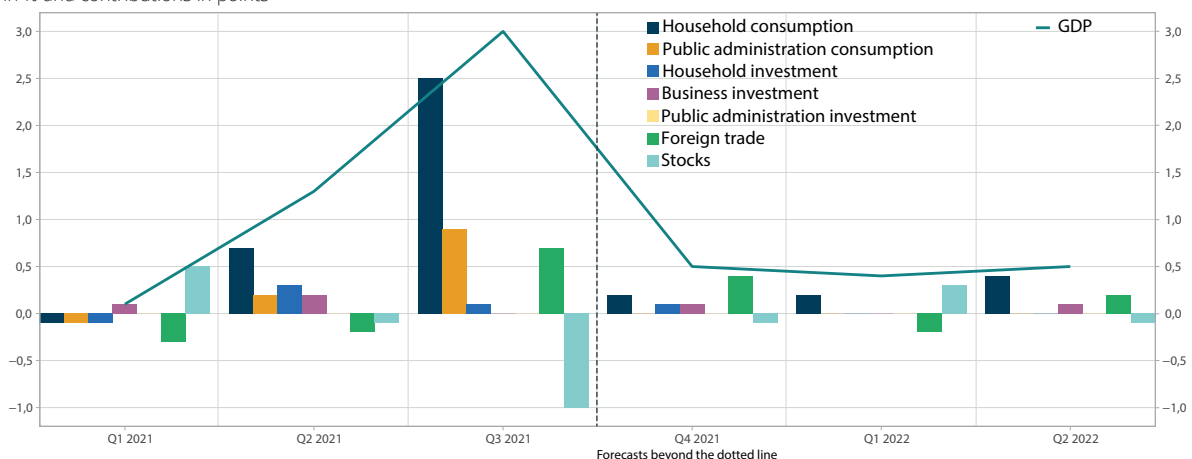
In Q3 2021, strong growth in activity (+3.0%) was mainly driven by the increase in consumption (+4.9%), after Q2 had been affected to some extent by health restrictions. Government consumption was also dynamic, with education services returning to normal and the ongoing vaccination and testing campaigns. Foreign trade too had a positive impact on growth: the return of international tourism, although only partially, helped build momentum in exports, while imports increased only slightly, especially with regard to domestic demand. Both domestic and foreign demand have therefore increased more sharply than resources (domestic production and imports), suggesting a strong destocking trend.

In Q4 2021, household consumption is expected to slow after its vigorous catch-up in the previous quarter. Once again, it will probably be driven by sectors previously affected by the restrictions (accommodation-catering, transport services, services to households, etc.). In other sectors any increase is likely to be nearer the trend rate, or may even decline (limited increase in electronic equipment, drop in vehicle purchases). Government consumption is expected to be virtually stable. Meanwhile, investment is likely to increase moderately, with supply chain problems hampering investment mainly by non-financial enterprises in manufactured products and that of general government in construction. The contribution of foreign trade should remain slightly positive, with exports more dynamic than imports, mainly due to naval deliveries. All in all, GDP looks set to increase by 0.5% in Q4, putting it 0.4% above its pre-crisis level (level in Q4 2019); this would represent annual growth of 6.7% compared to 2020 (after -8.0%).

In H1 2022, all components of domestic demand are expected to accelerate slightly. Household consumption should continue to catch up in those sectors that are still below their pre-crisis level. Government consumption is likely to rise slightly in Q1, driven by testing and vaccinations, and investment is expected to increase moderately, in a context where supply chain difficulties are slow to dissipate. The contribution of foreign trade looks set to be zero overall, with exports boosted in Q2 by another major delivery of naval equipment, while imports evolve in line with domestic demand. All in all, GDP is likely to rise by 0.4% in Q1 –a slight slowdown in a situation made even more uncertain by the resurgence of the epidemic in Europe, which is likely to affect the behaviour of economic agents, even if no new restrictions are put in place– then by 0.5% in Q2. The carry-over effect for 2022 –i.e. the annual growth that would be observed if GDP were stable in Q3 and Q4– is expected to be 3.0%. ●

## ► 1. Quarterly variations in GDP and contributions of main demand items

variations in % and contributions in points



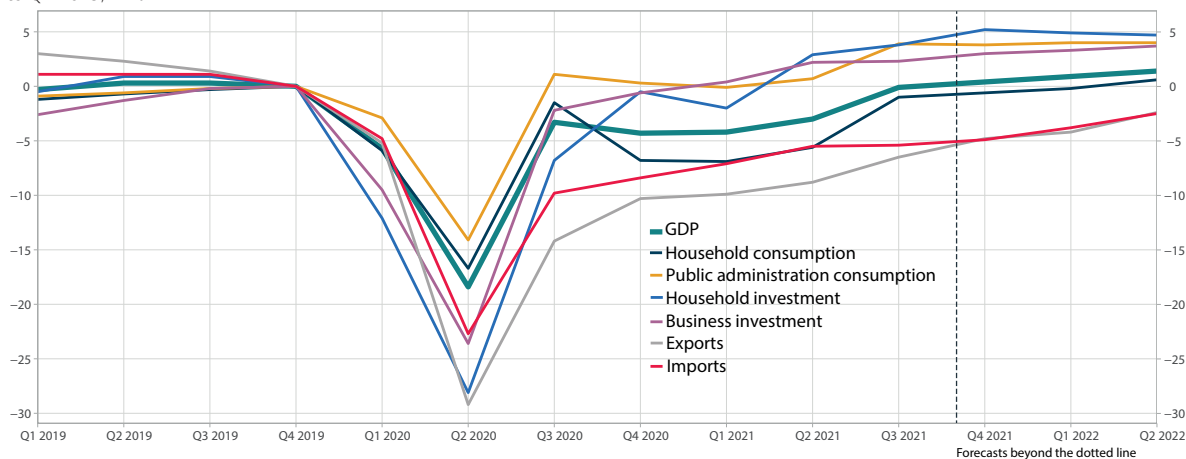
How to read it: in Q4 2021, GDP is expected to increase by 0.5% compared to T3 2021; the contribution of household consumption is expected to be 0.2 points.

Source: INSEE calculations from various sources

# French economic outlook

## ► 2. Changes in GDP, imports and main demand items compared to pre-crisis

difference to Q4 2019, in %

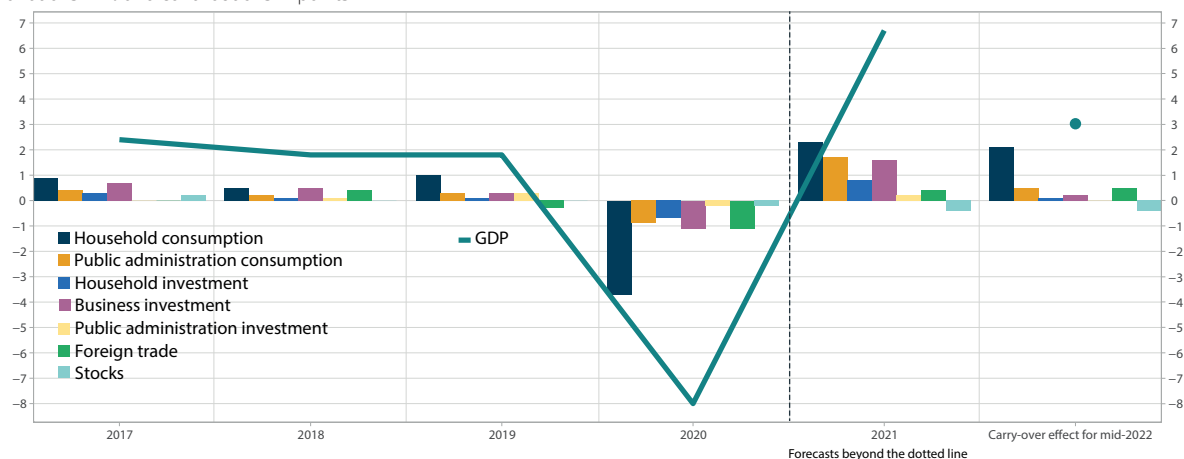


How to read it: in Q4 2021, household consumption would be 0.6% below its level in Q4 2019.

Source: INSEE calculations from various sources

## ► 3. Annual variations in GDP and contributions of main demand items

quarterly variations in % and contributions in points



How to read it: in 2021, GDP is expected to increase by 6.7% compared to 2020; the contribution of household consumption is expected to be 2.3 points.

Source: INSEE calculations from various sources

## ► 4. Goods and services: resources-uses balance at chain-linked prices for the previous year, in quarterly and annual change

changes Q/Q-1 (in %), seasonally adjusted data - YTD

	2020				2021				2022		2020	2021	2022 ovhg
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2			
<b>Gross domestic product</b>	<b>-5.7</b>	<b>-13.5</b>	<b>18.5</b>	<b>-1.1</b>	<b>0.1</b>	<b>1.3</b>	<b>3.0</b>	<b>0.5</b>	<b>0.4</b>	<b>0.5</b>	<b>-8.0</b>	<b>6.7</b>	<b>3.0</b>
Imports	-4.8	-18.8	16.6	1.5	1.5	1.6	0.1	0.6	1.2	1.3	-12.2	6.5	3.1
Total resources	-5.4	-14.7	17.9	-0.2	0.4	1.6	2.3	0.5	0.5	0.6	-8.9	7.0	3.0
Household consumption expenditure	-5.9	-11.5	18.3	-5.4	-0.2	1.4	4.9	0.3	0.4	0.8	-7.2	4.5	4.1
General government consumption expenditure**	-2.9	-11.5	17.7	-0.9	-0.3	0.8	3.2	-0.1	0.2	0.0	-3.5	6.2	1.9
of which individual general government expenditure	-4.1	-13.0	20.9	-1.7	-0.1	1.0	4.5	-0.2	0.2	-0.1	-4.9	7.6	2.4
of which collective general government expenditure	-0.7	-8.2	13.1	1.0	-0.9	0.0	-0.1	0.1	0.1	0.1	-0.1	3.8	0.2
Gross fixed capital formation (GFCF)	-9.5	-15.8	26.4	2.5	0.2	2.4	0.1	0.8	0.1	0.1	-8.9	11.7	1.4
of which Non-financial enterprises (NFE)	-9.5	-15.6	28.0	1.6	1.1	1.8	0.1	0.6	0.3	0.5	-8.1	12.1	1.6
Households	-12.1	-18.2	29.7	6.8	-1.6	5.1	0.9	1.3	-0.3	-0.2	-12.2	16.3	2.2
General government	-5.1	-12.2	18.3	0.6	-0.9	0.9	-1.1	0.5	-0.5	-0.8	-4.4	4.8	-1.0
Exports	-5.2	-25.3	21.2	4.6	0.4	1.2	2.5	1.8	0.7	1.9	-16.1	8.4	5.1
Contributions (in points)													
Domestic demand excluding inventory**	-6.0	-12.5	20.2	-2.5	-0.1	1.5	3.3	0.3	0.3	0.4	-6.7	6.7	2.9
Changes in inventories**	0.4	0.8	-2.3	0.6	0.5	-0.1	-1.0	-0.1	0.3	-0.1	-0.2	-0.4	-0.4
Foreign trade	-0.1	-1.8	0.6	0.8	-0.4	-0.2	0.7	0.3	-0.2	0.2	-1.1	0.4	0.5

■ Forecast

\* Consumption expenditure of general government and non-profit institutions serving households (NPISH)

\*\* Changes in inventories include acquisitions net of valuable items

How to read it: in Q4 2021, exports would increase by 1.8% compared to Q3 2021; the contribution of foreign trade to quarterly GDP growth would be 0.3 points

Source: INSEE calculations from various sources

## ► 5. Goods and services: resources-uses balance at chain-linked prices for the previous year, compared to pre-crisis

difference to Q4 2019, in %, seasonally adjusted data - YTD

	2020				2021				2022	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
<b>Gross domestic product</b>	<b>-5.7</b>	<b>-18.4</b>	<b>-3.3</b>	<b>-4.3</b>	<b>-4.2</b>	<b>-3.0</b>	<b>-0.1</b>	<b>0.4</b>	<b>0.9</b>	<b>1.4</b>
Imports	-4.8	-22.7	-9.8	-8.4	-7.1	-5.5	-5.4	-4.9	-3.8	-2.5
Total resources	-5.4	-19.3	-4.8	-5.0	-4.6	-3.2	-0.9	-0.4	0.2	0.8
Household consumption expenditure	-5.9	-16.7	-1.5	-6.8	-6.9	-5.6	-1.0	-0.6	-0.2	0.6
General government consumption expenditure**	-2.9	-14.1	1.1	0.3	-0.1	0.7	3.9	3.8	4.0	4.0
of which individual general government expenditure	-4.1	-16.6	0.8	-0.8	-1.0	0.0	4.6	4.4	4.6	4.5
of which collective general government expenditure	-0.7	-8.9	3.0	4.1	3.2	3.2	3.1	3.2	3.3	3.3
Gross fixed capital formation (GFCF)	-9.5	-23.9	-3.8	-1.3	-1.1	1.3	1.3	2.1	2.2	2.3
of which Non-financial enterprises (NFE)	-9.5	-23.6	-2.2	-0.6	0.4	2.2	2.3	3.0	3.3	3.7
Households	-12.1	-28.1	-6.8	-0.5	-2.0	2.9	3.8	5.2	4.9	4.7
General government	-5.1	-16.6	-1.4	-0.8	-1.7	-0.8	-1.9	-1.4	-1.9	-2.7
Exports	-5.2	-29.2	-14.2	-10.3	-9.9	-8.8	-6.5	-4.8	-4.2	-2.4

■ Forecast

\* Consumption expenditure of general government and non-profit institutions serving households (NPISH)

How to read it: in Q4 2021, exports would be -4.8% below their level in the Q4 2019 .

Source: INSEE calculations from various sources

# Activity by branch

The dynamism of GDP in Q3 2021 (► **Figure 1**) was mainly reflected in the automatic rebound in activity in those services that had previously been subject to health restrictions (accommodation-catering, transport, leisure, etc.). In industry and construction, activity grew at a much more moderate pace, even declining in some industrial branches (manufacture of transport equipment in particular).

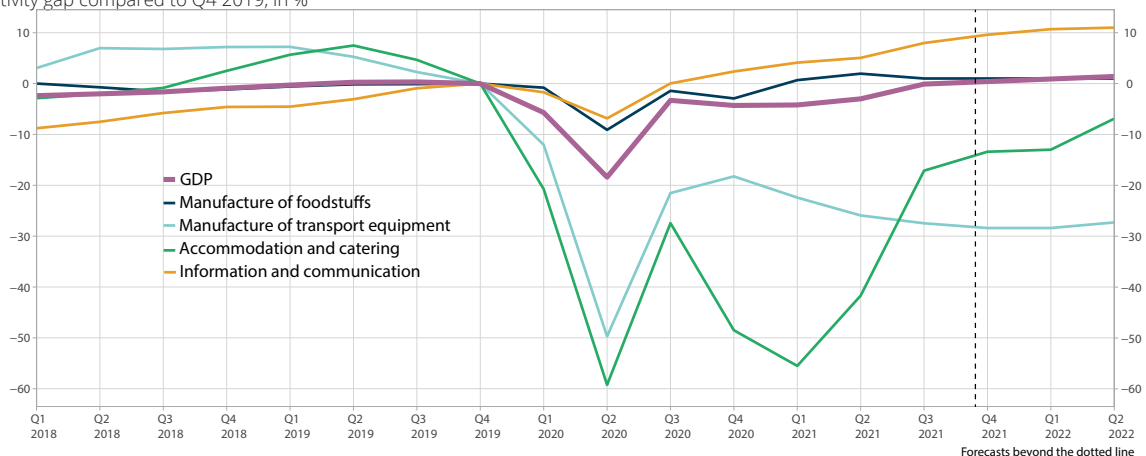
The economic outlook in Q4 appears to be one of contrasts. Business climate indicators, based on business tendency surveys, are at very high levels. They remained high in October and November, on the basis of responses from business leaders, most of which were collected before the strong resurgence of the virus (► **Figure 2**). At the same time, production capacity, especially industrial capacity, was subject to increasing tensions: supply chain difficulties, which in October were at historic levels, the highest since this series began (► **Box 1**), and record rises in production prices. Lastly, the deterioration in the health situation, which has not as yet resulted in further restrictions, is likely to affect activity in services, through reduced air travel, for example.

In this context, the increase in activity in Q4 2021 is likely to result mainly, as in Q3, from the increase in market services, especially those that are still below their pre-crisis level and are now able to benefit from potential catch-up. In industry, the increase in activity is expected to be less, mainly because of further deterioration in activity in transport equipment (especially the automobile industry).

In H1 2022, GDP is again expected to be driven mainly by market services, especially those where the catch-up continues. However, some branches are likely to still remain well below their pre-crisis level into Q2 2022: accommodation-catering and transport services, in a context of only partial recovery still in international tourism, and transport equipment, due to supply chain problems that are slow to clear up. Finally, after the significant catch-up recorded in H1 2021 and relative stability during the rest of the year, construction is likely to weaken in Q1 and Q2 2022, since housing starts were less dynamic in 2021 than pre-crisis. ●

## ► 1. Economic activity compared to pre-crisis, for different branches

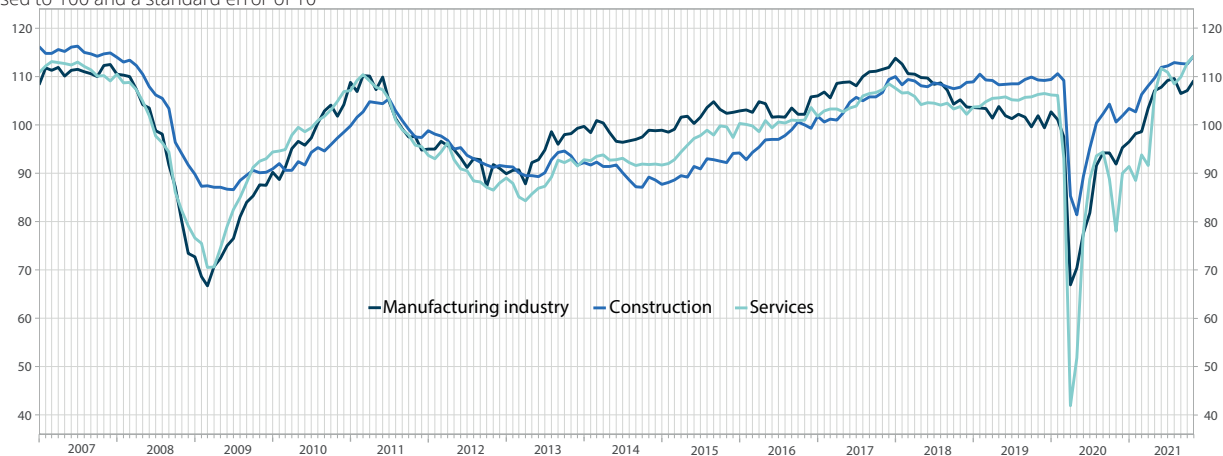
economic activity gap compared to Q4 2019, in %



How to read it: in Q3 2021, economic activity had virtually returned to its Q4 2019 level; in Q2 2022, it is expected to exceed this level by 1.4%.  
Source: INSEE calculations from various sources

## 2. Business climate

normalised to 100 and a standard error of 10



Source: INSEE

## 3. Estimate then forecast of losses of economic activity in 2021 by branch, on average quarterly

difference to the fourth quarter of 2019, in %

Branch	weight	2020				2021				2022	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
<b>Agriculture, forestry and fishing</b>	<b>2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.1</b>	<b>-0.8</b>	<b>-1.8</b>	<b>-2.5</b>	<b>-2.4</b>	<b>-1.9</b>	<b>-1.5</b>	<b>-1.3</b>
<b>Industry</b>	<b>14</b>	<b>-5.2</b>	<b>-21.3</b>	<b>-5.8</b>	<b>-3.5</b>	<b>-2.6</b>	<b>-2.7</b>	<b>-2.4</b>	<b>-2.1</b>	<b>-1.8</b>	<b>-1.2</b>
Manufacture of food products, beverages and tobacco-based products	2	-0.8	-9.1	-1.4	-2.9	0.7	1.9	1.0	1.0	1.0	1.0
Coke and refined petroleum	0	6.8	28.2	19.6	31.5	127.2	98.7	18.6	15.6	15.6	15.6
Manufacture of electrical, electronic, computer equipment; manufacture of machinery	1	-7.1	-23.6	-7.7	-4.0	-2.2	-2.8	-0.3	1.7	2.7	3.7
Manufacture of transport equipment	2	-12.0	-49.7	-21.5	-18.3	-22.4	-25.9	-27.5	-28.4	-28.4	-27.3
Manufacture of other industrial products	6	-5.9	-22.6	-5.6	-3.4	-1.4	-1.9	-2.0	-1.5	-1.1	-0.6
Extractive industries, energy, water, waste treatment and decontamination	3	-2.4	-12.1	0.0	3.5	2.6	4.4	6.4	6.5	7.1	7.7
<b>Construction</b>	<b>6</b>	<b>-12.6</b>	<b>-35.0</b>	<b>-6.4</b>	<b>-6.7</b>	<b>-6.0</b>	<b>-2.8</b>	<b>-3.0</b>	<b>-2.6</b>	<b>-3.3</b>	<b>-3.9</b>
<b>Mainly market services</b>	<b>-5</b>	<b>-5.4</b>	<b>-17.7</b>	<b>-4.6</b>	<b>-6.2</b>	<b>-6.5</b>	<b>-4.6</b>	<b>-0.2</b>	<b>0.6</b>	<b>1.3</b>	<b>2.0</b>
Trade; repair of automobiles and motorcycles	10	-6.1	-17.2	-0.2	-2.1	-2.6	-3.5	-1.8	-1.9	-1.5	-1.0
Transport and storage	5	-11.0	-33.6	-18.3	-21.5	-19.0	-15.4	-8.4	-7.6	-6.1	-5.3
Accommodation and catering	3	-20.7	-59.2	-27.4	-48.5	-55.5	-41.7	-17.1	-13.4	-13.0	-6.9
Information and communication	5	-1.7	-6.8	0.0	2.4	4.1	5.1	8.0	9.6	10.7	11.0
Financial and insurance activities	4	-4.7	-15.2	-2.7	-1.8	-0.6	1.0	3.5	4.3	5.0	5.6
Real estate activities	13	-1.3	-3.8	-0.8	-0.5	-0.3	0.4	1.4	1.8	2.1	2.4
Scientific and technical activities; administrative and support services	14	-4.4	-17.7	-2.9	-2.0	-2.5	-0.8	1.9	2.4	3.2	3.4
Other service activities	3	-9.6	-41.2	-13.3	-25.7	-27.6	-22.4	-5.6	-3.5	-2.3	-0.6
<b>Mainly non-market services</b>	<b>22</b>	<b>-4.6</b>	<b>-15.0</b>	<b>1.2</b>	<b>-0.2</b>	<b>0.2</b>	<b>-0.1</b>	<b>1.3</b>	<b>1.5</b>	<b>1.6</b>	<b>1.7</b>
<b>Total VA</b>	<b>100</b>	<b>-5.5</b>	<b>-18.3</b>	<b>-3.5</b>	<b>-4.5</b>	<b>-4.4</b>	<b>-3.2</b>	<b>-0.4</b>	<b>0.2</b>	<b>0.6</b>	<b>1.1</b>
<b>Taxes and subsidies</b>		<b>-7.4</b>	<b>-19.0</b>	<b>-1.4</b>	<b>-2.9</b>	<b>-3.1</b>	<b>-1.5</b>	<b>2.2</b>	<b>2.5</b>	<b>2.8</b>	<b>3.4</b>
<b>GDP</b>		<b>-5.7</b>	<b>-18.4</b>	<b>-3.3</b>	<b>-4.3</b>	<b>-4.2</b>	<b>-3.0</b>	<b>-0.1</b>	<b>0.4</b>	<b>0.9</b>	<b>1.4</b>

■ Forecast

How to read it: in Q4 2021, activity in the accommodation-catering branch is expected to be at -13.4% compared to its pre-crisis level; in Q1 2022, it is expected to be at -13.5%.

Source: INSEE calculations from various sources

## Box 1- According to business leaders, supply difficulties persist

Business leaders report unprecedented levels of supply chain disruption in the business tendency surveys. Specifically, the branches most severely affected are transport equipment and capital goods. In October 2021, 72% and 58% respectively of businesses in these branches said that supply chain difficulties were restricting their production, levels that have never been seen since these series began in 1991 (► [Figure 4](#)).

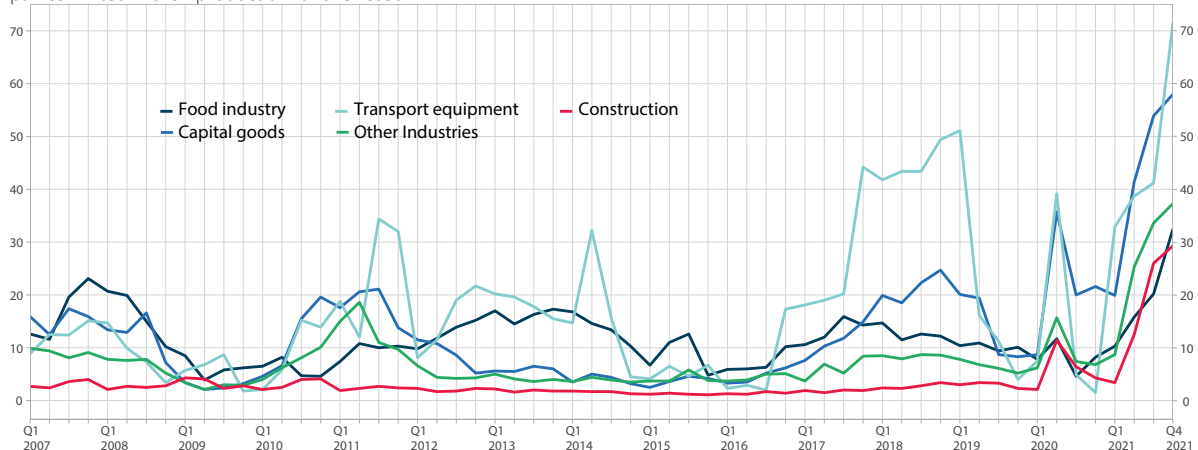
Added to these problems are hiring difficulties, especially in services, where 51% of companies reported in October that they had experienced such difficulties, a record level since the series began in 2000 (► [Figure 5](#)). These problems go hand in hand with a particularly buoyant employment climate, at its highest since 2011.

These different problems are having a very serious effect on the production capacity of the businesses concerned. For example, in October and November almost half of companies in the building construction sector reported that they could not increase production if they were to receive more orders.

As a result, tensions over selling prices are growing ever stronger. This trend is particularly pronounced in the manufacturing industry (► [Figure 6](#)). In November 2021, the balance of opinion on the expected change in selling prices reached its highest ever level in this branch since the series came into existence, and the same was true in retail trade (including the automobile trade) and wholesale trade. ●

### ► 4. Supply chain difficulties in the major industrial sectors and building construction

% of companies limited in their production for this reason

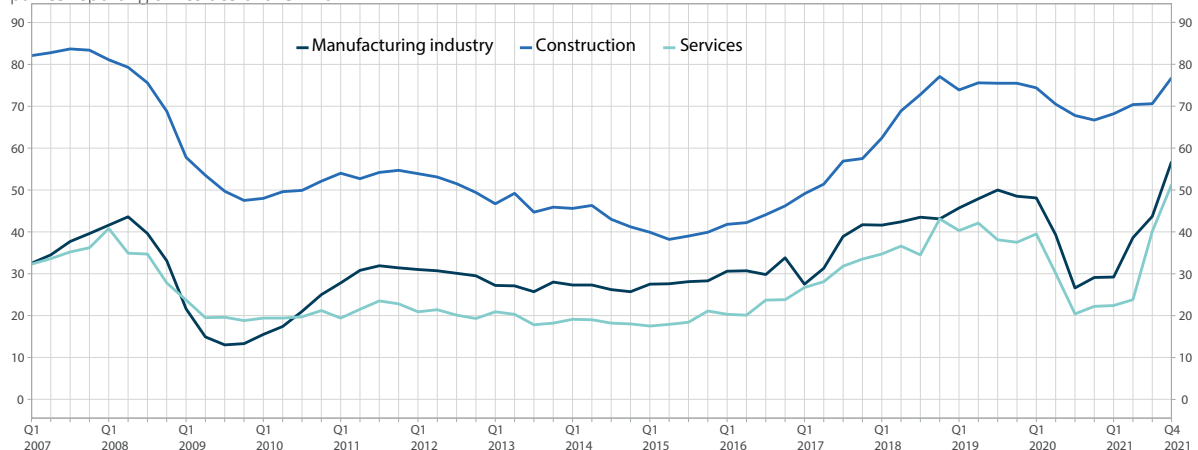


How to read it: results are weighted by turnover. Last point: October 2021

Source: INSEE, business surveys

### ► 5. Hiring difficulties in the manufacturing industry, building construction and services

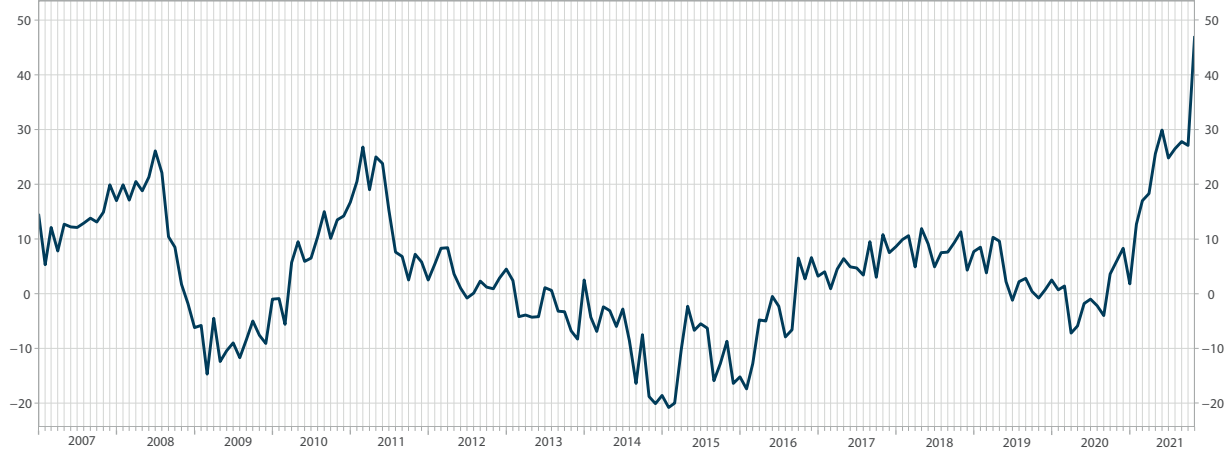
% of companies reporting difficulties of this kind



Source: INSEE, business surveys

## ► 6. Expected change in selling prices in the manufacturing industry

opinion balances, in %



Source: INSEE, business surveys

### Bibliography

Broin M. (2021), "Workforce shortage, sourcing difficulties: from inconvenience to bottlenecks", Insee *Economic outlook* October 2021. ●

## Box 2- "High-frequency" indicators are sending out mixed signals

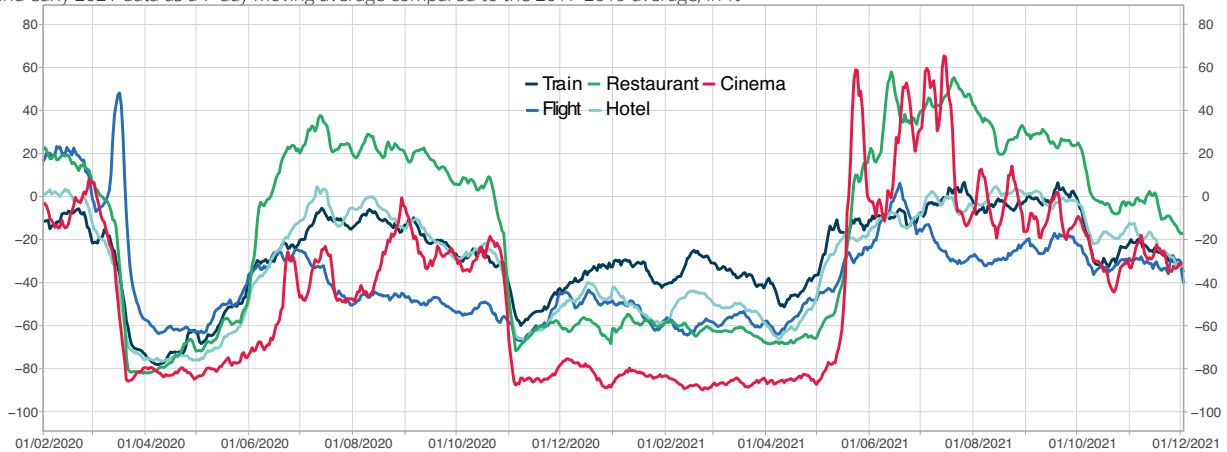
In an increasingly uncertain health context, searches for specific terms using the *Google* search engine suggest a slight downturn in the trend for leisure activities (► [Figure 7](#)). In particular, the beginning of October coincided with a decline in searches for "restaurant", "hotel", "train" and even "cinema" compared to the reference period. The indicators for "restaurant" and "hotel" have not rebounded since, in line with the dynamics of bank card transactions (► [Household Consumption and Investment Sheet](#)). For all the keywords considered, searches remain at or have moved back below their baseline level. These indicators therefore present a more contrasted signal than the latest business tendency surveys.

Concerning the change in road traffic in France, monitored in real time by the Centre for Studies and Expertise on Risks, the Environment, Mobility and Urban Planning (Centre d'études et d'expertise sur les risques, l'environnement, la mobilité et l'aménagement - CEREMA), mobility overall (all vehicles) is down on levels in November after the peak during the All Saints holiday, although since the series is not seasonally adjusted, interpretation is difficult (► [Figure 8](#)). At the beginning of December, it was virtually back to its pre-crisis baseline level, which it had exceeded since May. For heavy goods vehicles, the mobility indicator at the end of November was back to a similar level to September, higher than the pre-crisis reference level.

Finally, data from the Google Mobility Reports indicate an increase in time spent at home since mid-October, consistent with the change in the weather (► [Figure 9](#)). The start of the strengthening of rules on teleworking, linked to the fifth wave of the epidemic, may also help explain this trend. However, the indicator remains very much lower than at the same period last year, which was marked by the second lockdown. ●

## ► 7. Frequency of keyword searches on internet

2020 and early 2021 data as a 7-day moving average compared to the 2017-2019 average, in %

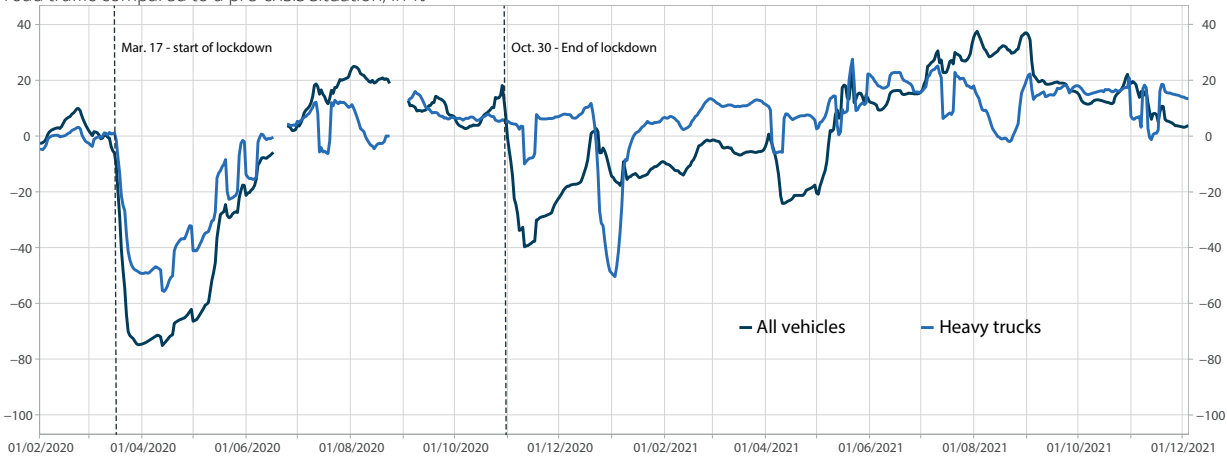


How to read it: the 7-day moving average for the number of Google searches in France in the semantic field “restaurant” was 17% lower on 1<sup>st</sup> December to 17% compared to the average of the 7-day moving averages for every 1<sup>st</sup> December between 2017 and 2019.  
Note: the last point represents 3 December 2021.

Source: Google Trends, INSEE calculations

## ► 8. Road traffic in France

loss of road traffic compared to a pre-crisis situation, in %



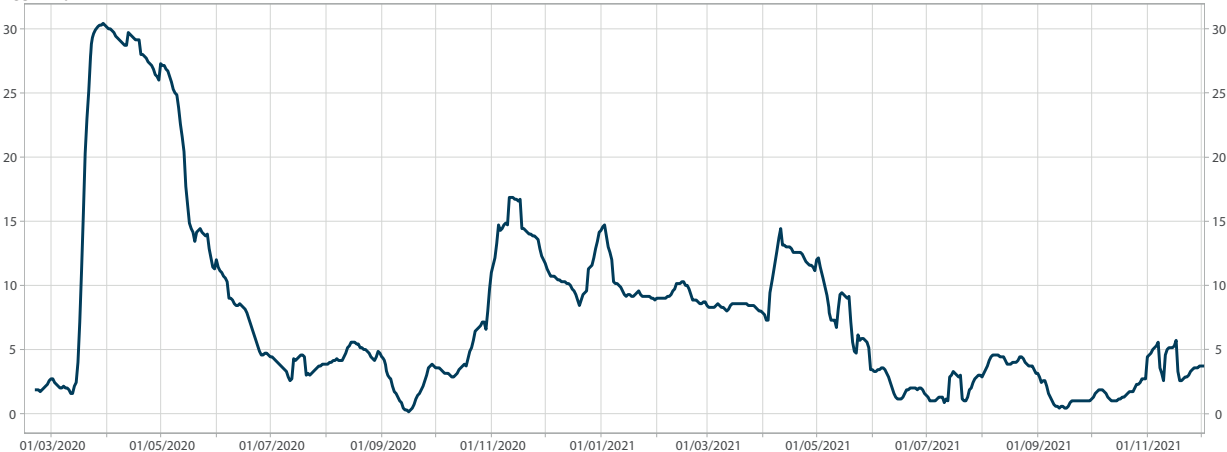
How to read it: on 1<sup>st</sup> December 2021, road traffic in France was 14% higher for heavy goods vehicles and 3.2% higher for all vehicles combined, compared to a similar day before the crisis

Note: the date of the last point is 5 December 2021. The index is constructed by comparing current traffic to “pre-crisis” traffic. For this reference to be as “fair” as possible, it is calculated from the average daily flow from 13 January to 2 February 2020 to avoid effects associated with the school holidays in February and the start of lockdown. For more clarity, the series was smoothed with a 7-day moving average.

Source: Cerema, INSEE calculations

## ► 9. Indicator of total time spent at home

difference in %



How to read it: on 1<sup>st</sup> December 2021, the 7-day moving average for time spent at home was 4% higher than the median value calculated by Google between 3 January and 6 February 2020.

Note: the last point represents 3 December 2021.

Source: Google Mobility Reports, INSEE calculations

## In October 2021, about one-third of businesses consider that the measures related to the health crisis are affecting their activity, a smaller share than in April 2021

From October 2020 to October 2021, some new quarterly questions were added to the business tendency surveys in industry, services and the building construction industry relating to the repercussions of the health crisis on productivity in these businesses. During this year, marked by the ups and downs of the health crisis and an economic recovery surrounded by tensions, the share of businesses reporting a negative impact of the health measures on their productivity decreased. In October 2021, it still stood at 36%, however.

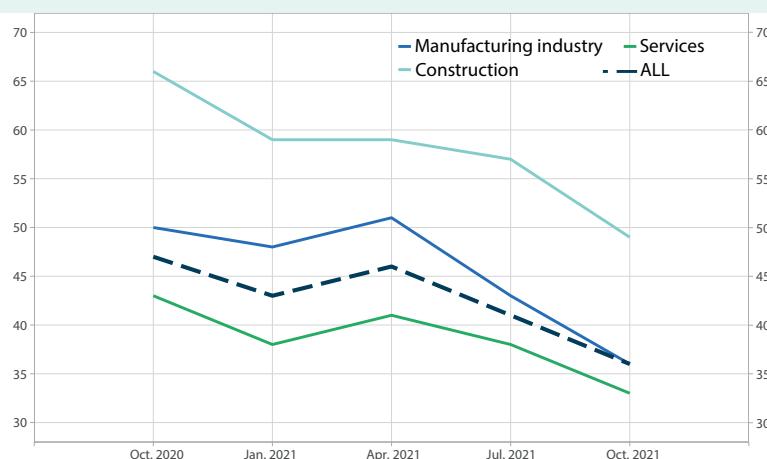
### Since the summer of 2021, businesses have reported fewer obstacles to productivity linked to health crisis measures.

In October 2021, the share of businesses declaring that measures relating to the health crisis (health protection measures, reorganisation measures, teleworking) are having a negative effect on their productivity continued to fall, after beginning to take a downward turn in July. It thus stood at 36% in October, after a little more than 45% in April (► **Figure 1**). The trend is the same in the three sectors considered (industry, services, building). The building sector is distinguished by a larger share of businesses expressing such a negative impression than in the other two sectors, over the whole of the period. When each measure is considered separately (► **Box 1**), once again there are fewer and fewer businesses that consider they are having a negative effect on productivity. The extent of this downward variation is not the same for all the different measures, however.

The health protection measures themselves (masks, keeping a safe physical distance, etc.) have affected all the main sectors of activity: the share of businesses that state they are not concerned has remained low throughout the period (► **Figure 2**). These direct protection measures are less often reported as weighing down on productivity: overall, 23% of businesses referred to them in October 2021, against 38% one year earlier. This gradual decrease is more pronounced in industry and building than in services. By habit or by adaptation, even though they have been in place throughout the period, the health protection measures are considered more widely than one year ago as having a neutral effect on productivity, in particular in building. It is in industry that the health protection measures are most widely considered neutral: in October 2021, three-quarters of businesses declared that they were not having an effect on their productivity.

### ► 1. The proportion of businesses declaring at least one negative effect on productivity of the measures linked to the health situation has been decreasing since spring 2021

in %



Note: responses are weighted according to the workforce of the units surveyed. Here we consider those businesses that declared a negative impact on productivity for at least one of the three actions proposed in the questionnaire: health protection measures (masks, safe distances, etc.), reorganisations, and teleworking.

Source: INSEE, business surveys in industry, services and construction

# French economic outlook

In services, on the contrary, accommodation and food services stand out clearly from the other sectors: the negative impression there is very strong and concerned almost 50% of businesses in October (► [Box 2](#)).

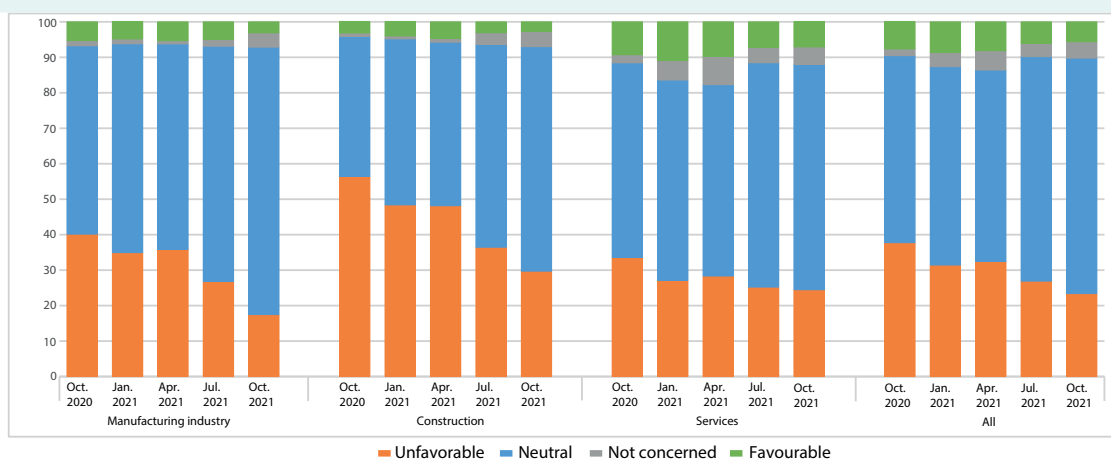
The opinions of businesses have varied to a greater extent on the subject of the effect of teleworking on productivity. From autumn 2020 to spring 2021, teleworking was increasingly considered as having a negative effect, but this assessment decreased through to October 2021, falling to a lower level than in October 2020 (► [Figure 3](#)). This trend echoes that in “forced” teleworking over the period: the increase in negative opinions between autumn 2020 and spring 2021 came against a backdrop of large-scale use of teleworking; the view in October 2021, meanwhile, refers more to a context of moderate and non-mandatory teleworking. In

this respect, the proportion of businesses that state they are not concerned fell until April 2021 and then increased until October 2021, coming close to its level one year earlier, showing a return of these sectors to a way of working that is closer to that pre-crisis.

In services, the sectors of information and communication and of specialised, scientific and technical activities stand out by the fact that a larger portion of businesses are concerned by teleworking, both at the height of the crisis and in October 2021; in these sectors the number that considers that teleworking linked to the health situation is detrimental to their productivity has fallen very significantly from its level in spring 2021: it has slipped from about 30% in April 2021 to less than 15% in October 2021 (11% in information-communication, 13% in specialised activities).

## ► 2. Opinion of businesses on the effect of health protection measures (masks, safe distances, etc.) on productivity, by sector

in %

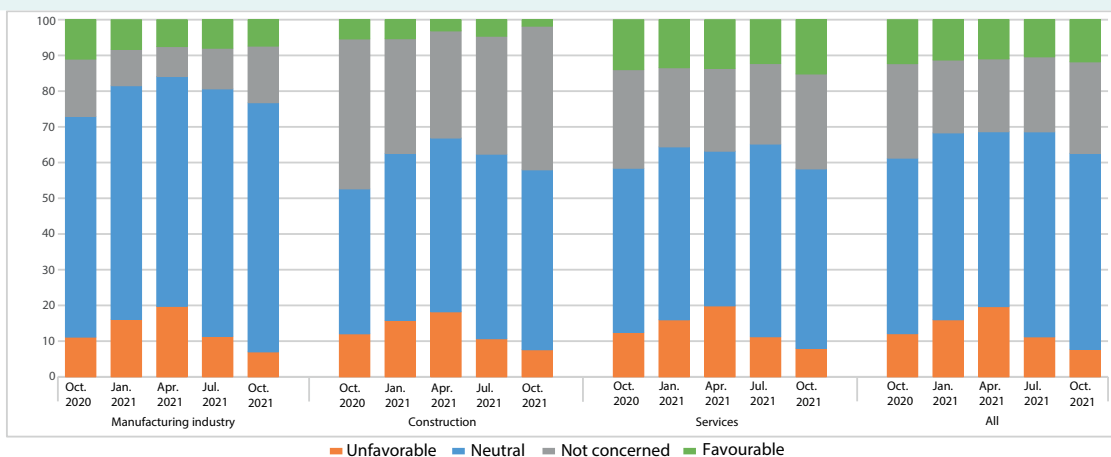


Note: the health protection measures refer to wearing a mask, measures imposing a safe physical distance, etc. Responses are weighted according to the workforce of the units surveyed.

Source: INSEE, business surveys in industry, services and construction

## ► 3. Opinion of businesses on the effect of teleworking on productivity, by sector

in %



Note: responses are weighted according to the workforce of the units surveyed.

Source: INSEE, business surveys in industry, services and construction

Regarding reorganisations of activity caused by the health crisis, they have been of different kinds: in logistics, sourcing, works scheduling, etc. Like for teleworking and the health measures, they were less often considered as being detrimental to productivity in October 2021 than in October 2020 (► **Figure 4**). However, this fall in negative opinions was less pronounced than for the other types of measures (health protection measures, teleworking). In building and in industry, there are still quite a lot of businesses reporting that reorganisations linked to the health crisis are having a negative effect on their productivity, in particular in the sector of capital goods and in transport equipment (around 30% in both). In services, the same applies to accommodation and food services (30% too, a larger proportion than the average in services as a whole, box).

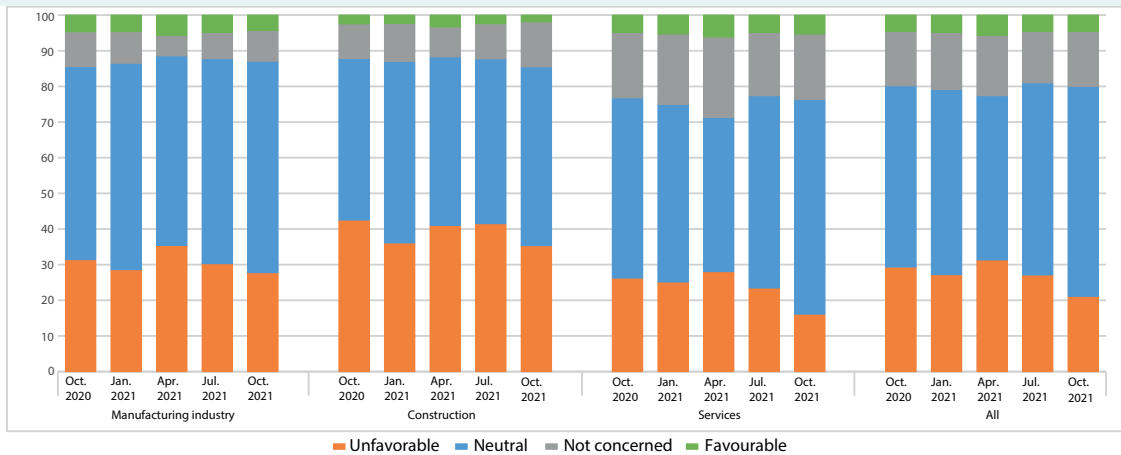
## With the recovery, the workforce is increasingly considered insufficient

As well as the effects on productivity of the measures linked with the health crisis, businesses were also surveyed on the size of their workforces and whether they are suited to their level of activity.

Since the beginning of 2021, more and more businesses have come to judge that their workforce is insufficient given their activity (► **Figure 5**). This tension has increased with the recovery: in July 2021, the share of businesses that considered their workforce to be insufficient began to overtake the number of businesses considering that their workforce is more than sufficient given their activity. This trend has been accentuated: all in all in October 2021, one-quarter of businesses considered their workforce to

### ► 4. Opinion of businesses on the effect of reorganisations on productivity

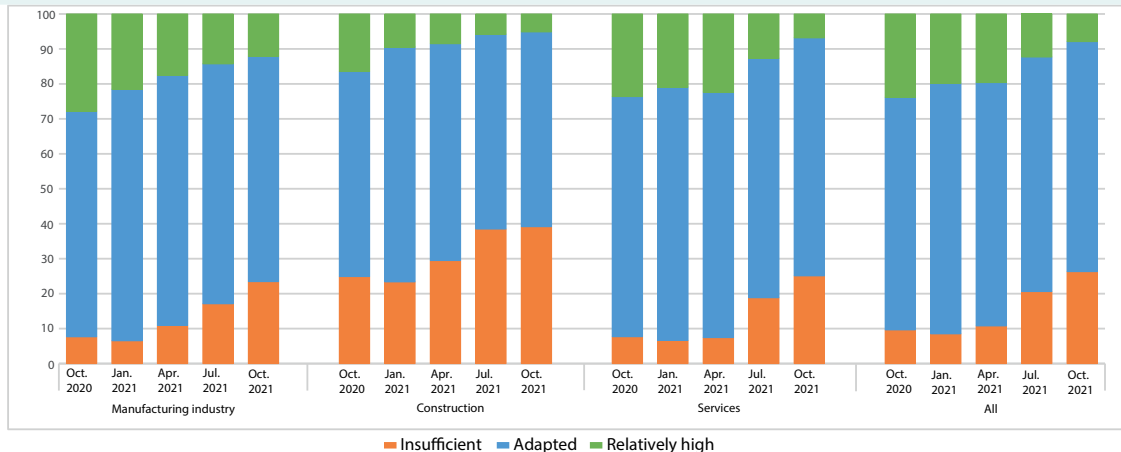
in %



Note: responses are weighted according to the workforce of the units surveyed.  
Source: INSEE, business surveys in industry, services and construction

### ► 5. Opinion of businesses on their workforce size given their current activity

in %



Note: responses are weighted according to the workforce of the units surveyed.  
Source: INSEE, business surveys in industry, services and construction

# French economic outlook

be insufficient given their activity, while less than 10% of them considered their workforce to be too large.

In industry, this tendency is particularly pronounced in the agrifood sector and in «other industries», in particular in metalworking and other metallic products and “other manufacturing industries, including repair and installation.” The transport equipment sector is something of an exception: the proportion of businesses that consider they have a large workforce given their activity remained relatively high in October 2021 (36%), linked to the significant supply chain problems encountered by the sector which restrict it more than workforce numbers do.

In services, the turnaround in opinions on the high or insufficient level of the workforce in July was particularly pronounced in accommodation and food services, where the share of businesses that considered their workforce insufficient reached 46% in October.

Until spring 2021, during a period marked by a second and then a third lockdown, businesses would appear to have preferred to hold on to their employees despite the low activity levels, with the help of the public schemes in support of employment and to remunerate short-time working. From October 2020 to April 2021, there were therefore more businesses in industry and services reporting too high a level of employment for their activity than pointing to an insufficient workforce. The businesses in building may also have chosen to hold on to their workers pending a full resumption of their worksites. In building, however, the proportion of businesses that considered their workforce too small has always exceeded the number of businesses considering it to be too large, and labour shortages have been reported more widely in the sector than in the other two main sectors taken as a whole. ●

*Myriam Broin*

## Box 1- Repercussions of the health crisis on productivity: a module of questions asked from October 2020 to October 2021 in three tendency surveys

From October 2020 to October 2021, new questions were added to the quarterly questionnaires for the business tendency surveys in industry, services and building construction, asking business leaders to describe the repercussions of the health crisis on their productivity. The exact wording of the questions is given below (► [Figure 6](#)).

The notion of workforce is defined differently, according to sector. In services, respondents are specifically asked to include temporary workers. In industry and building construction, the questionnaires mention “total workforce”, but with no specific definition. Short-time working was not mentioned: employees on short-time work are counted in the workforce of the businesses in any case.

The results for October 2021 were calculated on the basis of the responses sent by businesses between 27 September and 28 October 2021. The response rate for the business tendency surveys over this period weighted by turnover was 80% for the survey in industry, 75% for that in services, and 66% for that in building construction. The results given here are weighted according to the companies’ workforces.

The scope considered is the usual one for business tendency surveys in industry, services and building construction. Industrial companies with more than 20 employees were surveyed, also companies in building construction with more than 10 employees. The services sector survey covers market services, excluding air, rail and water transport services, financial and insurance services, scientific research and development services and the arts, entertainment and recreational activities sub-sector. Estimates for the total scope were obtained by weighting the results according to workforce size, excluding temporary workers, in industry, construction and all market services. ●

## ► 6. The set of themed questions in the business tendency surveys in industry, services and the building construction industry

### Les répercussions de la crise sanitaire sur la productivité

4. Actuellement, au regard de votre niveau d'activité, vos effectifs vous paraissent-ils :

- ☐ relativement élevés
- ☐ adaptés
- ☐ insuffisants

5. Actuellement, les mesures suivantes ont-elles un effet sur la productivité de votre entreprise ?

Les mesures de protections sanitaires (masques, distanciation physique, etc.) ☐ favorable ☐ neutre ☐ défavorable ☐ non concerné

Le recours au télétravail ☐ favorable ☐ neutre ☐ défavorable ☐ non concerné

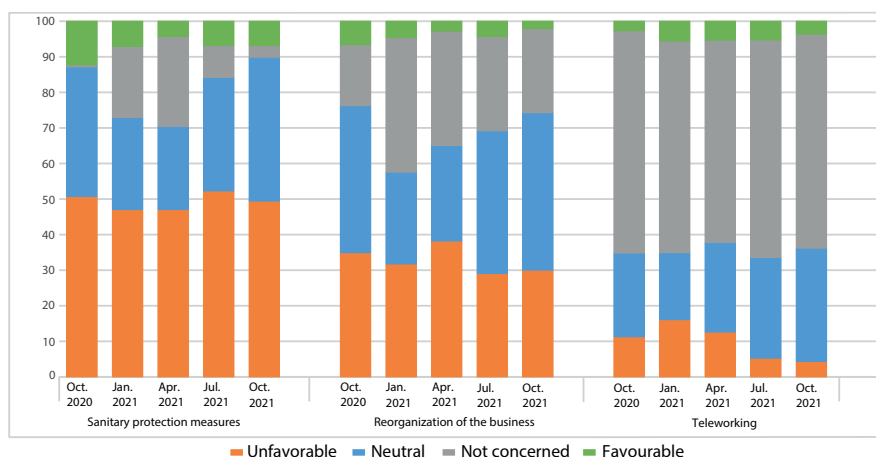
La réaorganisation de l'activité (logistique, approvisionnements, ordonnancement des travaux, etc.) ☐ favorable ☐ neutre ☐ défavorable ☐ non concerné

## Box 2- In accommodation and food services, the health protection measures are still widely considered to be detrimental to productivity

In accommodation and food services, the direct health protection measures (wearing a mask, maintaining a safe distance, sanitiser gel, etc.) continue to be widely considered as holding back activity, and have been since October 2020 (► [Figure 7](#)). In July 2021, the proportion of businesses that were not concerned had decreased considerably and the negative impression had grown, perhaps linked with the introduction of the health pass. This feeling then eased slightly, although remaining strong: in October 2021, almost half of businesses considered that the health protection measures were having a negative impact on their activity.

## ► 7. Opinion of accommodation and food services businesses on the effect of the different measures on their productivity

in %



Note: responses are weighted according to the workforce of the units surveyed.  
Source: INSEE, business survey in services

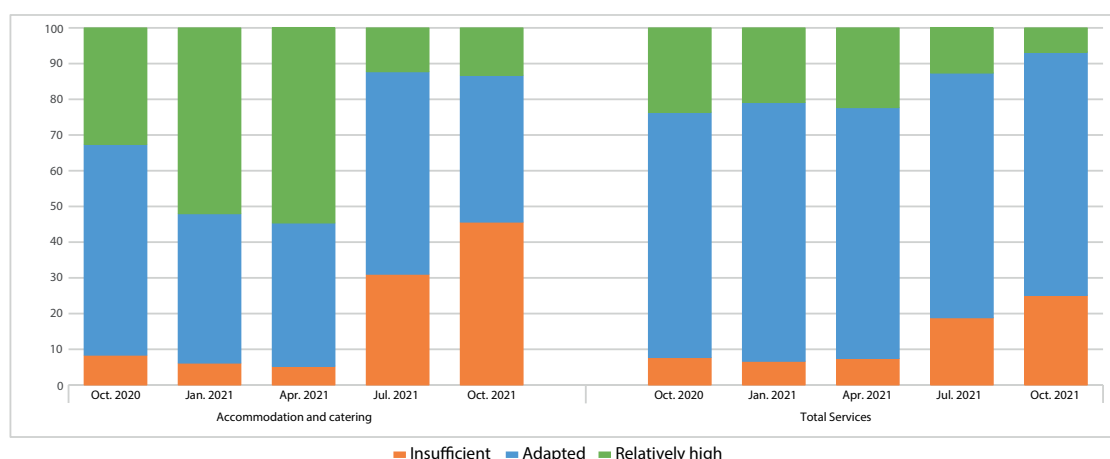
Having to revise the organisation of work on account of the health crisis also continued to be perceived as hindering productivity by 30% of businesses in October 2021, a smaller share than one year earlier, although still considerable.

Regarding teleworking, accommodation and food services are activities that by their very nature do not lend themselves to such an organisation: a large majority of companies therefore declare that they are not concerned. However, some parts of the activity can be carried out by teleworking, such as handling bookings or the administrative side of the activity. As in the other service sectors, the share of negative opinions of the impact on productivity has decreased significantly in relation to its level in October 2020.

Finally, the general recovery in activity after the third lockdown in spring 2021 resulted in a sharp rise in reports on insufficient workforce sizes, which was more pronounced in accommodation and food services than in services taken as a whole (► **Figure 8**). ●

## ► 8. Opinion of accommodation and food services businesses on their workforce size given their current activity

in %



Note: responses are weighted according to the workforce of the units surveyed.

Source: INSEE, business survey in services

## A new business climate in the building construction industry

Alongside the results of the tendency surveys, INSEE publishes composite business climate indicators each month to summarise the opinions of businesses, as expressed in the business tendency surveys. Since October 2021, the business climate indicator for the building construction industry has been modified to capture variations in the outlook in the sector more effectively. This change was made necessary in particular by gaps that appeared during the health crisis between output in construction and the view that might be provided by the former version of the composite indicator. The new indicator gives more importance than its predecessor to balances of opinion for the near future and would appear to me more closely in line with output in building over the longer term.

### During the first lockdown in spring 2021, the business climate in the building construction industry only partly conveyed the fall in activity in the sector.

In April 2020, the generalised fall in activity linked to the implementation of the first lockdown was translated in the business tendency surveys by a sudden slide in business climates in industry and in services (► **Figure 1**). The climates in building construction all declined, but much more moderately than in other sectors, at a time when most construction sites were almost at a standstill and the construction sector was posting a fall of over 60% in its activity (compared to Q4 2019<sup>1</sup>). This singular feature caused INSEE to look into the method used for the business climate in building construction.

The purpose of this composite indicator, like the other sectoral business climates drawn from the business tendency surveys, is to summarise the opinion of the businesses that are surveyed in a single indicator. The calculation method is based on factor analysis, a technique that allows concurrent trends in several variables whose movements are closely correlated to be extracted (► **Box**). With this method, the business climate in the building construction industry was constructed as a linear combination of five variables drawn from the business tendency surveys in the

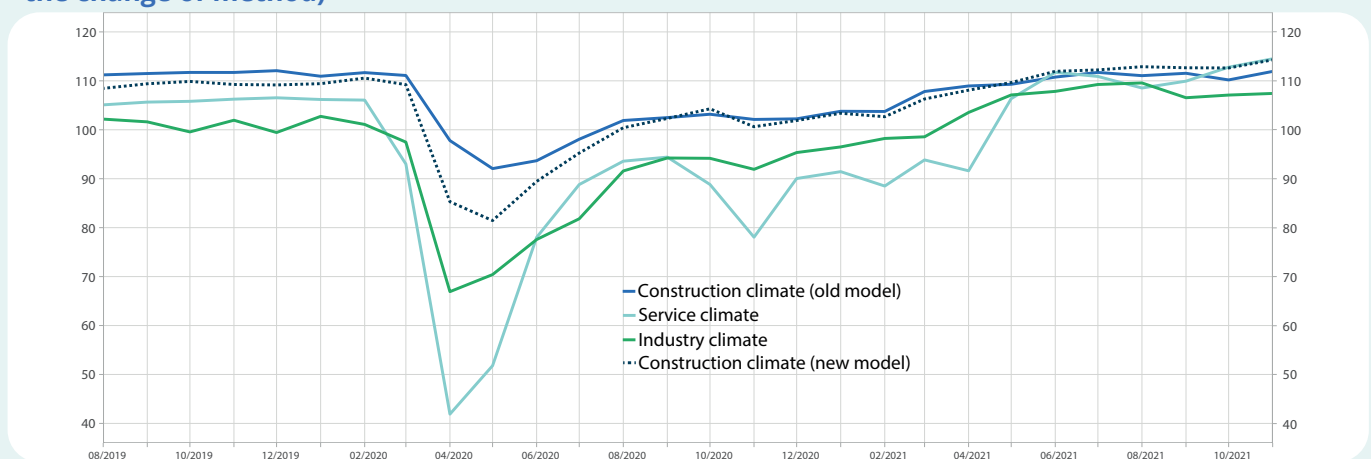
building industry: balances of opinion on past and forecast activity, the balance of opinion on order book levels, the balance of opinion on past workforce and an indirect estimation of production capacity utilisation rates. The respective weights of these different variables are updated each year and it is preferable that they should be relatively well balanced, which was no longer the case in 2020.

The moderate fall in the business climate in building construction in April 2020 can be explained by inertia in three of the five variables making up the climate indicator:

- the balance of opinion on the levels of order books fell significantly in April 2020, but less than in other sectors (balance of opinion of -26 in April 2020, down 26 points on the previous month, against a balance of -52 in manufacturing industry, down 36 points on March, for instance);
- the high weighting of the balance on past trends in the workforce resulted in too much importance being given to the past short-term situation;
- the indirect estimate of the production capacity utilisation rate (TUC) remained relatively high in spring 2020, despite many construction sites having been halted. In this very particular context, this estimation of TUC drawn indirectly from a question about the margins for increasing production if any additional orders should

<sup>1</sup> Estimation based on quarterly accounts.

### ► 1. Business climates in services, industry and the building construction industry (before and after the change of method)



Source: INSEE, business surveys

# French economic outlook

be received<sup>2</sup> was certainly less relevant than in times of normal activity. In spring 2020, the building businesses that responded to the survey declared that their current order books continued to represent 7 to 8 months of work, on average.

## A new model for the business climate in building construction has been estimated to capture short-term variations in the sector, in particular in times of crisis.

Further to the overhaul of the business climate in building construction, the model that is now used is based on four balances of opinion. Two of them were already present in the former model, which is to say the balances of opinion on forecast activity and past activity. The other two are new and concern the expected variation in the workforce and the expected variation in prices for contracts negotiated in the coming three months. They therefore replace the balances of opinion

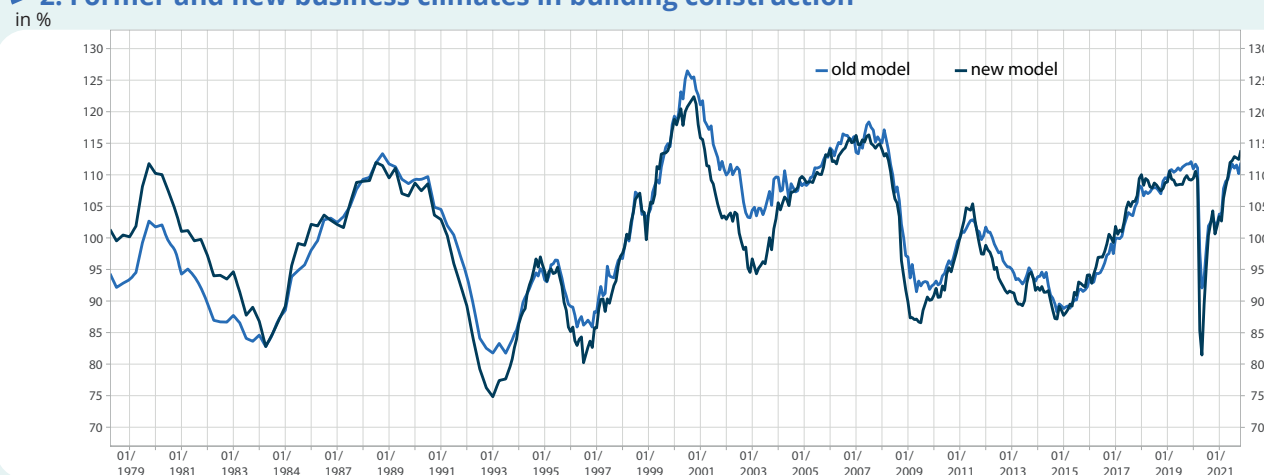
on order book levels and on the past variation in the workforce, and also the indirect estimation of production capacity utilisation rates. More particularly, the new climate would appear to be more homogeneous than the former one, with the weights allocated to the variables that compose it being more balanced (► **Box**).

In addition, the new climate in building construction captures the sudden fall that occurred in spring 2020 more effectively (► **Figure 2**). Over the longer term, it shows slightly larger variations than the former climate, with more pronounced dips in 2003-2004 and at the time of the 2008-2009 financial crisis. The new indicator also seems to capture variations in output in the building construction industry more effectively, as it has a profile that is closer to the year-on-year change in that output (► **Figure 3**). The correlation between year-on-year change in output in the sector and the new business climate (0.80, calculated over the period 1978 – 2019) is also a little higher than for the former climate (0.77). ●

<sup>2</sup> The question asked is as follows: "If you did receive more orders, with your current resources, could you increase your production? If you answered yes, by how much?" The answer to this question is noted PCAUG and is then used to calculate the capacity utilisation rate as follows: 
$$TUC = \frac{100}{1 + \frac{PCAUG}{100}}$$

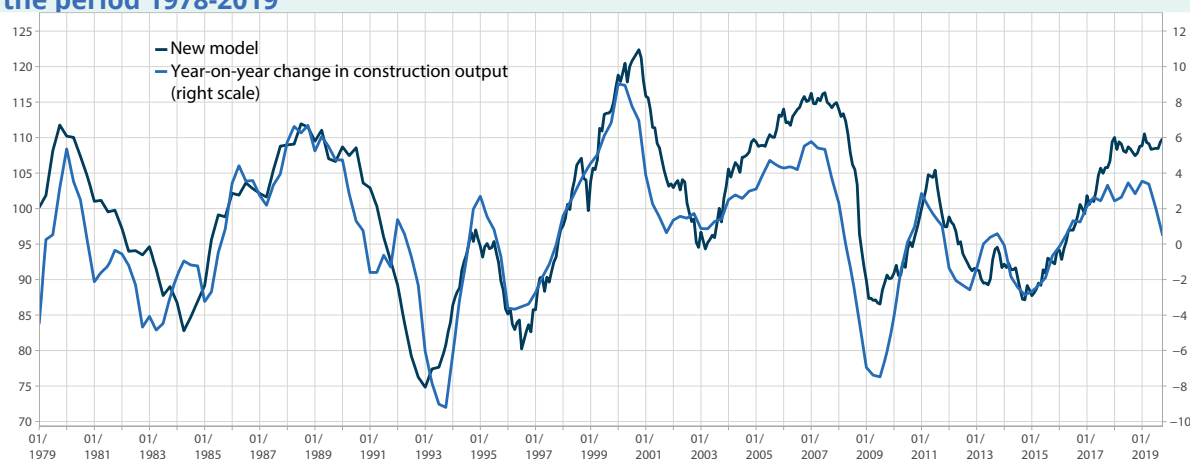
Tanguy Barthélémy

## ► 2. Former and new business climates in building construction



Source: INSEE, business surveys

## ► 3. Comparison between the proposed new model and year-on-year change in output in building over the period 1978-2019



Source: INSEE, business surveys

## Calculation method for the business climate in the building construction sector

The method for calculating the business climate in the building construction industry is based on factor analysis (Doz C. et Lengart F., 1999), a statistical method for dimensionality reduction. The objective is to reduce a certain number of variables that are correlated with each other to a small number of independent and unobserved variables, referred to as latent factors, by writing the observed variables as linear combinations on the unobserved latent factors. In the case of tendency surveys, and notably that in the building construction industry, the observed variables are a selection of balances of opinion and other elementary indicators drawn from the surveys.

The factor analysis model is in matrix form and is written:

$$y_{it} = \lambda_i F_t + u_{it}$$

where:

- $y_{it}$  the observed variables  $i$  (balances of opinion, etc.) for the period
- $F$  the unobserved latent factor
- $\lambda_i$  the coefficients or loadings
- $u_i$  the residuals of the model

The *loadings*  $\lambda_i$  are estimated by maximum likelihood. For simplicity's sake, the composite indicators of sectoral business climates are constructed by static factor analysis, limited to a single factor. This is the case of the new indicator of the business climate in building construction.

Ultimately, the common factor is written as a linear combination of the observed variables. The choice of these variables and the model itself are selected on the basis of the following five criteria:

- the survey must be representative of the building sector: presence of the "flagship" variables from the survey (balances of opinion on forecast and past activity, for instance);
- simplicity of the model: a limited number of observed variables, between 3 and six in practice;
- homogeneity: one variable must not be over-represented (or under-represented) in the definition of the common factor. In addition, the weights of the different observed variables must be relatively well balanced;
- good relationship between the factor and the series: variations in the common factor explain a large part of the variations in the series;
- acceptance of a model with a single factor: single factor hypothesis accepted at a threshold of 5%.

Concerning the business climate in building construction, the former model used until March 2020 and the new one further to the change in methodology are the following:

$$F_{2019} = 0,09 \text{ APR} + 0,12 \text{ APA} + 0,42 \text{ JCC} + 0,26 \text{ EPA} + 0,14 \text{ TUC}$$

$$F_{2021} = 0,22 \text{ APR} + 0,31 \text{ APA} + 0,21 \text{ EPR} + 0,28 \text{ PRIX}$$

with:

- APR (APA resp.): balance of opinion on forecast activity (past activity, resp.);
- EPR (EPA resp.): balance of opinion on forecast workforce (past workforce, resp.);
- JCC: balance of opinion on judgement of order books;
- TUC: production capacity utilisation rate;
- PRIX: balance of opinion on future variation in prices. ●

## Bibliography

**Doz C. et Lengart F.** (1999), Analyse factorielle dynamique : test du nombre de facteurs, estimation et application à l'enquête de conjoncture dans l'industrie, *Annales d'Économie et Statistiques*, n°54, pp. 91-127. ●

## Foreign trade

In Q3 2021, exports accelerated significantly while imports remained stable, with the result that foreign trade made a positive contribution to change in GDP (► [Figure 1](#)). The dynamism of exports is due mainly to the gradual return of non-resident tourists during the summer, after very poor levels in previous quarters. This recovery in tourism has also helped imports, although to a lesser degree, with French residents travelling abroad. In addition, in a context of increasing supply chain problems, trade in manufactured products, both imports and exports, declined in Q3, especially transport equipment.

By the end of 2021, tourism is expected to stagnate as a result of uncertainties associated with the pandemic. It is likely that trade in manufactured products will still be limited by the persistence of supply chain problems, although aeronautical and naval deliveries should ensure that exports maintain growth. Imports are expected to increase, although more moderately, with the result that foreign trade is likely to contribute positively to change in GDP.

In Q1 2022, exports are set to increase slightly, then reach a second peak in growth as a result of new naval deliveries in the spring. However, it is likely that transport equipment will continue to affect the shortfall in trade compared to its pre-crisis level, with supply chain problems in the sector easing only slowly (► [Figures 2 and 3](#)). In Q1 and Q2 2022, the recovery in tourism is expected to be sluggish, although it should still make a positive contribution to the development of trade. ●

### ► 1. France's foreign trade

variation in %, volumes of previous year's chained prices, contributions in points

	quarterly variations										annual variations		
	2020				2021			2022			2020	2021	2022 ovhg
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2			
Exports													
Total	-5.2	-25.3	21.2	4.6	0.4	1.2	2.5	1.8	0.7	1.9	-16.1	8.4	5.1
Manufactured products (67%*)	-4.5	-27.6	27.7	5.3	-1.1	1.5	-1.4	2.0	-0.1	1.6	-15.4	7.3	2.3
Imports													
Total	-4.8	-18.8	16.6	1.5	1.5	1.6	0.1	0.6	1.2	1.3	-12.2	6.5	3.1
Manufactured products (69%)	-4.1	-20.6	24.0	1.6	1.7	1.3	-1.2	0.7	1.0	1.0	-9.9	8.3	2.0
Contribution of foreign trade to GDP	-0.1	-1.8	0.6	0.8	-0.4	-0.2	0.7	0.3	-0.2	0.2	-1.1	0.4	0.5

■ Forecast

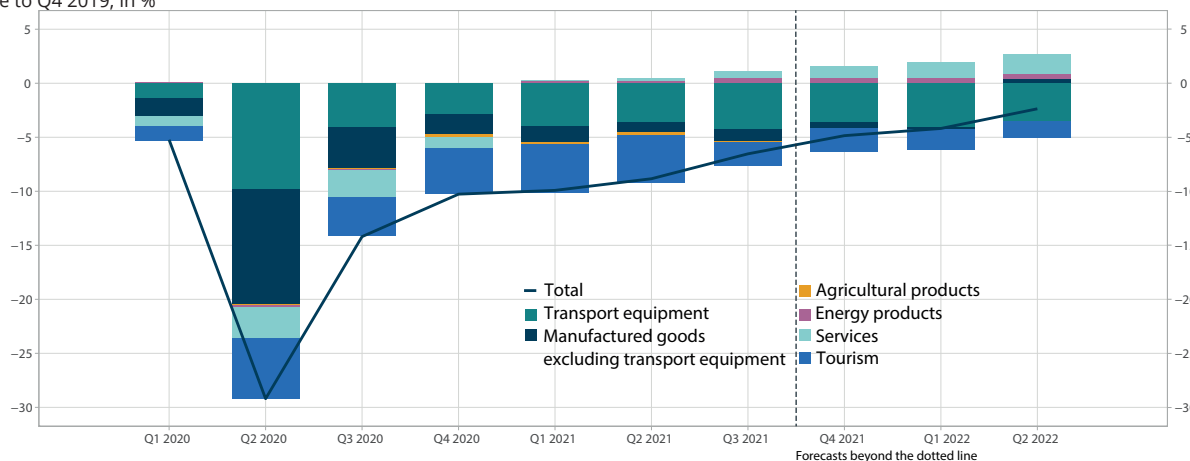
How to read it: French exports are expected to grow by +1.8% in Q4 2021. In 2021, exports are expected to rise by +8.4% as an annual average compared to 2020. Year-on-year growth in exports at the end of H1 2022 (i.e. the annual growth that would be achieved if the level in Q3 and Q4 2022 remained stable compared to Q2) is expected to be +5.1%.

\*Share of exports (or imports) of manufactured products in total exports (or imports), in 2020.

Source: INSEE

### ► 2. At the end of 2021, transport equipment again expected to make the largest contribution to the shortfall in exports compared to their pre-crisis level

difference to Q4 2019, in %

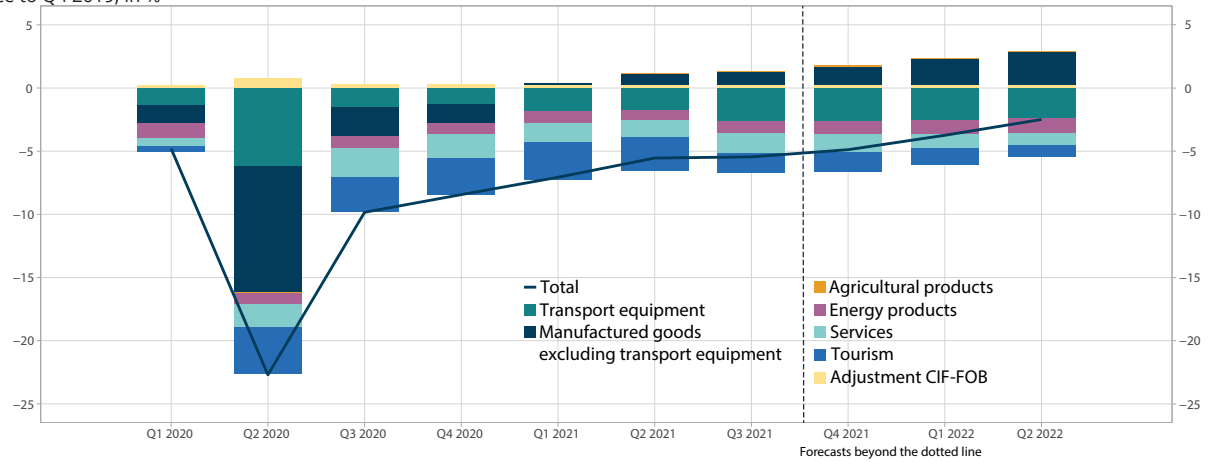


How to read it: in Q3 2021, French exports were 6.5% below their Q4 2019 level, with exports of transport equipment contributing -4.2 points.

Source: INSEE

## ► 3. Imports of manufactured products are expected to continue to increase to a higher level than pre-crisis

difference to Q4 2019, in %



How to read it: in Q3 2021, French imports were 5.4% below their Q4 2019 level, with tourism imports contributing -1.5 points.

Source: INSEE

## Employment

In Q3 2021, payroll employment increased again (+108,000 between the end of June and the end of September, after +158,000 then +310,000 in Q1 and Q2, ► [Figure 1](#)). These successive increases more than made up for the 315,000 job destructions in 2020, with the result that payroll employment at the end of September was well above its level at the end of 2019 (+261,000 jobs, or +1.0%). It exceeded this level in all the major sectors of activity (building construction, market and non-market tertiary) apart from industry (► [Figure 2](#)).

In Q4 2021, payroll employment is likely to slow (+45,000 between the end of September and the end of December) then increase in a similar fashion in Q1 and Q2 2022 (+35,000 and +45,000). This slowdown compared to recent quarters primarily reflects the slowdown in activity. As has been the case since the start of the health crisis, fluctuations in employment look set to be smaller than those in activity due to the cushioning effect of short-time working. The take-up rate of the short-time working scheme should continue to decline gradually (it is expected to drop from 1.0% of paid hours in the non-agricultural market sector on average in Q3 2021 to less than 0.5% by mid-2022), which should contribute in accounting terms to increasing apparent labour productivity per capita (► [Focus](#)). In addition, after being virtually stagnant for two years, hourly productivity is expected to return to similar levels of growth to pre-crisis, or even higher, as happened in previous phases of recovery in activity. Considerable uncertainty remains, however, over the scenario forecast for employment coming out of the crisis, as the model of apparent labour productivity that usually underpins employment forecasts<sup>1</sup> has lost its relevance since the start of the crisis.

By taking self-employment into account, which is expected to slip back moderately in 2021 then stabilise in 2022, total employment (payroll and self-employment) is expected to increase by 133,000 in H2 2021 (between the end of June 2021 and the end of December 2021) then by 80,000 in H1 2022. By the end of June 2022, it should exceed 387,000 jobs (including 386,000 payroll jobs), which was its pre-crisis level at the end of 2019 (► [Figure 2](#)), or +1.4%, over a period of two and a half years. By comparison, between 2015 and 2019, an average of 261,000 jobs (including 215,000 payroll jobs) were created each year. ●

<sup>1</sup> Special analysis «Slowdown in labour productivity and forecasting employment in France», *Economic outlook* June 2018.

### ► 1. Change in payroll employment

in thousand, SA, at the end of the period

	2020				Evolution over 3 months				2022		Evolution over 1 year		Evolution since end of 2019		
					2021										
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	2020	2021	End of Dec. 2020	End of Dec. 2021	End of June 2022
Agriculture	-6	-2	0	11	-4	0	-2	0	0	0	3	-6	3	-3	-3
Industry	-11	-24	-8	-12	7	3	4	2	2	4	-55	16	-55	-39	-33
Construction	2	4	16	8	33	4	-4	-1	-2	-2	31	33	31	64	59
Commercial tertiary sector	-456	-108	273	-57	93	273	104	33	25	33	-348	504	-348	156	214
Tertiary non-trading	-7	-76	108	29	29	29	6	10	10	10	55	73	55	128	148
<b>All</b>	<b>-479</b>	<b>-205</b>	<b>390</b>	<b>-21</b>	<b>158</b>	<b>310</b>	<b>108</b>	<b>45</b>	<b>35</b>	<b>45</b>	<b>-315</b>	<b>620</b>	<b>-315</b>	<b>306</b>	<b>386</b>
	-1.9%	-0.8%	1.6%	-0.1%	0.6%	1.2%	0.4%	0.2%	0.1%	0.2%	-1.2%	2.5%	-1.2%	1.2%	1.5%

■ Forecast

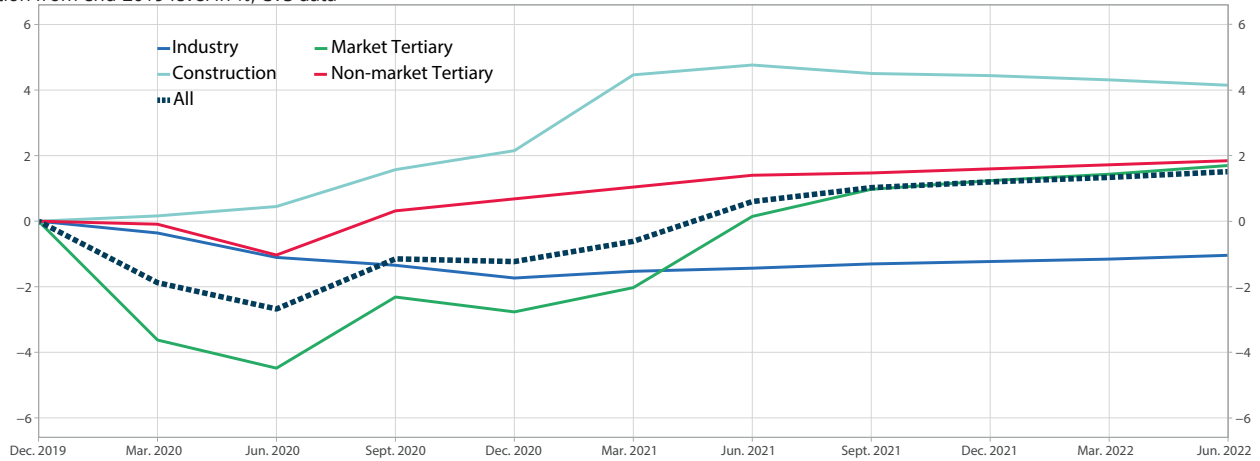
Note: in this table, temporary workers are counted in the sector tertiary non-trading.

Scope: France (excluding Mayotte)

Source: INSEE

## ► 2. Payroll employment compared to the end of 2019

deviation from end-2019 level in %, CVS data



How to read it: at the end of June 2021, payroll employment was 0.6% higher on its level at the end of 2019.

Note: in this graph, temporary workers are counted in the sector tertiary non-trading.

Scope: France (excluding Mayotte)

Source: INSEE

### During the health crisis, per capita productivity and hourly labour productivity fluctuated considerably

*Since the beginning of the health crisis, apparent per capita labour productivity and hourly productivity have seen variations that are the mirror image of each other: per capita productivity fell and then recovered, driven by intense use of short-time working; hourly productivity, on the other hand, increased temporarily driven by a pronounced sectoral composition effect. In Q3 2021, these effects faded significantly: per capita productivity and hourly productivity both returned to close to their pre-crisis levels. These variations should continue to return to normal over the coming period, but it is difficult at present to assess the extent of the potential for a rebound in (hourly or per capita) productivity in the short-to-medium term.*

The purpose of this focus is to explain the recent variations in (per capita and hourly) labour productivity, and in particular to show the role of use of the short-time working scheme in fluctuations in per capita productivity and the effect of sectoral deformation in fluctuations in hourly productivity. Its aim is not to provide a quantitative analysis of any lasting effect of the health crisis on labour productivity.

#### Apparent per capita labour productivity has varied considerably over the past two years, linked closely with use of the short-time work scheme.

At the height of the health crisis (Q2 2020), economic activity fell very suddenly, while the decline in employment was much more moderate. This resulted in a collapse in the apparent per capita productivity of labour (measured here as the ratio of added value to the salaried workforce). Over the following quarters, productivity per capita recovered significantly, while continuing to fluctuate considerably with variations in activity, and remaining below its pre-crisis level (► [Figure 1](#)).

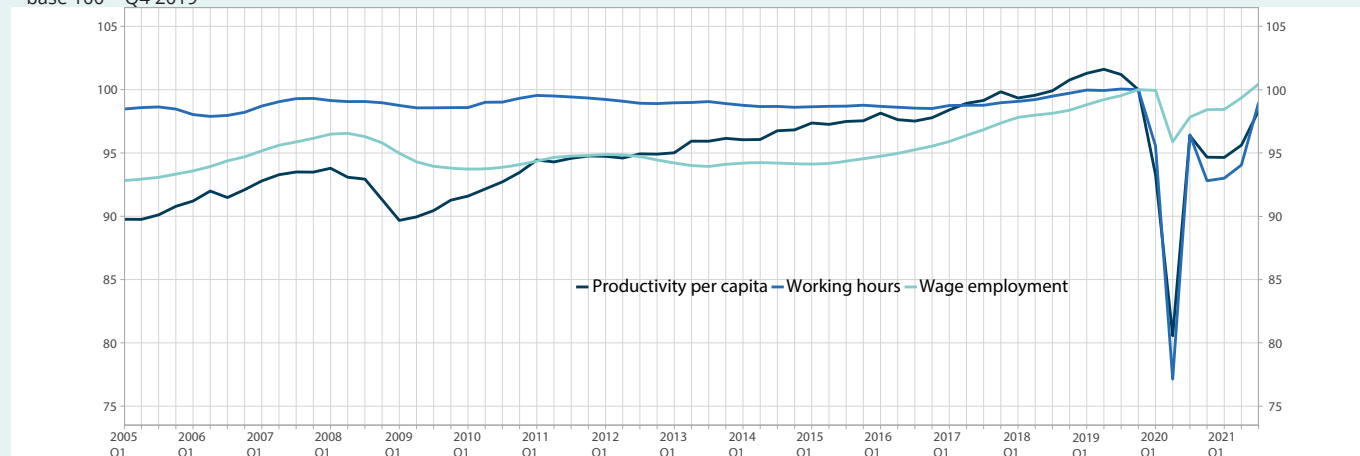
This very irregular trend in per capita productivity can be explained first by the use of the enhanced short-time work scheme. This enables many employees to keep their jobs without working over considerable periods, which resulted in sharp variations in working hours per employee. Fluctuations in per capita productivity and working hours have thus been closely correlated since early 2020, in contrast with the pre-Covid period when per capita productivity was on a growing trend and working hours per employee were flat. At the height of the health crisis, market-sector hourly productivity increased.

#### Hourly productivity showed fluctuations in a mirror image of per capita productivity

Apparent hourly productivity of labour (measured here via the ratio between value added and hours worked by employees) has also varied considerably since the beginning of the health crisis. Its fluctuations over the past two years mirror those in per capita productivity, but on a lesser scale (► [Figure 2](#)). Here too, these uneven movements contrast with the somewhat smooth trend followed previously by hourly productivity.

### ► 1. Salaried employment, working hours per employee and apparent per capita productivity of employees

base 100 = Q4 2019



Scope: excluding real estate non-agricultural market sector excluding the real estate sector.

Note: per capita productivity corresponds to the added value by volume in relation to salaried employment of natural persons.

Source: INSEE, quarterly accounts

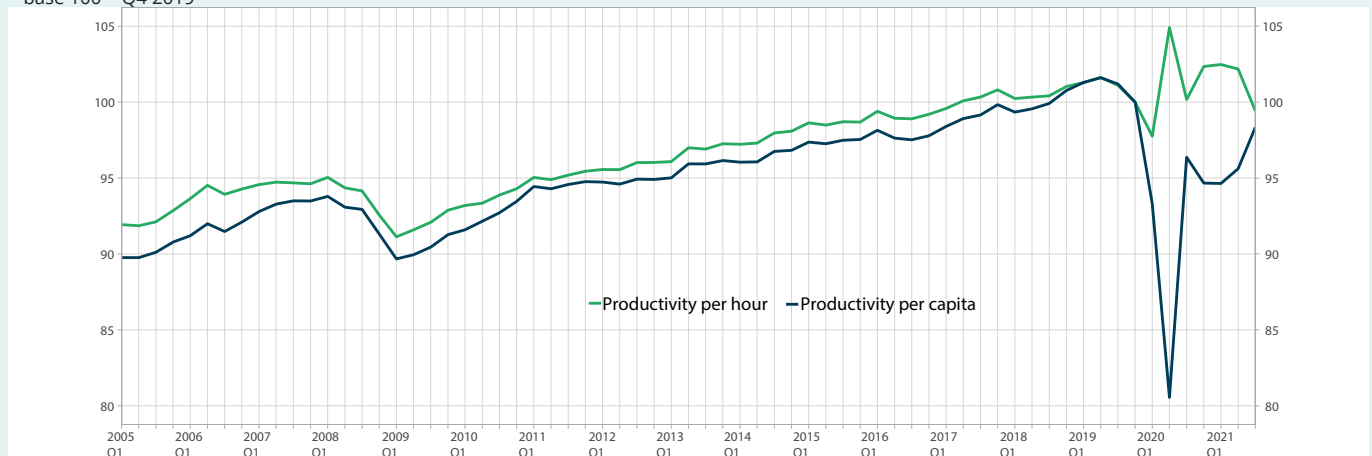
Use of the short-time working scheme does not have a direct influence on hourly productivity insofar as, by definition, the latter is calculated on the basis of a volume of hours actually worked. However, it is the intensity of use of the scheme, and more broadly deformations in the breakdown of hours worked between productive branches, which explain most of the recent movements in hourly productivity at aggregate level.

## A novel sectoral composition effect explains the temporary increase in hourly productivity

In 2020-21, the crisis had a bigger impact on branches of activity in which the level of productivity is lower than the average (► [Figure 3](#)). For instance, some relatively unproductive branches were particularly affected, such as accommodation and food, services to households

### ► 2. Apparent productivity of employees, hourly and per capita

base 100 = Q4 2019

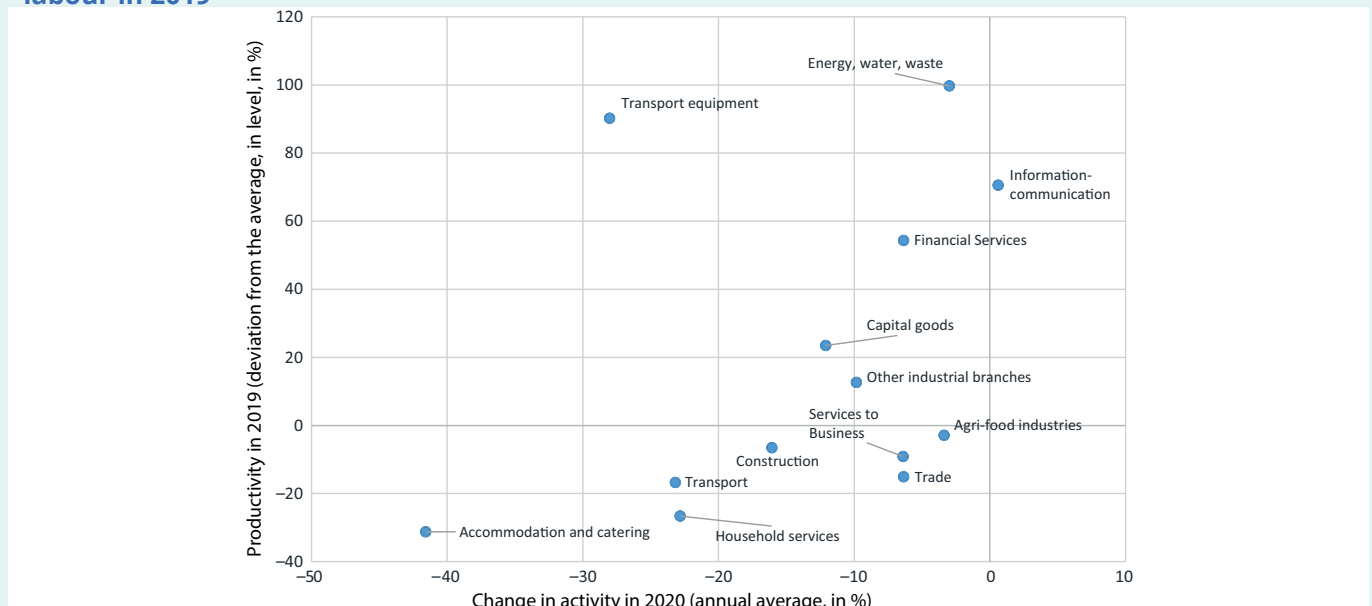


Scope: excluding real estate non-agricultural market sector excluding the real estate sector.

Note: apparent hourly productivity corresponds to value added by volume in relation to the volume of hours worked by employees.

Source: INSEE, quarterly accounts

### ► 3. Variation in added value by volume in 2020 and the level of apparent hourly productivity of labour in 2019



Scope: excluding real estate non-agricultural market sector excluding the real estate sector.

Source: INSEE, quarterly accounts

or, to a lesser extent, commerce. On the other hand, high labour productivity sectors such as energy or information-communication suffered only limited losses of activity, or even posted gains. The economy was thus deformed at least temporarily, with an increased weight of sectors that are more productive than average. This was not systematic, however, as activity in certain high-productivity branches, such as the manufacturing of transport equipment, for example, also saw some considerable falls in activity.

Such a deformation of the productive structure has consequences for the trend in hourly productivity measured in all branches, even when hourly productivity within each branch is unchanged. It is this composition effect that explains the temporary increase in the

aggregate hourly productivity of the market branches during the health crisis.

The trend in aggregate hourly productivity can thus be broken down in accounting terms into two contributions (► **Box**):

- The variation in productivity specific to each branch. The greater the weight of the branch, the greater the influence on aggregate productivity.
- The deformation effect of the breakdown between branches of the hours worked ("composition effect"). For example, when the relative weight of a branch in the total hours worked decreases and this branch has lower-than-average productivity, then this contributes to an increase in overall productivity.

## Methodology and main concepts used

Hourly productivity of labour is defined as the ratio of value added (or GDP) by volume to the total volume of hours worked. This definition can be applied at a global level (the whole economy) or for each branch.

In accounting terms, aggregate productivity is written as the sum of the productivities of the different branches weighted by the weight of each of them in hours worked. Thus, each branch contributes to the variation in aggregate productivity via two effects: <sup>1</sup>

(1) The contribution of the productivity specific to the branch ("intra-branch effect"), defined as the productivity of the branch weighted by its weight in hours worked: for each branch, if the structure of hours worked remains unchanged, the variation in its productivity affects the variation in aggregate productivity, and all the more so when the share of that branch in the hours worked is greater;

(2) A "composition" effect reflecting the reallocation of hours worked between branches, calculated as the variation in the share of a branch in hours worked weighted by the productivity related to this branch: this effect can capture the variation in aggregate productivity that results from variations in the structure of the hours worked; it is all the more marked (in absolute value) when the difference from the average productivity of the branch is greater.

This structure effect can come either from a deformation in the structure of hours per capita, or from a reallocation of jobs between branches. In practice, as the crisis mainly resulted in falls in hours worked, to a much greater extent than the fall in the number of jobs, it is above all the first effect that played a part in the composition effect.

The formula taken to break down the figures is formally that proposed by Berthier (2002)<sup>2</sup> for the calculation of contributions.

Thus, if we denote  $P_{jt}$  as the productivity in branch  $j$  at date  $t$ , and  $\alpha_{jt}$  as the share of branch  $j$  in the total hours worked at date  $t$ , the different in aggregate productivity between date  $t$  and date  $t_0$  is written

$$P_t - P_{t_0} = \sum_j (\alpha_{jt} - \alpha_{jt_0}) \left( \frac{P_{jt} + P_{jt_0}}{2} - \frac{P_t + P_{t_0}}{2} \right) + \sum_j \frac{(\alpha_{jt} + \alpha_{jt_0})}{2} (P_{jt} - P_{jt_0})$$

where  $P_t = \sum_j \alpha_{jt} P_{jt}$  is the aggregate productivity of all branches. The first term of this represents the composition effect and the second the intra-branch effect. ●

<sup>1</sup> See exemple: Schreiber, A. et A. Vicard (2011), "Tertiariation of the French Economy and the slowdown in labor productivity between 1978 and 2008", *Document de Travail de la Direction des Etudes et des Synthèses Economiques*, G 2011/10, June 2011.

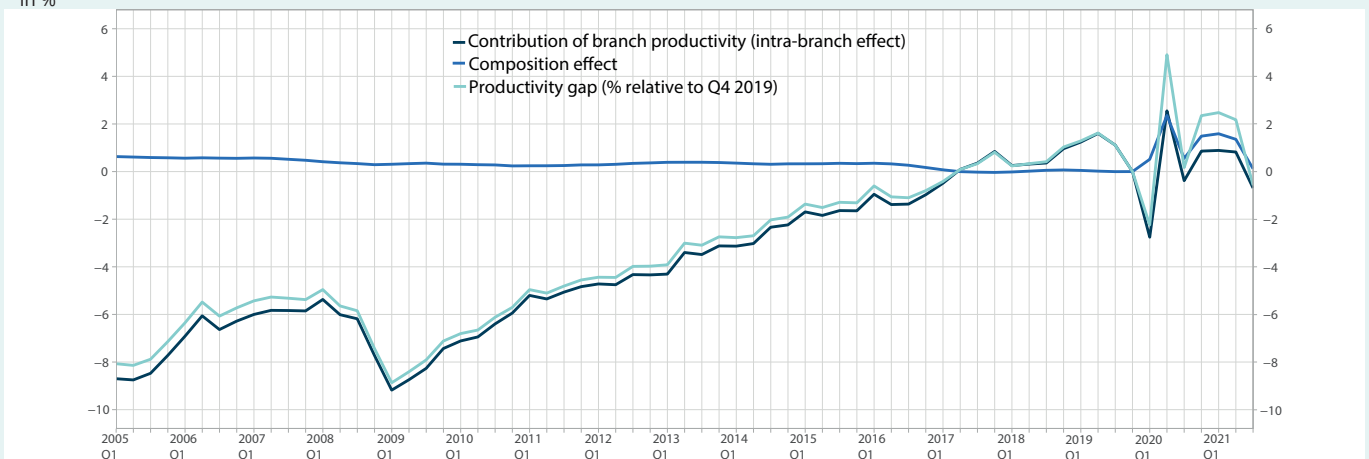
<sup>2</sup> JP. Berthier, "Réflexions sur les différentes notions de volume dans les comptes nationaux", *Document de travail de l'INSEE* n°8, June 2002.

In general, the composition effect plays a very moderate role (at least at the granularity level taken here). It is therefore the variation in productivity within the branches that explains almost all of the variations in aggregate hourly productivity from 2005 to 2019 (► [Figure 4](#)). However, the composition effect has played a novel role in variations in hourly productivity since the beginning of 2020.

The inter-branch composition effect contributed overall to an increase in market-sector hourly productivity during the health crisis. Between Q1 2020 and Q2 2021, this came on average to +1.3 points, thus explaining most of the increase in hourly productivity over the same period (+1.6 points), in relation to the level at the end of 2019 (► [Table](#)).

## ► 4. Breakdown of the apparent hourly productivity of labour

in %

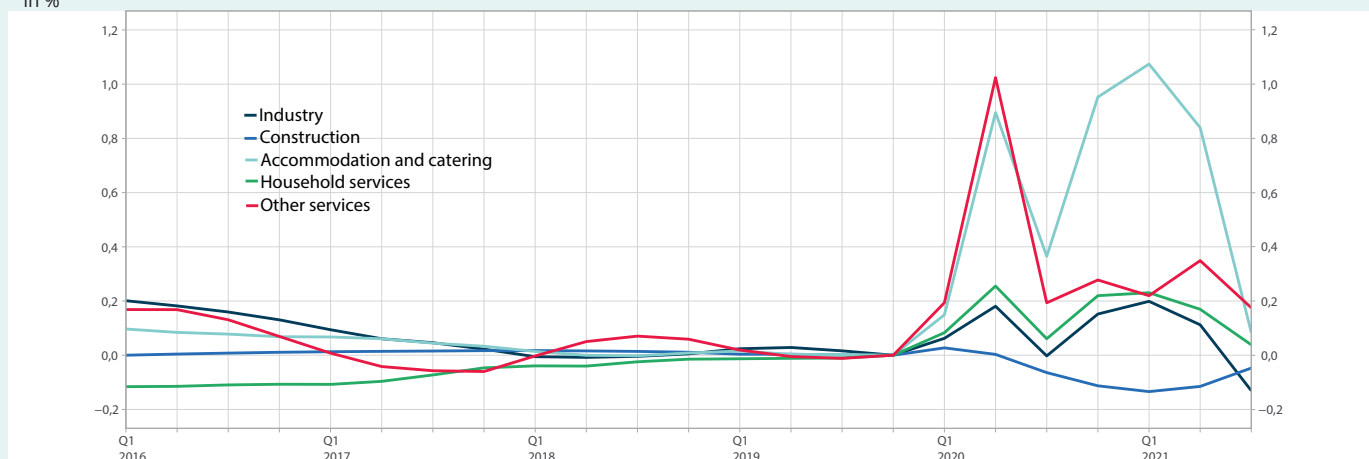


Scope: excluding real estate non-agricultural market sector excluding the real estate sector.

Source: INSEE, quarterly accounts

## ► 5. Contribution of the branches to composition effects

in %



Scope: excluding real estate non-agricultural market sector excluding the real estate sector.

Source: INSEE, quarterly accounts

# French economic outlook

The branch of accommodation and food services alone made a large contribution to this composition effect (► **Figure 5**), as the fall in hours worked in that sector was much greater than in the other market-sector branches. In the more productive branches, such as information-communication or financial services, the fall in hours was more limited, which also provided a one-off boost to hourly productivity.

The contribution of productivity variations that are specific to the branches has been more variable over the past two years and is more difficult to interpret. The average net effect over the period from Q1 2020 to Q2 2021 is slightly positive (+0.3 points), with contributions that vary from one main branch to another (► **Figure 6**). Caution is required, however, when comparing productivity branch by branch, given the degree of precision of these measurements, which come from different information systems which were themselves being tested by new types of variations.

## In Q3 2021, per capita productivity and hourly productivity return to their pre-crisis levels

In Q3 2021, activity returned much closer to its pre-crisis level, with the added value of the market-sector branches other than real estate standing just a little over 1% below its level in Q4 2019. Per capita productivity thus rebounded significantly, a trend that was consistent with the sharp fall in use of the short-time work scheme. However, given the fact that the salaried workforce has already exceeded its pre-crisis level and the remaining use of the short-time working

scheme, per capita productivity remained 1% lower in Q3 2021 than in Q4 2019.

At the same time, hourly productivity fell back considerably in Q3 2021, as the composition effect which had been increasing it decreased and almost disappeared. The two notions of productivity thus came singularly closer to each other. In light of their respective pre-crisis levels, hourly productivity remained a little higher than per capita productivity, however, in particular due to even greater use of the short-time working scheme than pre-crisis.

In terms of level, market-sector hourly productivity is very close to its pre-crisis level, at 0.6% below its level at the end of 2019, which is a small figure given the usual fluctuations of this indicator. In light of the positive trend in (per capita or hourly) productivity in the 2010s, the fact that productivity in Q3 2021 is just below its level at the end of 2019 would appear to indicate a loss of productivity in relation to a counterfactual scenario without a crisis. It is difficult at this stage, however, to assess such a hypothesis precisely.

**Looking forward, the two notions of productivity are likely to progress and to continue coming close to each other, although significant uncertainties remain as to the extent of their potential rebound.**

In the short-term future:

- the composition effect is likely to remain weak if use of short-time activity remains moderate in the less productive branches, as was already the case in Q3 2021;

## ► 6. Difference in hourly productivity in relation to pre-crisis level (Q4 2019)

difference in %, contributions in points

	2020 Q1-2021 Q2	2021 Q3
<b>Total difference</b>	<b>1.6</b>	<b>-0.6</b>
<b>Contribution of the branches (intra-branch effect)</b>	<b>0.3</b>	<b>-0.7</b>
of which industry	0.3	0.2
of which construction	-0.7	-0.6
of which commercial tertiary	0.7	-0.2
<b>Composition effect (inter-branch effect)</b>	<b>1.3</b>	<b>0.1</b>
of which industry	0.1	-0.1
of which construction	-0.1	0.0
of which commercial tertiary	1.3	0.3

Scope: excluding real estate non-agricultural market sector excluding the real estate sector.

Note: between Q1 2020 and Q2 2021, hourly productivity was higher on average by 1.6% than in Q4 2019, of which 1.3 points attributable to the sole composition effect.

Source: INSEE, Quarterly accounts

- The variation in hourly productivity of labour in each of the branches remains uncertain; it could be affected by several effects that could potentially work contrary to each other:

- upwards: by the reorganisation of businesses and the innovations they could make use of in the management of their resources, with accelerated adoption of new technologies;
- uncertain: by maintaining an organisation that allows considerable use of remote working;

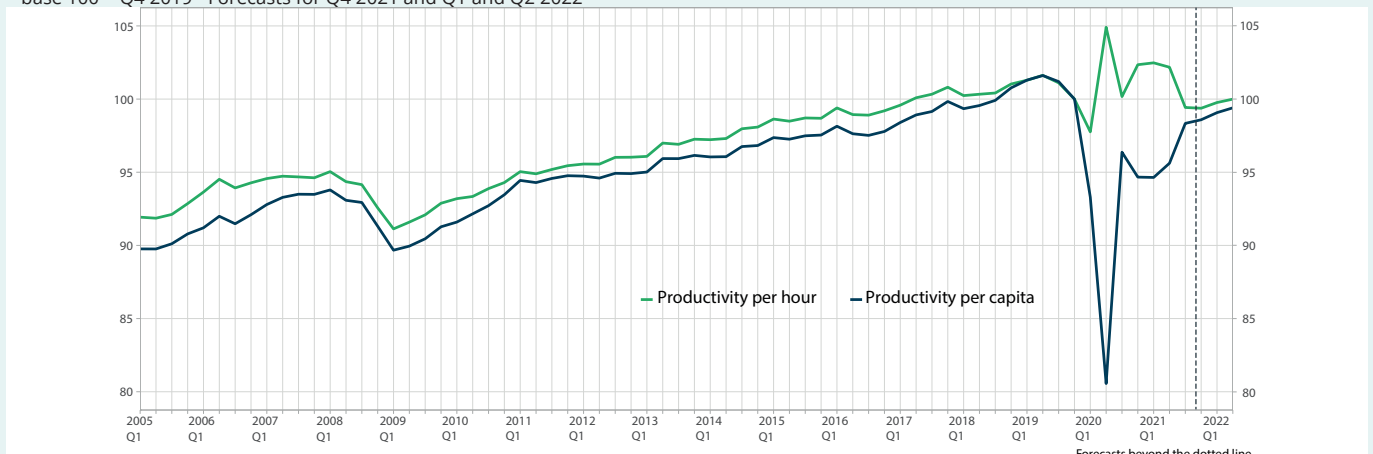
- downwards: by a possible lasting impact of the health restrictions and an effect of the crisis on human capital which might prove significant.

Over the forecasting period, hourly productivity should therefore return to its pre-crisis level or even a little higher, as in previous phases of acceleration in activity (► **Figure 7**). Also, per capital productivity should increase slightly more quickly, with a gradual fall in the level of use of the short-time working scheme (► **Employment sheet**). ●

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## ► 7. Apparent productivity of employees, hourly and per capita

base 100 = Q4 2019 - Forecasts for Q4 2021 and Q1 and Q2 2022



Scope: excluding real estate non-agricultural market sector excluding the real estate sector.

Source: INSEE, quarterly accounts

# Unemployment

In Q3 2021, the unemployment rate according to the ILO definition remained virtually stable compared to the previous quarter: +0.1 points, at 8.1% of the active population (► [Figure 1](#)). This near-stability is the result of substantial accompanying increases in employment (+273,000 as a quarterly average, after +305,000 in H1) and in the active population (+325,000, after +320,000 in H1, with the active population reaching an unprecedented level and thus exceeding its trend level). Half of these increases involved 15-24 year-olds, and were mainly the result of sandwich contracts which have increased in number since 2017 and accelerated in 2021. Thus the activity rate among young people reached 41.1% in Q3 2021, up by 1.8 points compared to spring and by 3.2 points compared to its pre-crisis level. For all people aged 15 and over, the increase in the active population in Q3 2021 was mainly offset by a substantial decline in the number of inactive persons in the “halo of unemployment”: -175,000 persons, after near-stability since Q3 2020.

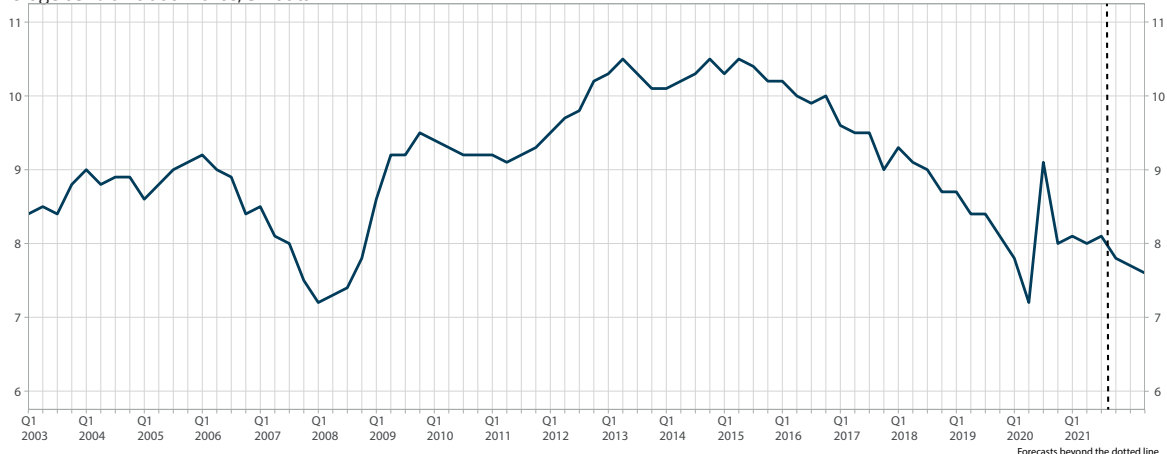
In Q4 2021, the active population is expected to slip back slightly in reaction (-27,000), due to a rebound in the halo of unemployment after its atypical decline in the previous quarter, then increase a little in H1 2022 (+40,000) (► [Figure 2](#)). Taking into account the expected rise in employment (+73,000 as a quarterly average in Q4 2021, then +84,000 in H1 2022), the number of unemployed according to the ILO definition is likely to drop by 100,000 in Q4 2021. The unemployment rate is therefore expected to fall to 7.8% of the active population, then decrease gradually over H1 to 7.6% (► [Figure 3](#)).

This forecast remains dependent on future change in the active population, however, the trend level remains difficult to determine after two years of exceptionally large fluctuations. The chosen scenario is based on the latest available active population projections, dating from 2017, adjusted to take into account observed pre-crisis trends and the recent activity behaviour of young people, attributable to the growth in sandwich contracts.<sup>1</sup> All in all, the forecast for the active population is for a slowdown compared to the changes observed in 2021, with a return to a similar level of growth to pre-crisis: it is likely that the slowdown in the trend labour force population will be more than offset by the effects of sandwich contracts on the activity of young people. ●

<sup>1</sup> INSEE's latest active population projections date back to 2017. In this Sheet, they have been adjusted to take several factors into account, which will still need to be analysed and confirmed in the coming quarters. First, the activity trend for people of intermediate age was reduced slightly to take account of changes observed between 2015 and 2019. Second, since 2017, the number of sandwich contracts has increased significantly and this increase accelerated in 2021. Projections for the active population of young people have therefore been revised upwards to take this into account. Finally, a more technical detail which does not affect the dynamics of 2020 and 2021, projections have also been adjusted to take into account the overhaul of the continuous Labour Force Survey in 2020, which slightly increases the activity rate, and to transpose the results so that the scope is “France excluding Mayotte”, the same as the Labour Force Survey. A full programme updating INSEE's labour force projections will be disseminated in June 2022.

### ► 1. Unemployment rate (ILO definition)

quarterly average as % of labour force, SA data

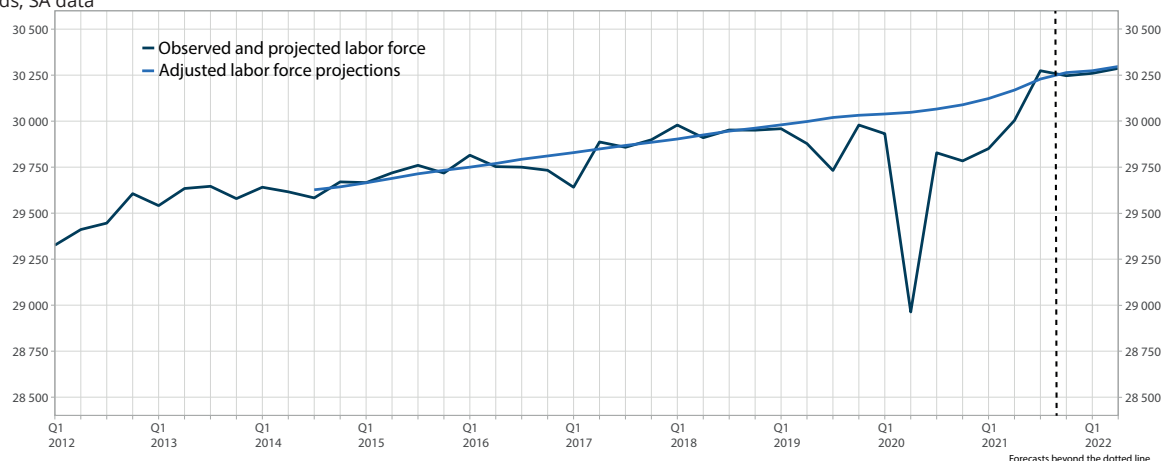


Scope: France (excluding Mayotte), persons aged 15 or over living in ordinary housing

Source: INSEE, Labour Force Survey

## ► 2. Change in the active population compared to adjusted projections

in thousands, SA data



Scope: France (excluding Mayotte)

Source: INSEE, Labour Force Survey, adjusted labour force projections; DARES, numbers of sandwich contracts

## ► 3. Change in employment, unemployment and the active population

variation in quarterly average in thousands, SA data

	2020				2021				2022		Cumulative change since end 2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
<b>Employment (1)</b>	-26	-731	361	167	67	238	273	73	32	52	506
<b>Unemployment (2)</b>	-94	-266	642	-338	23	-8	52	-100	-19	-25	-133
<b>Active population = (1) + (2)</b>	<b>-120</b>	<b>-997</b>	<b>1003</b>	<b>-171</b>	<b>90</b>	<b>230</b>	<b>325</b>	<b>-27</b>	<b>13</b>	<b>27</b>	<b>373</b>
<i>Trend labour force (a)</i>	7	7	7	7	7	7	5	4	3	2	56
<i>Effect of work-linked training on youth activity (b)</i>	0	3	12	17	27	40	54	33	8	22	216
<i>Pre-crisis» cyclical bending effect (c)</i>	-3	-73	35	15	4	20	22	6	2	3	31
<i>Residue (d)</i>	-124	-933	950	-210	52	164	244	-70	0	0	73
<b>Variation in unemployment rate</b>	<b>-0.3</b>	<b>-0.6</b>	<b>1.9</b>	<b>-1.1</b>	<b>0.1</b>	<b>-0.1</b>	<b>0.1</b>	<b>-0.3</b>	<b>-0.1</b>	<b>-0.1</b>	<b>-0.5</b>
Unemployment rate	7.8	7.2	9.1	8.0	8.1	8.0	8.1	7.8	7.7	7.6	

■ Forecast

How to read it: between Q2 2021 and Q3 2021, employment increased by 273,000 on average, unemployment increased by 52,000 and the active population increased by 325,000. The unemployment rate rose by 0.1 points, reaching 8.1%.

Note: Employment corresponds here to total employment (payroll employment including sandwich contracts + self-employment), measured as a quarterly average (a) Trend based on adjusted active population projections.

(b) Effect based on sandwich contract numbers from DARES, calculations by INSEE.

(c) This flexibility effect represents the fact that new workers enter the labour market when the employment situation improves. It was estimated over the pre-crisis period.

(d) In 2020 and 2021, the remainder covers the specific effect of the health crisis on activity behaviour, i.e. mainly the massive withdrawal of activity during the 1<sup>st</sup> lockdown in spring 2020.

Scope: France (excluding Mayotte), persons aged 15 and over

Source: INSEE, Labour Force Survey, Quarterly employment estimates

## Consumer prices

In 2021, inflation rose sharply: after reaching zero in December 2020 (0.0% over one year), it now stands at +2.8% for November, according to the provisional estimate. This increase was mainly driven by energy prices: after dropping to particularly low levels in 2020, they have recovered significantly since then, in the context of the global economic recovery (► **Focus**).

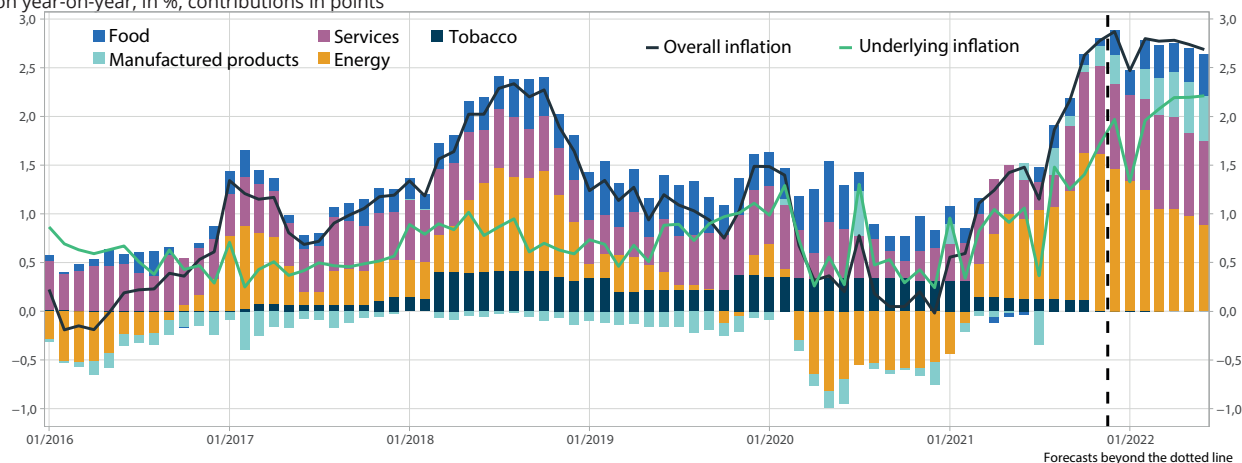
Over the next six months, inflation is expected to remain above 2.6% year-on-year (except in January, an automatic consequence of the postponement of the winter sales in 2021) under the conventional assumption that the price of oil is fixed at \$75 for a barrel of Brent and there is stability in other commodity prices. It is also assumed that the structure of consumption used to weight the consumer price index (CPI) in 2022 will be the same as for 2021, i.e. the structure of consumption in 2020 (► **Box 1**).

The contribution of energy prices to headline inflation is expected to remain significant, but it looks set to decrease under the conventional assumption used, through the automatic effect of their increase one year earlier ("base effect"). In addition, over the forecasting period, the regulated gas tariff is likely to remain stable due to the price shield introduced in October. All in all, the change in energy prices is expected to drop from 21.6% year-on-year in November 2021 to 11.8% in June 2022. At the same time, inflation is expected to increase in manufactured products and food: past increases in the prices of industrial and agricultural commodities (especially cereals) have indeed resulted in recent and significant increases in production prices, which are likely to begin to have repercussions on consumer prices (► **Box 2**). The prices of manufactured goods should therefore move from a year-on-year change of 0.8% in November 2021 to 1.8% in June. Finally, after returning to a more normal seasonality in 2021, the prices of services should make a stable contribution to inflation in the coming months.

Consequently, while headline inflation is likely to remain relatively stable in H1 2022, core inflation is expected to increase over the entire period –apart from January due to the winter sales– and reach +2.2% year-on-year in June, driven by the momentum of the prices of manufactured products and, to a lesser extent, those of food products, excluding fresh food. ●

### ► 1. Headline inflation and contributions by item

inflation year-on-year, in %, contributions in points



Source: INSEE

## ► 2. Consumer prices

change in %, contributions in points

Regroupements IPC* (pondérations 2021)	October 2021		November 2021		December 2021		March 2021		June 2021		Annual averages		
	yoy	cyoy	yoy	cyoy	yoy	cyoy	yoy	cyoy	yoy	cyoy	2020	2021	2022 ovhg
<b>Food (17.9%)</b>	<b>0.7</b>	<b>0.1</b>	<b>0.4</b>	<b>0.1</b>	<b>1.4</b>	<b>0.3</b>	<b>1.9</b>	<b>0.3</b>	<b>2.4</b>	<b>0.4</b>	<b>1.9</b>	<b>0.6</b>	<b>1.8</b>
including: fresh food (2.6%)	1.5	0.0	-1.0	0.0	2.8	0.1	4.3	0.1	4.8	0.1	7.3	1.8	3.2
excluding: fresh food (15.2%)	0.5	0.1	0.7	0.1	1.2	0.2	1.5	0.2	2.0	0.3	1.0	0.4	1.6
<b>Tabacco (2.4%)</b>	<b>4.8</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>13.7</b>	<b>5.5</b>	<b>0.0</b>
<b>Manufactured products (25.0%)</b>	<b>0.3</b>	<b>0.1</b>	<b>0.8</b>	<b>0.2</b>	<b>1.2</b>	<b>0.3</b>	<b>1.5</b>	<b>0.4</b>	<b>1.8</b>	<b>0.5</b>	<b>-0.2</b>	<b>0.3</b>	<b>1.4</b>
including : clothing and footwear (3.5%)	0.0	0.0	1.8	0.1	2.3	0.1	3.6	0.1	4.3	0.2	-0.5	0.0	3.0
medical products (4.4%)	-1.6	-0.1	-2.0	-0.1	-2.1	-0.1	-2.8	-0.1	-3.1	-0.1	-2.0	-1.2	-2.9
other manufactured products (17.1%)	0.8	0.1	1.3	0.2	1.8	0.3	2.0	0.3	2.4	0.4	0.2	0.7	2.1
<b>Energy (7.5%)</b>	<b>20.2</b>	<b>1.5</b>	<b>21.6</b>	<b>1.6</b>	<b>19.6</b>	<b>1.5</b>	<b>14.1</b>	<b>1.1</b>	<b>11.8</b>	<b>0.9</b>	<b>-6.1</b>	<b>10.6</b>	<b>14.6</b>
including : oil products (3.4%)	27.0	0.9	29.3	1.0	24.8	0.8	11.8	0.4	9.3	0.3	-11.8	13.7	13.2
<b>Services (47.3%)</b>	<b>1.8</b>	<b>0.8</b>	<b>1.9</b>	<b>0.9</b>	<b>1.8</b>	<b>0.9</b>	<b>2.0</b>	<b>1.0</b>	<b>1.8</b>	<b>0.9</b>	<b>0.9</b>	<b>1.2</b>	<b>1.9</b>
including : rent-water (8.5%)	1.4	0.1	1.6	0.1	1.7	0.1	1.7	0.1	1.8	0.2	0.3	1.1	1.8
health services (6.5%)	-0.8	-0.1	-0.8	0.0	-0.7	0.0	-0.3	0.0	0.3	0.0	0.3	-0.5	0.0
transport (1.7%)	8.8	0.2	12.2	0.2	8.9	0.2	12.8	0.2	8.7	0.2	-1.7	4.1	11.4
communications (2.4%)	5.3	0.1	2.6	0.1	2.8	0.1	2.9	0.1	0.5	0.0	1.0	2.9	1.4
other services (28.1%)	1.5	0.4	1.7	0.5	2.0	0.5	2.0	0.6	1.9	0.5	1.4	1.2	1.9
<b>All (100%)</b>	<b>2.6</b>	<b>2.6</b>	<b>2.8</b>	<b>2.8</b>	<b>2.9</b>	<b>2.9</b>	<b>2.8</b>	<b>2.8</b>	<b>2.7</b>	<b>2.7</b>	<b>0.5</b>	<b>1.7</b>	<b>2.7</b>
All excluding energy (92.5%)	1.3	1.2	1.3	1.2	1.5	1.4	1.8	1.7	1.9	1.7	1.1	1.0	1.7
All excluding tabacco (97.6%)	2.6	2.5	2.9	2.8	2.9	2.8	2.8	2.7	2.7	2.6	0.2	1.6	2.8
<b>Core inflation (60.1%)*</b>	<b>1.4</b>	<b>0.8</b>	<b>1.7</b>	<b>1.0</b>	<b>2.0</b>	<b>1.2</b>	<b>2.1</b>	<b>1.2</b>	<b>2.2</b>	<b>1.3</b>	<b>0.6</b>	<b>1.1</b>	<b>2.0</b>

■ Provisional

■ Forecast

yoy: year-on-year

cyoy: contribution to the year-on-year value of the overall index

\* Consumer price index (CPI)

\*\* Index excluding public tariffs and products with volatile prices, corrected for tax measures

Note: Annual and half-yearly values correspond to year-on-year averages.

Source: INSEE

### Bloc 1- Which weights for the 2022 inflation forecast?

The Consumer Price Index (CPI) is based on a basket of goods and services fixed over the course of a year, with prices monitored each month. This basket is updated every year when the CPI is published in January, to reflect the structure of household consumption over the previous year.

In general, updating the weights at the start of the year has only a limited effect on the level of the CPI, since the structure of household consumption only changes slowly from one year to the next. This is not the case for 2020, however, when the structure of consumption was atypical.<sup>1</sup> Thus, in January 2021, the update of the weights (taking into account the structure of consumption for 2020 rather than that for 2019) contributed to headline inflation of about 0.2 percentage points year-on-year.

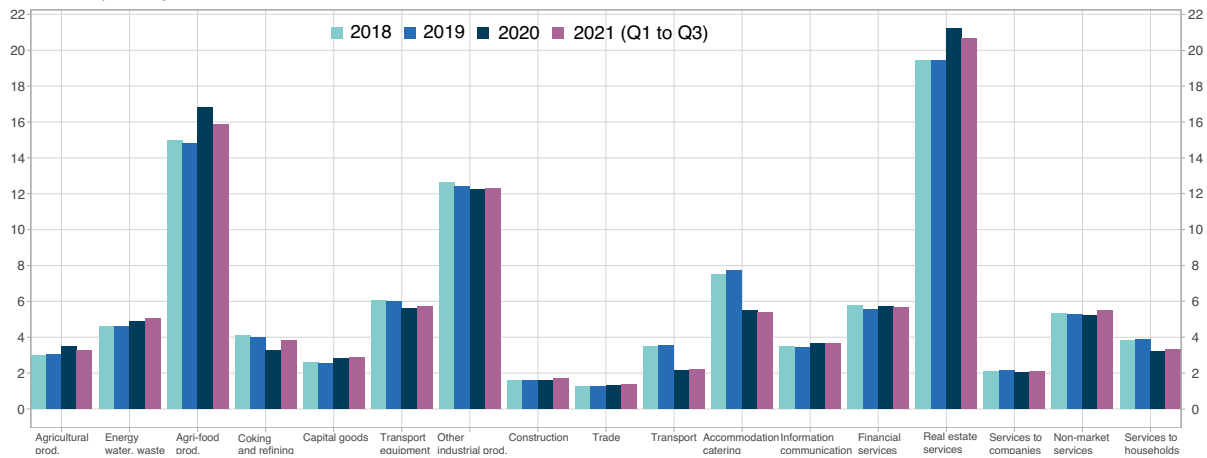
CPI weights will be updated again at the beginning of next year, when the 2022 CPI is prepared. In the inflation forecast presented here, the assumption that has been decided is to keep the same weights for the 2022 CPI as for 2021. This assumption seems justified insofar as, given the health restrictions in force in H1 2021, the structure of consumption for the whole of 2021 is likely to be more similar to that of 2020 than to that of a pre-crisis year. This is shown by data from the national accounts for the first three quarters of 2021: for the 17 items in the national accounts classification the structure of consumption by value appears to be fairly similar between 2021 and 2020 and differs from those of 2019 and 2018 (especially regarding the weight of accommodation-catering, transport services and agri-food products, ► Figure 3). This comparison exercise is flawed since the scope of household consumption within the meaning of the national accounts is different from that of the CPI, being based on data from only the first three quarters of 2021. Despite these limitations, it nevertheless makes the chosen assumption plausible in the context of this forecast. ●

.../...

<sup>1</sup> INSEE, *Abbreviated Methodology*, February 2021 "Consumer price index : changes for the year 2021".

## ► 3. Structure of consumption since 2018 (in A17 nomenclature)

share in consumption by value, in %



How to read it: in 2020, accommodation-catering represented 5.5% of consumption, but 7.5% in 2018 and 7.7% in 2019.

For the first three quarters of 2021, 5.4% of total consumption derived from accommodation-catering: the volume of this consumer item in 2021 is closer to that of 2020 than to that before the crisis.

Note: the scope of consumption presented here corresponds to our consumption forecasts, and not to the construction of the price index.

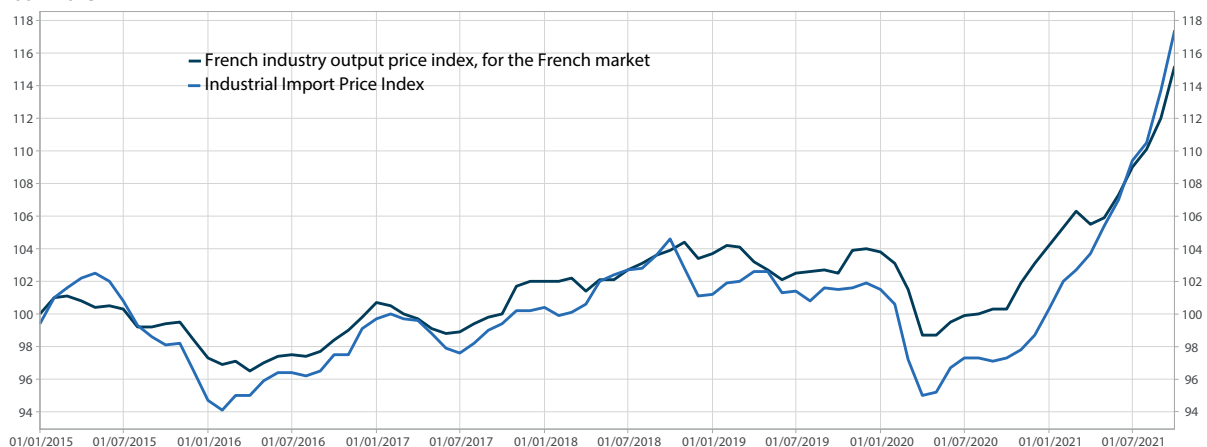
Source: INSEE

## Bloc 2- The increase in industrial production prices is likely to have an impact on consumer prices mainly during H1 2022

Since the end of 2020, the Industrial Producer and Import Price Indices (IPPI) have increased sharply, reaching historic highs, in a context of rising industrial commodity prices (► [Figure 4](#)). Since January 2021, the IPPI has increased by an average of +7.5% year-on-year, whereas between January and October 2020, the average change in the IPPI was -2.4% year-on-year. However, these recent price rises do not seem to have had a noticeable effect on the consumer price index: between September and November, consumer prices of manufactured products rose on average by only 0.5% year-on-year.

## ► 4. Producer and import price indices in industrial production

Base 100 = 2015



How to read it: in October 2021, producer prices in French industry for the French market increased once again: the IPPI –French market- reached 115.2 points, 2.9% more than the previous month. Regarding import prices of industrial products, they accelerated sharply (+3.3%): this index stood at 117.4 points.

Source: INSEE

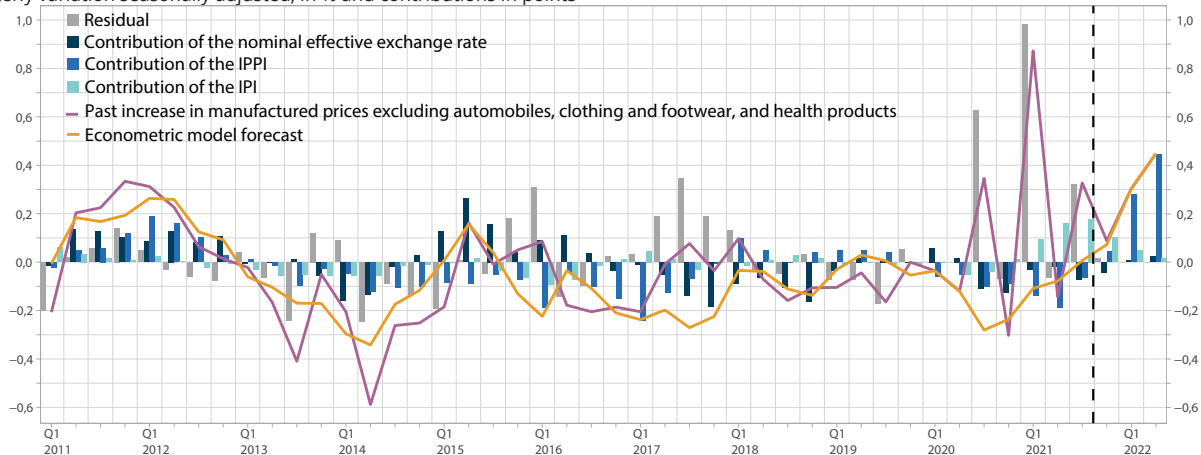
.../...

In fact, the increase in production prices did not impact immediately or fully on consumer prices. It first affected intermediate consumptions by companies, leading to a rise in their production costs. Pass-through to consumer prices depends on the trade-off businesses make between squeezing their margins and putting up their selling prices.

For example, this is illustrated by the following econometric model of the dynamics of consumer prices for the item “other manufactured products” (covering manufactured products, excluding clothing-footwear and health products). According to this model, consumer prices of “other manufactured products” excluding automobiles (as a quarterly variation and seasonally adjusted) depend mainly on the IPPI (as an indicator of production costs), the industrial production index for the branches of activity concerned, and the nominal effective exchange rate. They are expected to accelerate sharply in early 2022, mainly due to the IPPI, whose contribution is likely to increase from Q4 2021 onwards (► **Figure 5**). The model forecasts that the recent rise in production prices is likely to contribute 0.3 percentage points to quarterly growth in consumer prices of “other manufactured products” in Q1 2022, then 0.45 points in Q2. ●

## ► 5. Econometric model of consumer prices of manufactured products (excluding clothing, health products and automobiles)

quarterly variation seasonally adjusted, in % and contributions in points



How to read it: according to this econometric model, prices of “other manufactured products” excluding automobiles are expected to rise by 0.3% in Q1 2022 compared to the previous quarter, excluding seasonal effects. To forecast this rise, the model relied mainly on past values of the IPPI, which are expected to contribute 0.28 points.

Source: INSEE

## The rise in energy prices weighing on household budgets

Consumer prices of gas, vehicle fuel and, to a lesser extent, electricity increased sharply between December 2020 and October 2021, by about 41%, 21% and 3% respectively. Fuel prices came close to the levels they had reached in autumn 2018, while those of gas exceeded them. These rises are already resulting in slightly tighter budgets for all households, as the share of their spending dedicated to energy was half a point higher in Q3 than its average over the past 15 years. In October 2021, the rise in prices since the start of the year resulted in additional monthly energy expenditure of a little over €40 on average per household, of which €20 for fuel. However, fuel prices were relatively low at the end of 2020 due to the health crisis. If the comparison is made with November 2019, which is to say prior to the crisis, the additional cost is less: about €30 in October 2021, of which €8 for the price of vehicle fuel.

### Energy prices have soared since the start of the year, mainly for gas and fuel

Since the start of the year, worldwide tensions on energy markets have driven a rise of about 21% in fuel prices in France (+21.9% for diesel and +20.5% for petrol between December 2020 and October 2021). Gas saw a more pronounced rise of 40.9% over the same period, although it is consumed to a lesser extent by households. The increase in electricity prices, meanwhile, remained similar to that in previous years, at 2.6% (► **Figure 1**).

The last time such price levels were reached was autumn 2018, when the price of oil went slightly over €70 in October 2018. The current situation is on a par with the tensions at that time, with diesel prices exceeding €1.50 per litre since mid-October, for example. Although world markets have been showing signs of easing in Q4, uncertainties still remain as to whether prices are likely to stay at high levels in H1 2022.

### The weight of energy expenditure in overall consumption of households is about half a point higher than its fifteen-year average and exceeds that in autumn 2018

A portion of the household expenditure devoted to housing (heating, lighting, cooking, etc.) and to transport is particularly sensitive to any variations in energy prices, as the volumes of such spending are generally imposed by the requirements of the home and of everyday travel.<sup>1</sup>

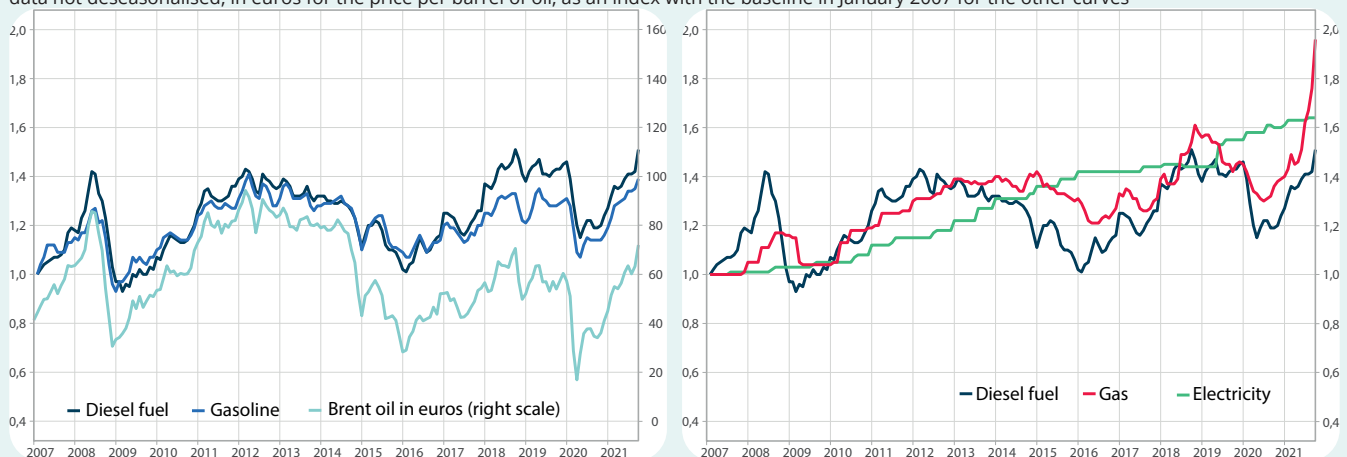
This portion hit a low in 2020, at just below 8%,<sup>2</sup> due to the context of travel restrictions imposed by the health rules. It has been rising again continuously since then and reached 8.9% in Q3 2021 (► **Figure 2**). Although the rise is driven both by energy inflation and by a return to normal of consumption and travel habits, the level reached this summer is still above the average for the past fifteen years (about 8.5%) and is higher than that for autumn 2018 on account of the rise in fuel spending. The

<sup>1</sup> See the book in the collection Insee Références “Economic players and the environment” or INSEE Première “In 2017, households spent 11% of their disposable income on cars”.

<sup>2</sup> The expenditure considered here is in current euros and includes that on the “Energy, water, waste” and “Manufactures of durable and non-durable goods” items in the classification for the quarterly accounts. Some spending other than on energy is therefore taken into account, too (expenditure on water consumption and waste management, in particular). This spending is in moderate proportions, however, and therefore is unlikely to vary significantly under the effect of energy prices.

### ► 1. Oil price in euros and consumer price indices for vehicle fuels (left) and consumer price indices for gas, diesel and electricity (right)

data not deseasonalised, in euros for the price per barrel of oil, as an index with the baseline in January 2007 for the other curves



Note: the price indices are taken from the breakdown of the CPI according to the consumption items in the COICOP classification. They are directly consistent with the spending data from the Family Budget survey used below.

Source: INSEE

highest point over the 2007-2021 period is still the peak of 9.6% reached in 2013, when oil prices remained above 75 dollars a barrel for a long period of time.

This measurement of the pressure on the current expenditure of households does also depend on the general level of their consumption, which has been affected by the periods of lockdown and had not yet returned to its pre-crisis (Q4 2019) level in Q3 2021. An alternative measurement consisting in calculating the same expenditure not in relation to household expenditure but in relation to their gross disposable income, produces a similar outcome, which is to say a marked increase in the ratio in Q3, close to the levels reached in 2018 but still below that 2013 high.

## In October 2021, the rise in prices resulted in additional monthly energy expenditure of a little over €30 on average per household compared to the end of 2019, of which €8 for fuel prices

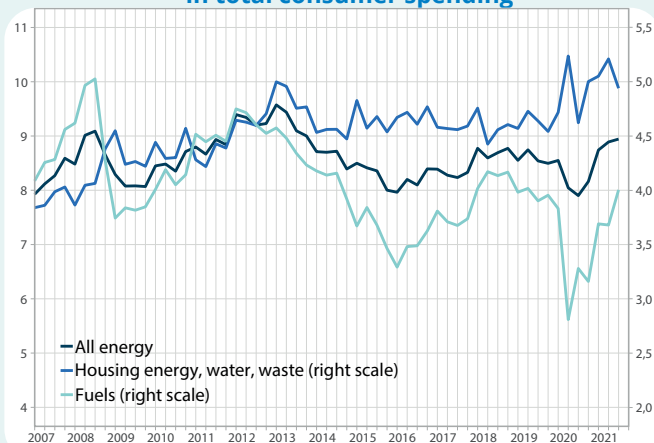
At a more micro-economic level, energy expenditure per household last October was €36 higher than in November 2019, a period when energy prices had not yet been affected by the crisis. With this additional expenditure, €30 comes solely from the variation in prices since then, of which €8 in particular for vehicle fuels, €14 for gas and €2 for heating fuel (► **Figure 3**, contributions in orange). €6 comes from greater energy consumption over the period, meanwhile (► **Figure 3**, contributions in blue).

If the situation in October 2021 is compared not with November 2019 but with December 2020, the month from which prices and consumption began to rise again significantly from their low point, the additional energy expenditure is greater, at €64 per household. This additional amount partly reflects the particular situation in 2020: with the health restrictions in place at the end of 2020, energy consumption volumes were well below their pre-crisis levels, and €21 of that €64 therefore comes from the rise in energy consumption, and in particular of vehicle fuel, between December 2020 and October 2021. Energy prices were relatively low at the end of 2020 and €43 of the €64 comes solely from the variation in energy prices between December 2020 and October 2021 (of which €20 for vehicle fuel, €15 for gas and €6 for heating fuel).

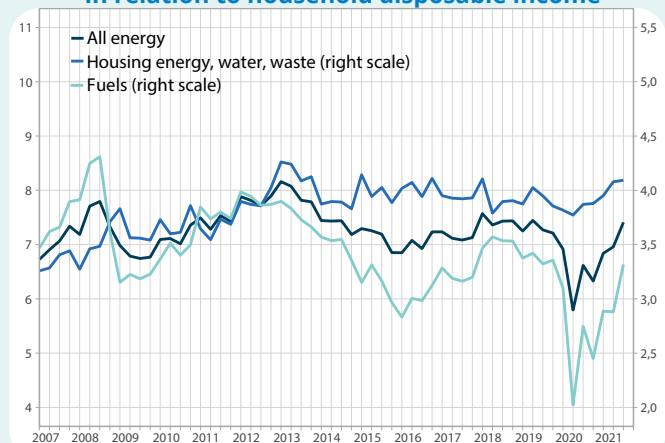
This rise in energy prices this year affects households in different proportions, due to substantial disparities in their consumption, depending on their standard of living or on whether they live in an urban or rural area. For example, the budget dedicated to vehicle fuels by a household on average over a year can range from €650 in the Paris conurbation to €1,550 in a rural area (according to the Family Budget Survey conducted in 2017). For instance, if energy prices had remained at their November 2019 level, a low-income household (first decile) would have spent almost €19 less in October 2021, against almost €45 for a household in the last income decile, and approximately €27 in the Paris conurbation (of which €5 for vehicle fuel), against €33 in a rural municipality (of which €12 for vehicle fuels), on the basis of usual household consumption behaviour (► **Figure 4** and **box**). ●

Charles-Marie Chevalier

## ► 2. Share of energy expenditure including water consumption and waste management, as a % in total consumer spending



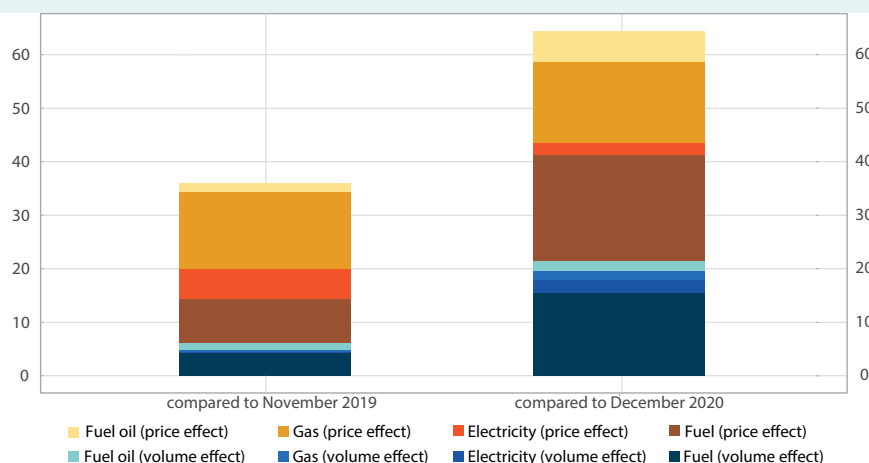
## in relation to household disposable income



Note: the consumer spending considered here is in current euros and includes that on the "Energy, water, waste" and "Manufacture of coke and refined petroleum products" items in the classification for the quarterly accounts.  
Source: quarterly accounts, 2014 base, INSEE

## ► 3. Increase in the energy bill for an average household in October 2021, according to the month taken for comparison

in euros



Note: the price effect (contributions in orange) represents the additional energy expenditure in October 2021, in relation to the reference month, resulting solely from variations in energy prices. The volume effect (contributions in blue) represents the additional energy expenditure resulting solely from variations in energy consumption volumes.

How to read it: an average household saw a rise in its energy bill of €14 due to the variation in the price of gas between November 2019 and October 2021.

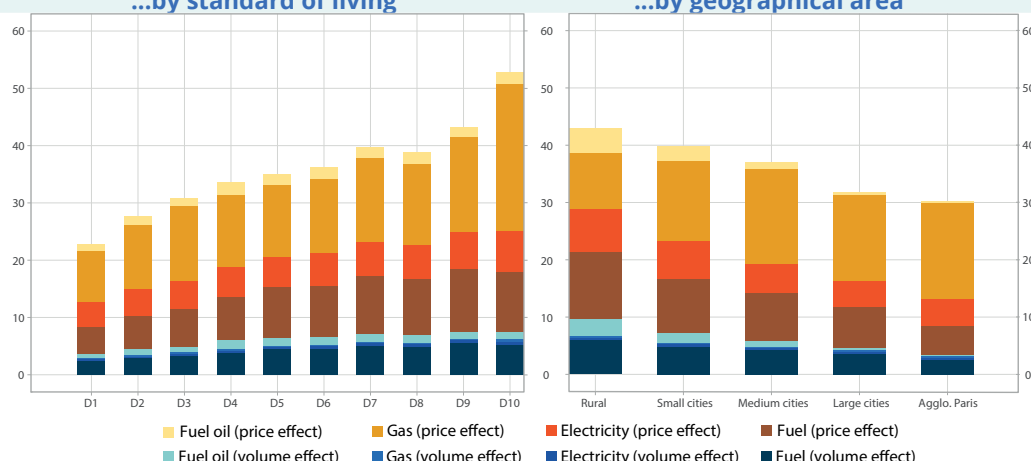
Source: INSEE calculations based on quarterly accounts

## ► 4. Increase in the energy bill for an average household in October 2021, in relation to November 2019...

in euros

...by standard of living

...by geographical area



Note: the price effect (contributions in orange) represents the additional energy expenditure in October 2021, in relation to the reference month, resulting solely from variations in energy prices. The volume effect (contributions in blue) represents the additional energy expenditure resulting solely from variations in energy consumption volumes. These figures are based on the structure of expenditure per consumption item taken from the Family Budget survey in 2017.

How to read it: a household whose standard of living is situated in the first decile saw an increase in its energy bill of €23, representing the sum of the additional costs for vehicle fuel, gas, electricity and heating fuel.

Source: INSEE calculations based on quarterly accounts, Family Budget 2017

### Methodology for calculating energy bill increases for households resulting from the increase in energy prices

The figures are based on consumption estimates by value and by volume, made on the basis of the data in the quarterly accounts in 2021 for the "Electricity", "Gas, steam and air conditioning", "lead-free petrol", "Diesel" and "Heating fuel" (data corrected for seasonal variations and for working days). The volume effect corresponds to the difference in this data between the two months in question. The price effect takes the volumes for the reference month and applies the variation in prices for each of the items, using the corresponding consumer price index.

October 2021 was chosen in order to take the most recent data for household consumption of goods and the consumer price indices. The aim of the reference to November 2019 is to make a comparison with the pre-crisis period. The month of November was considered a more suitable choice than December 2019 as the latter was marked in particular by a context of transport strikes. Finally, the reference to December 2020 serves to illustrate the rise in household energy bills from a remarkable low point not only in energy consumption volumes (vehicle fuels in particular, due to the restrictions in force) and energy prices (oil price in particular).

These aggregate effects are then calculated for an average household and then per category of population using the ratios taken from the 2017 Family Budget ("Les dépenses des ménages en 2017", Insee Résultats, September 2019). For example, for a household in the first decile with average vehicle fuel consumption in 2017 that was about 56% of the level observed for an average household, an additional cost is applied in line with this proportion ●

## Wages

In H2 2021, the nominal average wage per capita (SMPT) is expected to increase briskly (+4.9% in Q3 and +1.0% forecast for Q4), as a result of the rise in payroll due to the significant drop in short-time working compensations (which are not considered as wages). The renewal of the extraordinary purchasing power bonus (PEPA) and the increase in the SMIC by +2.2% on 1<sup>st</sup> October are also likely to boost the SMPT. This automatic increase in a context of net upturn in inflation is also likely to contribute to the rise in the basic monthly wage (SMB).<sup>1</sup> All in all, the nominal SMPT is expected to return to its pre-crisis trajectory by the end of the year. Thus on average over 2021 it is likely to rebound significantly (+6.7% after -4.9%), while the purchasing power of the SMPT, moderated by the rise in prices, is likely to be a little less dynamic (+4.9% after -5.5%).

In H1 2022, nominal wages are expected to remain buoyant (+0.8% in Q1 then +0.6% in Q2 for the SMPT), probably driven by another increase in the SMIC on 1<sup>st</sup> January of around +0.9%, and by taking into account increases in consumer prices and hiring difficulties in wage negotiations in many branches. Short-time working, which was already fairly low towards the end of 2021, is expected to fall back further and make only a low level contribution to change in SMPT. Conversely, the decision of 31 March 2022 regarding the possibility of paying the PEPA bonus is likely to have a slight impact on the SMPT in Q2. All in all, in the non-agricultural market branches, the SMPT in real terms looks set to increase by 1.3% as a carry-over effect in mid-2022 compared to its 2019 level.

In general government, the nominal SMPT is expected to increase by 1.5% in 2021, after +2.8% in 2020. This is mainly driven by the payment of exceptional bonuses to emergency workers who were mobilised in the context of the health crisis and by upward revisions to hospital civil service wages, set out in the “Ségur de la santé” agreements and implemented from autumn 2020. However, given the rise in prices, general government wages in real terms look set to decline slightly in 2021 (-0.2%, after +2.1% in 2020). In 2022, a rebound is expected in the nominal general government SMPT mainly as a result of the planned increase in the wages of category C personnel. All in all, in general government, the SMPT in real terms is likely to increase by 1.4% in overhang by mid-2022 compared to its 2019 level. ●

<sup>1</sup> The SMB corresponds to the structural component of the SMPT, alongside the short-term component mainly affected by the health crisis. Fluctuations in the SMB are therefore more moderate, between +0.3% and +0.5% per quarter in recent years.

### ► 1. Variation in the basic monthly wage and the average wage per capita

changes in %, seasonally adjusted data

	Quarterly growth rates										Average annual change				Difference to average 2019
	2020				2021				2022		2019	2020	2021	2022 ovhg	2022 ovhg
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2					
Average wage per capita (SMPT) in non-agricultural market branches	-3.7	-11.1	15.9	-1.7	0.8	0.0	4.9	1.0	0.8	0.6	2.3	-4.9	6.7	4.5	5.9
Basic monthly wage (SMB)	0.4	0.4	0.3	0.4	0.3	0.3	0.5	1.0	0.7	0.7	1.7	1.5	1.6	2.3	5.6
SMPT in general government (GG)											1.4	2.8	1.5	1.6	6.0
Household consumer prices (national quarterly accounts)	0.2	-0.1	0.1	0.1	0.8	0.3	0.7	1.1	0.6	0.4	0.8	0.6	1.7	2.1	4.5
Real WPS in the non-agricultural market branches	-3.9	-10.9	15.7	-1.8	0.0	-0.3	4.2	-0.1	0.3	0.2	1.5	-5.5	4.9	2.3	1.3
Real WPS	0.1	0.5	0.2	0.4	-0.5	0.0	-0.2	-0.1	0.1	0.3	0.9	0.9	-0.1	0.2	1.0
Real WPS in GG											0.5	2.1	-0.2	-0.5	1.4

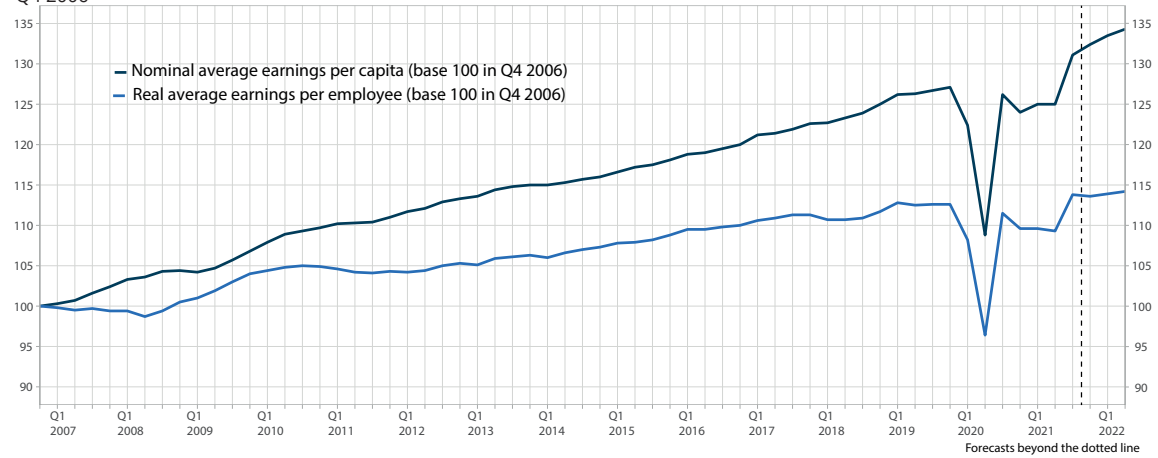
■ Forecast

Note: the quarterly ACEMO survey by DARES was suspended in Q2 2020 (data covering Q1 2020). The quarterly growth rates of the SMB in Q1 and Q2 2020 presented here are the result of estimates, consistent with the half-yearly variation in the SMB observed between Q4 2019 and Q2 2020.

Source: DARES, INSEE

## ► 2. Nominal and real average wage per capita and basic wage

base 100 = Q4 2006



Scope: non-agricultural market sector

Source: INSEE

# Household income

In Q3 2021, household gross disposable income (GDI) picked up (+0.8% after +0.6%). Earned income accelerated strongly as health restrictions were eased, while at the same time, support measures for households were reduced (short-time working benefits, subsidies paid out of the Solidarity Fund to self-employed workers, etc.). Given the acceleration of consumer prices, household purchasing power per consumption unit stabilised (0.0% after +0.2%).

In Q4 2021, household GDI is expected to increase considerably (+1.7%). Payment of the “inflation allowance”<sup>1</sup> should cause social benefits to rebound substantially (+2.5% after –2.8%). In addition, taxes and social contributions are expected to be nearly stable: social contributions and income tax are set to increase, following on from earned income, but this rise will probably be offset by the continuing reform of housing tax relief (first reduction for the 20% most well-off households). Given the buoyancy of household GDI, purchasing power per consumption unit is expected to bounce back in Q4 (+0.5%).

Across the whole of 2021, GDI is expected to accelerate sharply (+3.9% after +1.0% in 2020), a consequence of the strong rebound in earned income combined with a moderate decline in social benefits. Taking into account the rise in consumer prices, household purchasing power per consumption unit is likely to increase by 1.8%, after coming to a standstill in 2020 (0.0%).

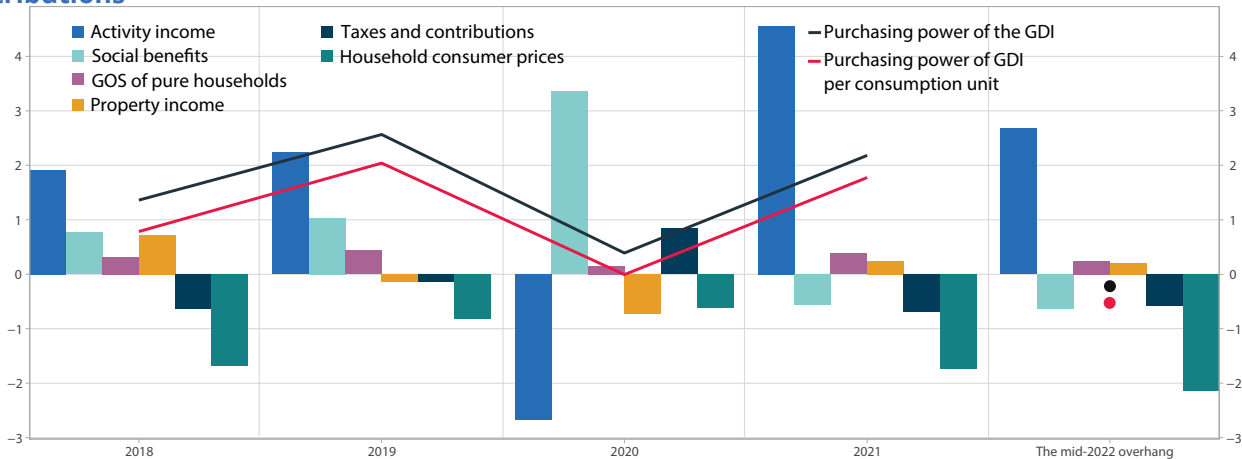
In Q1 2022, household GDI is expected to decline slightly (–0.3%). This would be the result of the drop in social benefits (–2.4%) as an automatic reaction to the payment of the inflation allowance the previous quarter. In fact, even without the effect of this reaction, benefits are likely to increase slightly, boosted by old-age allowances (increase in the basic old age pension from 1st January) but with a reduction in unemployment benefits (due to several factors, including the drop in the number of jobseekers and the reform of unemployment insurance). Meanwhile, earned income is set to pick up by 0.8%, driven mainly by wage increases in the private sector. These are likely to be less dynamic than at the end of 2021, as a result of the slowdown in payroll employment in Q1 2022. Given the rise in consumer prices (+0.6% after +1.1% as a quarterly variation), the purchasing power of household GDI per consumption unit is likely to fall back more sharply (–1.0%).

In Q2 2022, earned income is expected to increase at virtually the same pace as in the previous quarter (+0.7%), whereas social benefits are likely to rise slightly (+0.3%). GDI should then pick up (+0.5%) with purchasing power per consumption unit expected to rebound slightly (+0.1%).

The mid-year overhang for annual change in purchasing power per consumption unit is therefore expected to be –0.05% for 2022 (this is the annual change that would be forecast if purchasing power per consumption unit remained frozen in Q3 and Q4 at its Q2 level). In fact, this mid-year overhang is likely to be affected by the automatic reaction in Q2 2022 to the inflation allowance, which, in accounting terms, is expected to support household income at the end of 2021. In addition, the mid-year overhang does not anticipate change in purchasing power for the whole of 2022. By construction, it does not take into account possible movements in purchasing power in H2 2022, affected by the increase in earned income and the impact of tax or social measures, such as the ongoing reform of the housing tax. ●

<sup>1</sup> The “inflation allowance” refers to the payment of €100 to French residents whose earned income or replacement income is less than €2,000 net per month, the aim being mainly to compensate for the impact of the recent increase in fuel prices on purchasing power. This payment is expected to concern about 38 million people. The allowance will be paid at the end of 2021 or early 2022, depending on the situation. However, the right to the payment is established at the end of 2021 (eligibility is established according to information available as of October 2021), so that, in accordance with the principle of recording on an accrual basis and subject to confirmation of this payment in the national accounts, the entire allowance is recorded for accounting purposes in Q4 2021.

## ► 1. Annual variation in purchasing power of household gross disposable income (GDI) and its main contributions

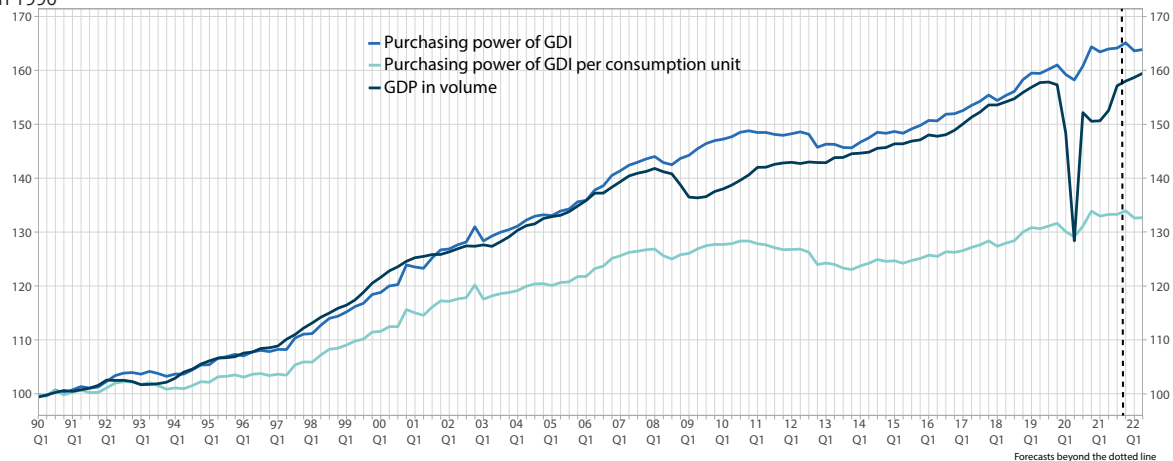


How to read it: in 2022, the growth overhang of the purchasing power of household gross disposable income is expected to reach -0.2% by the end of June. The main contribution to this decline is likely to be household consumer prices, at -2.1 points.

Source: INSEE

## ► 3. Change in purchasing power of household gross disposable income (GDI) and of GDP since 1990

base 100 in 1990



Source: INSEE

## ► 3. Components of household gross disposable income

variations in %

	2020				Quarterly changes				2022		Annual changes			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	2019	2020	2021	2022 ovhg
<b>Gross disposable income (100%)</b>	-0.9	-0.8	1.8	2.3	0.2	0.6	0.8	1.7	-0.3	0.5	3.4	1.0	3.9	1.9
including:														
Earned income (72%)	-2.8	-9.6	12.0	0.7	0.7	0.4	3.2	1.0	0.8	0.7	3.1	-3.7	6.6	3.8
Gross wages and salaries (64%)	-2.8	-10.3	12.6	-0.4	0.9	0.7	4.4	1.2	0.8	0.7	3.2	-4.1	6.9	4.7
GOS of sole proprietors* (8%)	-2.3	-4.3	7.6	8.8	-0.4	-1.8	-5.4	-0.6	0.6	0.4	2.3	-0.6	4.1	-2.9
Social benefits in cash (35%)	3.5	12.9	-9.8	2.8	-0.6	0.2	-2.8	2.5	-2.4	0.3	2.9	9.5	-1.5	-1.7
GOS of "pure" households (14%)	-0.2	-1.6	2.8	0.5	0.3	0.7	0.8	0.8	0.4	0.4	3.2	1.1	2.8	1.8
Property income (6%)	-5.2	-3.6	-1.3	0.6	3.0	2.4	2.0	1.3	1.1	0.8	-2.3	-12.6	5.0	4.2
Social contributions and taxes (-27%)	-0.7	-6.4	8.7	-2.6	1.0	-0.2	2.3	0.2	0.6	0.6	0.5	-3.2	2.7	2.3
<b>Household consumer prices</b>	0.2	-0.1	0.1	0.1	0.8	0.3	0.7	1.1	0.6	0.4	0.8	0.6	1.7	2.1
<b>Purchasing power of gross disposable income</b>	-1.1	-0.6	1.6	2.2	-0.6	0.3	0.1	0.6	-0.9	0.2	2.6	0.4	2.2	-0.2
<b>Household purchasing power by consumption</b>	-1.2	-0.7	1.5	2.1	-0.7	0.2	0.0	0.5	-1.0	0.1	2.0	0.0	1.8	-0.5

■ Forecast

How to read it: after a rise of 0.8% in Q3 2021, household gross disposable income is expected to accelerate in Q4, with +1.7 %. Annual change is expected to be +3.9% in 2021.

Note: figures in brackets give the structure for 2019.

\* the gross operating surplus (GOS) of sole proprietors is the balance of the operating account of sole proprietorships. This is mixed income as it remunerates work carried out by the owner of the sole proprietorship, and possibly members of their family, but it also contains profit made as a sole proprietor.

Source: INSEE

# Household consumption and investment

In Q3, household consumption increased by 4.9%, bringing it much closer to its pre-crisis level (-1.0% compared to Q4 2019). Above all, this dynamism clearly shows the rebound in spending in those sectors previously subject to health restrictions (accommodation-catering, transport services, leisure activities, etc.), although consumption in these sectors is still below its pre-crisis level. Spending on goods, however, offers a more contrasting situation, between some strong increases (electronic equipment) and some levels still in decline (purchases of vehicles). Despite the rise in oil prices, fuel consumption even exceeded its pre-crisis level slightly over the summer.

In Q4 2021, household consumption by volume is expected to continue its trajectory back to its pre-crisis level, especially in transport services, leisure activities and accommodation-catering. Regarding goods, additional spending observed since the beginning of the health crisis looks set to continue for electronic and computer equipment, whereas purchases of vehicles and other industrial products are likely to decline. All in all, consumption is expected to return almost to its pre-crisis level in Q4, an improvement of 0.3% compared to the previous quarter: it should therefore rebound by 4.5% in 2021 (after tumbling 7.2% in 2020).

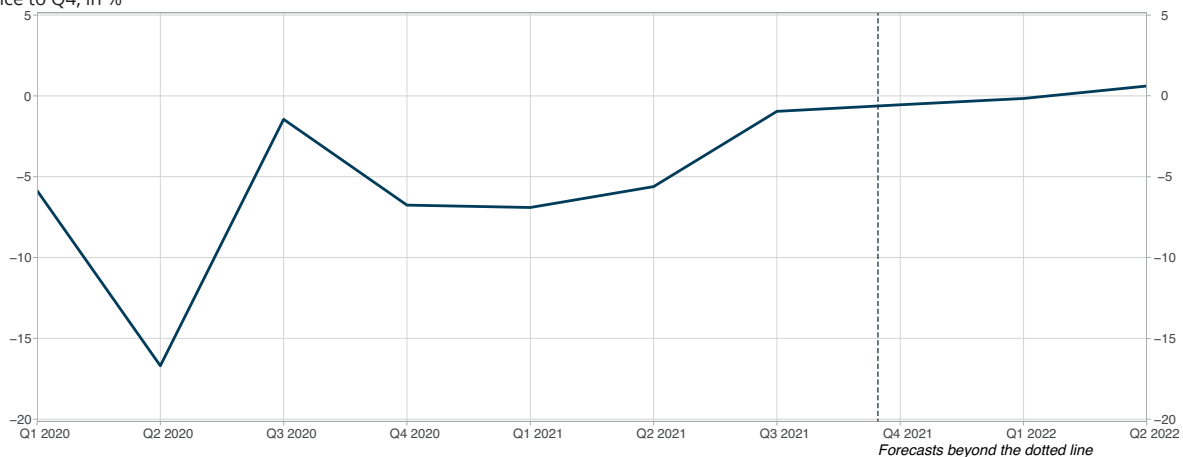
In H1 2022, household spending on the most affected items should gradually return to pre-crisis level, although for some items it is still likely to remain well below (especially purchases of vehicles, linked to supply chain difficulties hampering production in the sector). In other sectors, household consumption overall is likely to recover its previous momentum, reflecting the return to normal of consumer behaviour. All in all, the carry-over effect of consumption should reach 4.1% by mid-year.

After a substantial increase at the height of the crisis, the household savings ratio is expected to continue to decrease gradually, reaching 16.1% in Q2 2022, slightly above its 2019 level (15.0%).

Concerning household investment, it is expected to continue to increase in Q4, then decline slightly at the beginning of next year, affected by the downturn in deliveries of new homes and the slowdown in the pace of second-hand real estate transactions. ●

### ► 1. Past and expected quarterly consumption

in difference to Q4, in %

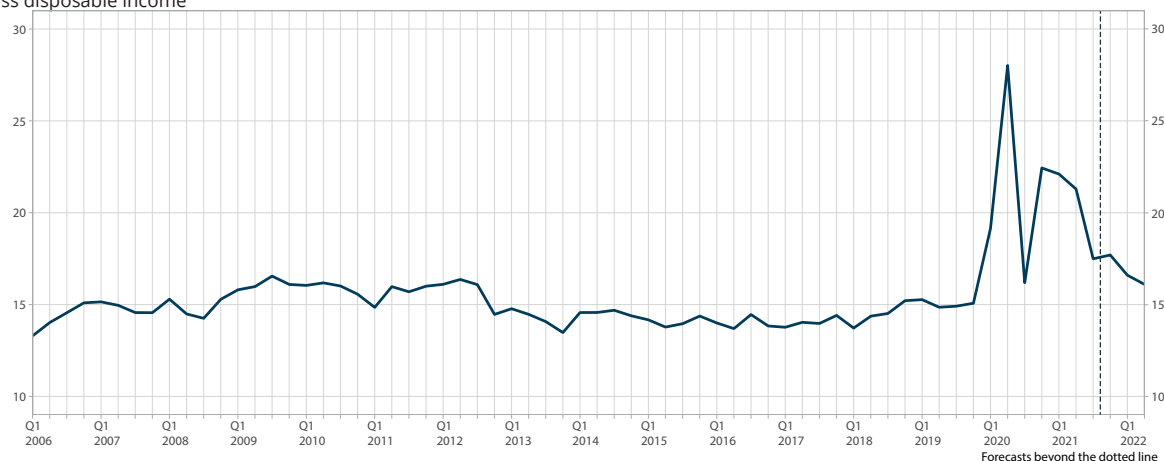


How to read it: in Q4 2021, household consumption would be 0.6% below its level in Q4 2019.

Source: INSEE calculations from various sources

## ► 2. Household savings ratio

in % of gross disposable income



How to read: in Q4 2021, the household savings ratio would be 17.7% of their gross disposable income.

Source: INSEE

## ► 3. Estimated and projected quarterly household consumption levels

difference to the Q4 of 2019, in %

Products	weight*	2020				2021				2022	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
<b>Agriculture, forestry and fishing</b>	<b>3%</b>	<b>3.8</b>	<b>-1.3</b>	<b>0.0</b>	<b>-1.0</b>	<b>-0.1</b>	<b>-2.3</b>	<b>-6.9</b>	<b>-4.5</b>	<b>-2.8</b>	<b>-1.0</b>
<b>Industry</b>	<b>44%</b>	<b>-6.9</b>	<b>-13.0</b>	<b>2.5</b>	<b>-1.7</b>	<b>-1.0</b>	<b>-3.5</b>	<b>-1.2</b>	<b>-2.7</b>	<b>-1.7</b>	<b>-1.0</b>
Manufacture of food products, beverages and tobacco-based products	15%	3.4	5.3	2.1	3.3	3.6	1.9	-1.1	-1	0	1
Coke and refined petroleum	4%	-6.3	-28.5	-4.1	-13.0	-6.3	-7.6	2.4	0	0	0
Manufacture of electrical, electronic, computer equipment; manufacture of machinery	3%	-8.7	-5.5	12.1	15.6	12.6	9.8	9.6	8	9	10
Manufacture of transport equipment	6%	-23.4	-36.0	2.9	-9.1	-8.8	-12.1	-12.9	-16	-12	-10
Manufacture of other industrial products	12%	-12.2	-23.1	3.7	-5.1	-4.6	-10.0	0.6	-1	-1	-1
Extractive industries, energy, water, waste treatment and decontamination	5%	-2.1	-4.1	0.3	1.6	1.9	5.6	1.9	2	0	0
<b>Construction</b>	<b>2%</b>	<b>-9.5</b>	<b>-23.4</b>	<b>0.4</b>	<b>0.8</b>	<b>-1.3</b>	<b>8.0</b>	<b>3.8</b>	<b>1.8</b>	<b>2.0</b>	<b>2.1</b>
<b>Mainly market services</b>	<b>47%</b>	<b>-6.2</b>	<b>-21.7</b>	<b>-6.5</b>	<b>-14.1</b>	<b>-15.3</b>	<b>-11.0</b>	<b>-1.4</b>	<b>0.1</b>	<b>0.5</b>	<b>1.5</b>
Trade; repair of automobiles and motorcycles	1%	-12.4	-24.6	1.8	-4.7	-2.5	-3.4	-2.4	-1	0	0
Transport and storage	4%	-16.4	-73.7	-32.4	-53.2	-51.7	-46.0	-21.3	-13	-13	-6
Accommodation and catering	8%	-17.4	-62.9	-15.7	-46.5	-58.5	-39.3	-4.4	-2	-2	-1
Information and communication	3%	-2.7	-1.9	-0.5	-0.7	0.9	1.7	4.6	4	4	4
Financial and insurance activities	5%	-2.5	-6.4	-1.7	-0.3	0.7	1.2	1.8	2	3	3
Real estate activities	19%	0.1	0.2	0.7	0.8	1.8	2.1	2.1	3	3	4
Scientific and technical activities; administrative and support services	2%	-6.6	-18.9	-10.2	-8.9	-9.3	-6.4	-1.0	0	0	1
Other service activities	4%	-12.2	-42.2	-13.6	-25.3	-25.4	-22.0	-5.5	-4	-4	-2
<b>Mainly non-market services</b>	<b>5%</b>	<b>-7.8</b>	<b>-24.4</b>	<b>1.1</b>	<b>-2.3</b>	<b>-0.3</b>	<b>1.1</b>	<b>0.6</b>	<b>0.9</b>	<b>0.8</b>	<b>0.9</b>
<i>Territorial correction</i>	<i>-1%</i>	<i>-44.8</i>	<i>-82.5</i>	<i>-35.5</i>	<i>-61.8</i>	<i>-64.2</i>	<i>-82.9</i>	<i>-32.7</i>	<i>-33</i>	<i>-29</i>	<i>-24</i>
<b>Total</b>	<b>100%</b>	<b>-5.9</b>	<b>-16.7</b>	<b>-1.5</b>	<b>-6.8</b>	<b>-6.9</b>	<b>-5.6</b>	<b>-1.0</b>	<b>-0.6</b>	<b>-0.2</b>	<b>0.6</b>

\* weight in household final consumption expenditure in current euros in Q4 2019

■ Forecast

How to read it: in Q4 2021, the level of household consumption of accommodation and food services would be 2% lower than in the Q4 of 2019.

Source: INSEE calculations from various sources

## ► 4. Household consumption and investment

quarterly changes and difference in Q4 2019, in %

	2020				2021				2022		2020*	2021*	2022* ovgh
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2			
<b>Consumption: quarterly changes</b>	<b>-5.9</b>	<b>-11.5</b>	<b>18.3</b>	<b>-5.4</b>	<b>-0.2</b>	<b>1.4</b>	<b>4.9</b>	<b>0.3</b>	<b>0.4</b>	<b>0.8</b>	-7.2	4.5	4.1
<i>difference in Q4 2019</i>	-5.9	-16.7	-1.5	-6.8	-6.9	-5.6	-1.0	-0.6	-0.2	0.6			
<b>Investment: quarterly changes</b>	<b>-12.1</b>	<b>-18.2</b>	<b>29.7</b>	<b>6.8</b>	<b>-1.6</b>	<b>5.1</b>	<b>0.9</b>	<b>1.3</b>	<b>-0.3</b>	<b>-0.2</b>	-12.2	16.3	2.2
<i>difference in Q4 2019</i>	-12.1	-28.1	-6.8	-0.5	-2.0	2.9	3.8	5.2	4.9	4.7			

■ Forecast

\*Annual variations

Source: INSEE

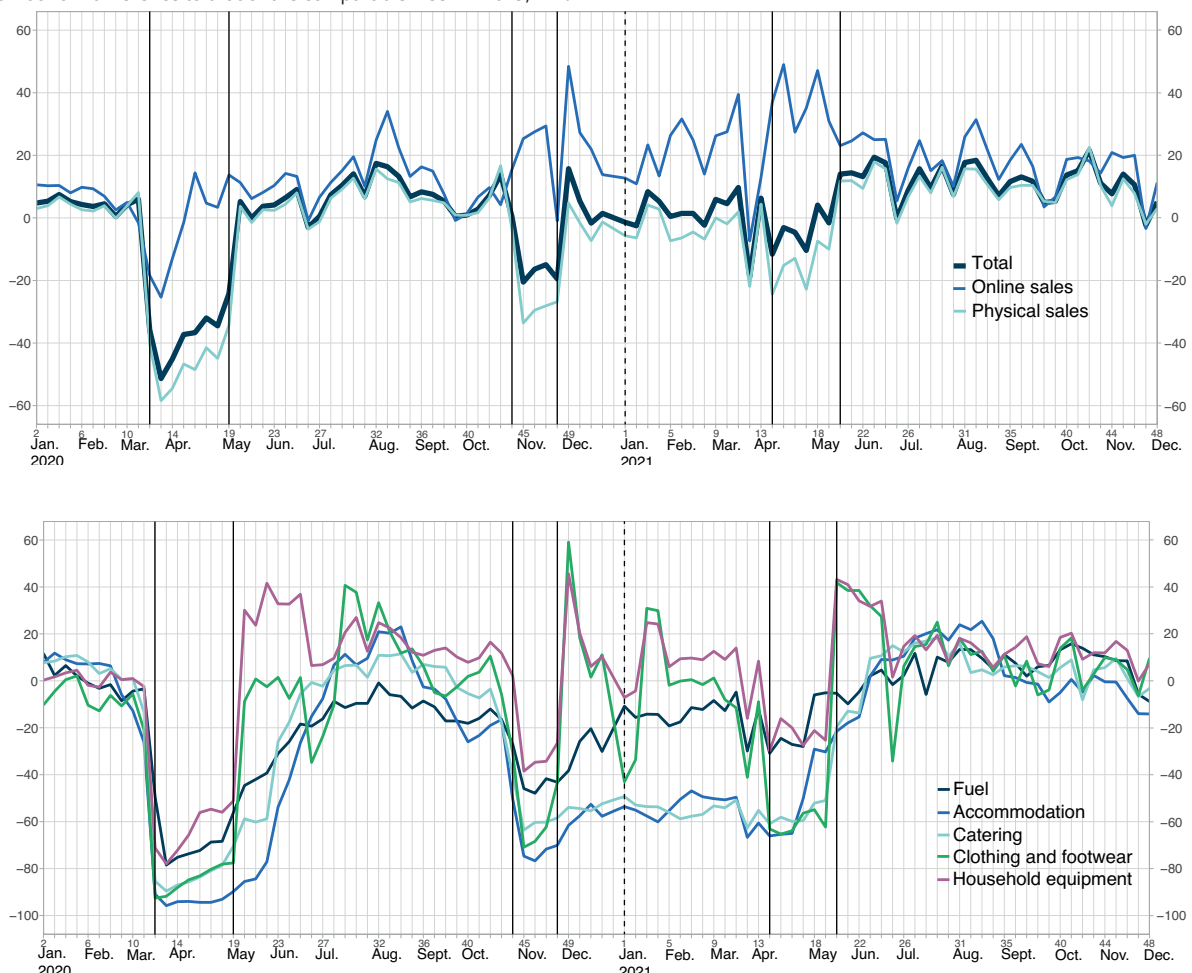
## Bank card transaction amounts have demonstrated relative dynamism since September

Aggregated bank card transaction amounts, available up to 5 December, are now an invaluable source for advanced analysis of household consumption behaviour. Compared year-on-year with 2019, total amounts were still well above the 2019 level in October and November (although admittedly this is partly due to the increased use of this payment method since the start of the health crisis), and their profile appears more dynamic than in Q3 (► **Figure 5**).

Looking at points of sale in detail, the change in bank card transactions appears contrasted in October and November: they remained dynamic in household equipment, whereas in clothing-footwear, the downward trend that began towards the end of July seems to have halted. Transactions relating to fuel purchases also appear to have increased across October and November, to more than 10% above their pre-crisis level (but this increase may be the effect of higher fuel prices). Lastly, bank card transactions were not very buoyant in accommodation and catering, with the profile following on from that of September, and even deteriorating in November in accommodation. ●

### ► 5. Weekly CB bank card transactions amounts

weekly amount in difference to that of the comparable week in 2019, in %



How to read: in week 48 of 2021 (26 November - 5 December), total CB bank card transaction amounts were 5.1% higher than the total for week 48 of 2019. The vertical lines show the dates that "non-essential" businesses closed and reopened during the 2020 lockdowns and the national lock-down in spring 2021. As each amount is compared to that of the same week in 2019, for the differences shown for the end of 2020 and the start of 2021 there is therefore a break in the reference week (end of 2019 then start of 2019). This break is indicated by the vertical dotted line at week 1 of 2021.

Note: in addition, the dynamism of these transaction amounts from March 2020 onwards may reflect a higher use of payment by bank card. This trend has been taken into account in the forecast for losses or increases in consumption compared to the pre-crisis level.

Source: INSEE calculations from various sources

# Enterprises' earnings

The margin rate of non-financial corporations (NFC) reached unprecedented levels in H1 2021 (35.7% of value added), especially in some market services where activity was constrained by the health restrictions (accommodation-catering, transport, etc.), and the decline in gross operating surplus was limited by the introduction of support measures (Solidarity Fund, short-time working, help with payment of contributions, etc.).

In Q3, the margin rate fell back significantly, to 32.9% of value added, with the rebound in economic activity accompanied by a reduction in the take-up of short-time working and a gradual decline in other support mechanisms (subsidies). This decline is expected to continue, more moderately, between Q4 2021 and Q2 2022, with subsidies gradually returning to their 2019 level, apart from the Competitiveness and Employment Tax Credit (CICE). Productivity should nevertheless sustain the margin rate, with the value added of NFCs more dynamic than employment. Real wages are unlikely to see more than a limited increase with little effect on the margin rate. Regarding the terms of trade, they are expected to impact the margin rate at the end of 2021, as in previous quarters: the price of intermediate consumptions for NFCs is likely to continue to increase more rapidly than their production prices, with the result that the price of value added will be less dynamic than the consumer price. Then in H1 2022, the price of intermediate consumptions is expected to slow, yet companies will probably continue to pass on their recent increases to their production prices. The price of the value added of NFCs is then expected to move more in tandem with consumer prices, which should balance out the terms of trade and virtually cancel out their contribution to the margin rate.

As an annual average over 2021, the margin rate is expected to stand at 34.2%. Thus compared to 2020, it should be up by 2.5 points, supported by the ramping up of the Solidarity Fund from December 2020, the reduction in taxes on production at the start of the year, and a stronger rebound in value added than that in remunerations paid (the reverse of what happened in 2020). By the end of H1 2022, the margin rate is expected to be 32.2%, slightly above its average level for 2018 (31.6%). ●

## ► 1. Decomposition of margin rate of non-financial corporations (NFC)

margin rate and variation in %, contributions in points

	2020				2021				2022		2019 2020		2021	2022 ovhg
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2				
<b>Margin rate</b>	30.3	30.9	31.1	34.3	35.6	35.7	32.9	32.6	32.4	32.2	33.4	31.7	34.2	32.2
<b>Variation in margin rate</b>	-2.8	0.6	0.2	3.2	1.3	0.1	-2.8	-0.4	-0.2	-0.2	1.8	-1.7	2.5	-2.0
<b>Contributions to variation in margin rate:</b>														
productivity gains	-4.3	-8.6	12.1	-1.0	0.2	0.7	1.3	0.3	0.2	0.3	0.7	-6.2	3.9	1.5
real cost of labour per capita	2.4	7.8	-11.3	1.3	0.0	0.1	-2.2	0.0	-0.1	-0.1	0.9	3.6	-3.2	-1.2
ratio of price of value added to consumer prices	0.3	1.1	-0.6	0.7	-0.2	-0.2	-0.5	-0.3	0.0	-0.1	0.6	1.1	-0.1	-0.6
other factors (including subsidies and taxes on production)	-1.2	0.2	0.0	2.2	1.2	-0.5	-1.4	-0.4	-0.4	-0.3	-0.4	-0.3	1.8	-1.6

■ Forecast

Note: the margin rate (*MR*) measures the share of value added that remunerates the capital.

This variation can be broken down additionally into:

- changes in productivity ( $Y/L$ ), where  $Y$  is value added and  $L$  is employment, and in the ratio of the price of value added to consumer prices, or terms of trade ( $P_{va}/P_c$ ), which have a positive effect;
- changes in the real cost of labour ( $W/P_c$ , where  $W$  represents the cost of labour per capita), which have a negative effect on the margin rate.
- other factors: these are mainly taxes on production net of subsidies, including the Solidarity Fund.

This breakdown can be synthesised in the equation:

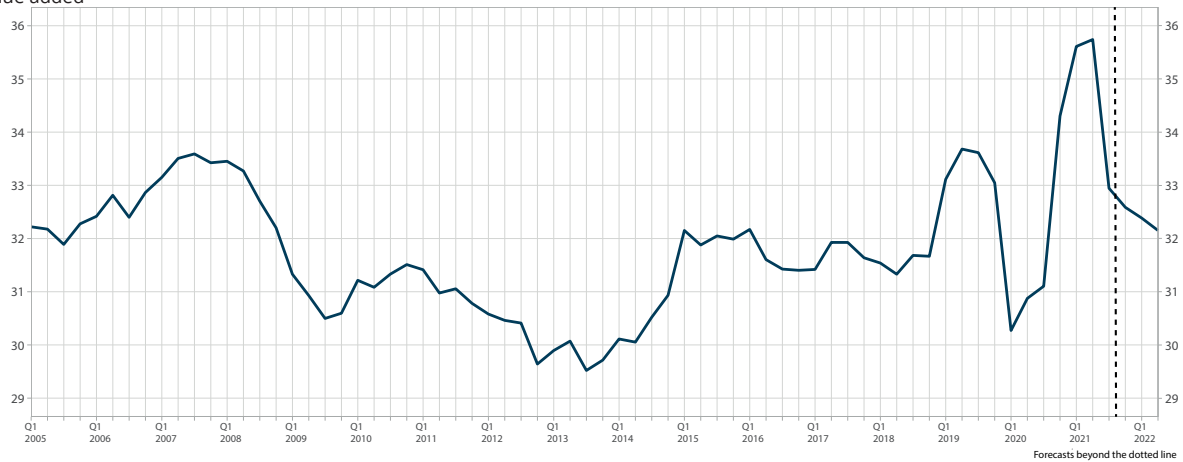
$$TM = \frac{EBE}{VA} \approx 1 - \frac{WL}{Y P_{va}} + \text{autres facteurs} = 1 - \frac{L}{Y} \frac{W}{P_c} \frac{P_c}{P_{va}} + \text{autres facteurs}$$

Source: INSEE

# French economic outlook

## ► 2. Margin rate of non-financial corporations (NFC)

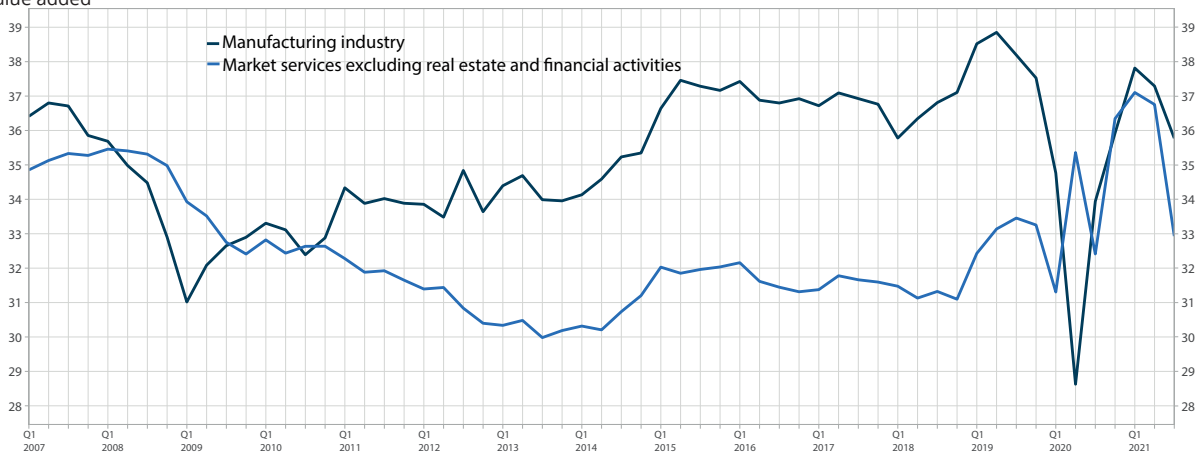
in % of value added



Source: INSEE

## ► 3. Margin rate in industry and services

in % of value added



Note: the margin rates calculated here are for all institutional sectors combined. However, a very large majority of the branches considered are composed of non-financial enterprises (NFE), i.e. non-financial corporations and sole proprietorships.

Source: INSEE

# Corporate investment

Investment by non-financial enterprises (NFE) slowed substantially in Q3 2021 (+0.1% after +1.8%, ► [Figure 1](#)), exceeding its pre-crisis level by 2.3%. However, this figure masks contrasting changes in different products. First, investment in manufactured products fell back by 1.7%, as a result of supply chain difficulties hampering production and imports of capital goods and transport equipment. Next, investment in construction declined by 0.5%, following on from a significant catch-up in H1 2021 as a result of the backlog that had built up in 2020. Lastly, investment in services, the only component of investment to increase in Q3, gained 1.8%, driven by investment in information and communication services and in services to businesses.

In Q4 2021, investment by NFEs looks set to accelerate slightly, although contrasts between products are likely to remain. Investment in manufactured products is likely to decline further, hampered by supply chain difficulties that affect the production of these goods. Investment in services is expected to increase at a very sustained pace, even exceeding its pre-crisis trend pace, while investment in construction should stabilise. At the end of 2021, investment by NFEs should then be 2.9% higher than before the crisis, driven mainly by investment in services (► [Figure 2](#)). As an annual average, investment by NFEs is expected to increase by 12.1% in 2021, after its dramatic 8.1% fall in 2020.

In H1 2022, supply chain difficulties are likely to be slow to resolve thus continuing to restrict investment in manufactured products. In addition, for companies whose production is limited because of these problems, the loss of income could result in them slowing down their investment in services slightly. Lastly, investment in construction could decline once again, a delayed consequence of the fact that building starts on non-residential buildings were less dynamic in 2021 than pre-crisis. Given these circumstances, the mid-year carry-over in investment by NFEs is set to be 1.6%. ●

## ► 1. Investment by non-financial enterprises (NFEs)

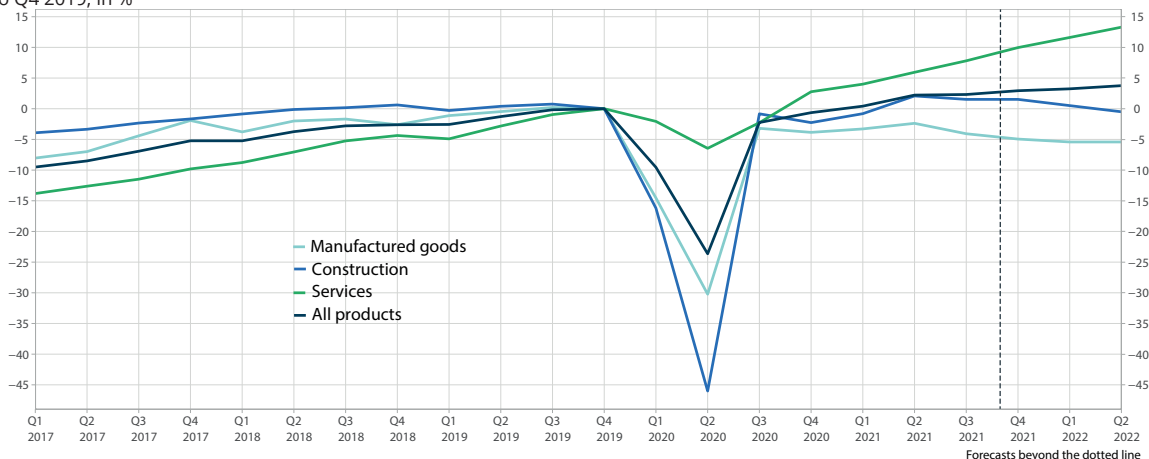
at previous year's prices, chain-linked, seasonally adjusted, in %

	Quarterly changes										Annual changes		
	2020				2021				2022		2020	2021	2022 ovhg
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2			
Manufactured product (32%)	-14.5	-18.4	38.7	-0.7	0.6	0.9	-1.7	-0.9	-0.5	0.0	-12.6	10.7	-1.8
Construction (24%)	-16.2	-35.6	83.7	-1.4	1.5	2.9	-0.5	0.0	-1.0	-1.0	-16.5	20.8	-1.3
Services (44%)	-2.1	-4.4	4.4	5.1	1.2	1.8	1.8	2.0	1.5	1.5	0.2	9.1	5.5
All NFEs (100%)	-9.5	-15.6	28.0	1.6	1.1	1.8	0.1	0.6	0.3	0.5	-8.1	12.1	1.6

■ Forecast  
Source: INSEE

## ► 2. Investment of non-financial enterprises by product

difference to Q4 2019, in %



Source: INSEE

# International economic outlook



# Synthesis International

Despite the continuing epidemic, in Q3 the increased vaccination coverage and the absence of restrictions on movement or activity meant that Europe was able to continue its economic recovery, mainly as a result of brisk domestic demand, except in Spain. In the United States, in contrast, where the vaccination rate is lower, the epidemic wave at the end of the summer, combined with inflationary tensions and the end of public aid for households, had an effect on consumption, causing a slowdown in activity. In China, outbreaks of the epidemic, electricity shortages and severe flooding led to the closure of means of production: as a result, GDP fell back for the first time since Q1 2020.

With the exception of Spain, the main Eurozone economies, as well as the United Kingdom and even more so the United States and China, have returned to around their pre-crisis level, or have already surpassed it. However, they are still all below their pre-crisis trend,<sup>1</sup> including the Chinese and US economies. In fact, the difference between the present trend and the pre-crisis trend in China and the United States is around 3%, fairly similar to that France and Italy, while Germany is slightly behind (about 4%). Both the United Kingdom (5%), and especially Spain (10%) appear to be further from their pre-crisis trend.

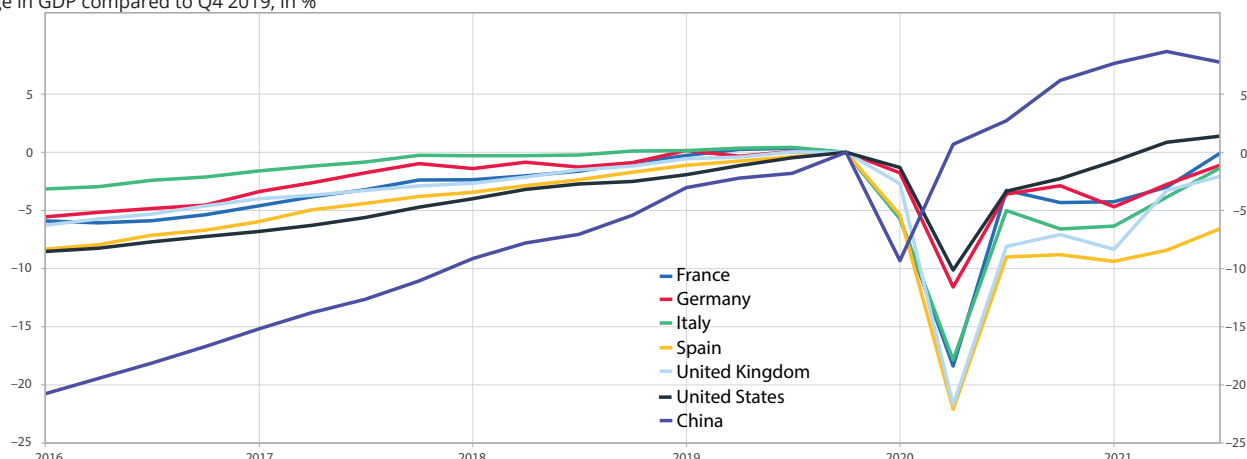
In Q4 2021, two factors, which are partly linked, affected world growth alongside the uncertainties of the health situation: input shortages disrupting production and inflationary tensions that can affect both business costs and household consumption. World industry is still affected by bottlenecks in world trade, in a context of energetic demand, especially in the United States where the consumption of goods has been very much buoyed up. For example, according to declarations by businesses, the delays they are facing in deliveries of inputs are still continuing at this summer's record levels (► [Figure 2](#)). The rise in inflation in all the western economies, and especially the United States (► [Figure 3](#)), is a result of the rise in the cost of commodities and partly because of these production difficulties (► [Focus](#)), and could affect household purchasing power. To combat this inflation, the central banks could gradually implement a tightening of monetary policy, and in particular an increase in interest rates seems possible in 2022 in the United States. Such monetary tightening could hamper recovery.

Added to these economic problems are fears linked to a deterioration in the health situation, caused both by the intensity of the fifth wave in Northern and Eastern Europe and concerns over the appearance of the Omicron variant: in addition to the possible introduction of new restrictions, these fears could result in more cautious consumption behaviour and a slower recovery for international tourism. The "high-frequency" indicator giving the number of *Google* searches for "restaurant", for example, showed a particularly marked decline in Germany in November (► [Figure 4](#)).

<sup>1</sup> The pre-crisis trend is determined by extending GDP from its Q4 2019 level with a growth rate equal to the average of the GDP growth rate over the period 2016-2019.

## ► 1. In Q3 2021, growth in the European economies remained brisk, but in China it declined

change in GDP compared to Q4 2019, in %



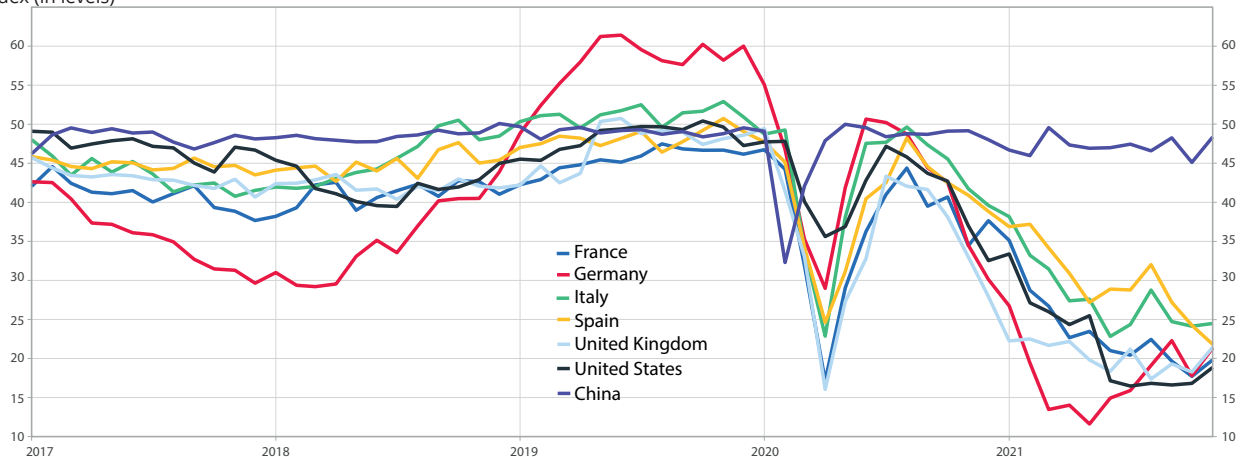
Source: INSEE, Destatis, Istat, INE, ONS, BEA, NBSC

# International economic outlook

GDP is therefore set to slow in Q4 2021 in Europe. In 2022, assuming a slow easing of supply chain difficulties, the catch-up effect in the sectors most affected by the pandemic are expected to continue to drive part of the growth of the European economies, Spain and Germany in particular. After the turbulence in Q3, activity is set to rebound in the United States and China in Q4 and again in early 2022, but without returning to the particularly high variations seen in 2021 as a result of the catch-up in 2020. ●

## ► 2. PMIs on input delivery delays in the manufacturing industry reveal continuing supply chain problems

PMI index (in levels)

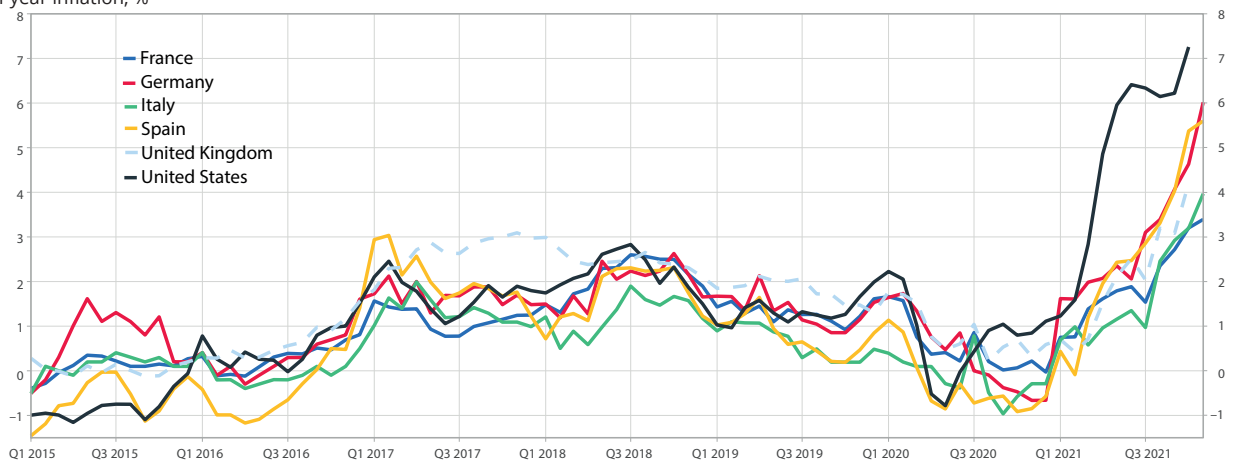


How to read it: in France in November, the PMI showing input delivery delays in the manufacturing industry stood at 20, well below the expansion threshold of 50, indicating longer input delivery delays.

Source: Purchasing Manager's Index, IHS Markit

## ► 3. Inflation is increasing strongly in western economies, especially the United States

year-on-year inflation, %



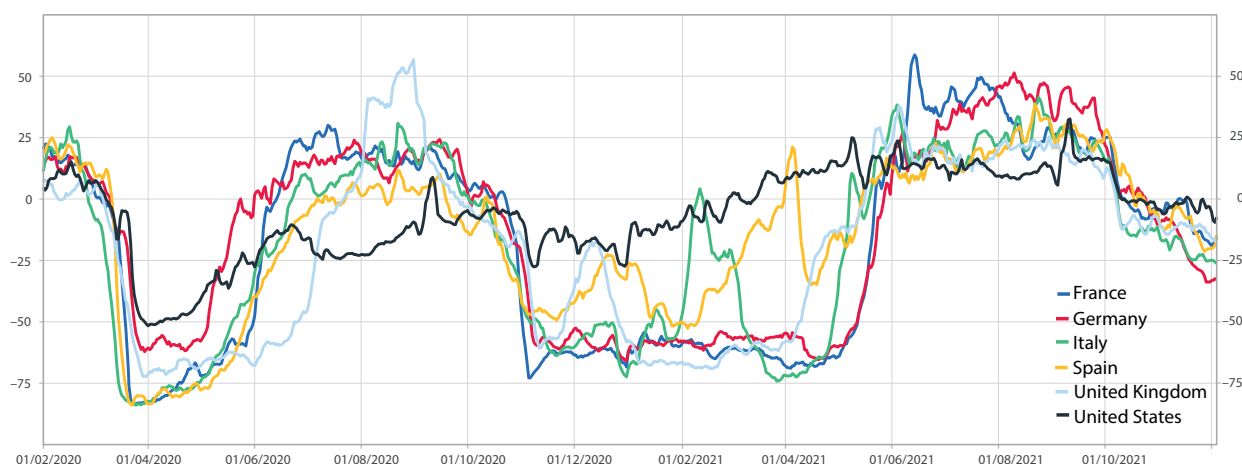
Note: Eurostat provides an indicator of consumer price indices harmonised between EU countries and the United States, but data for the United Kingdom stopped at the end of 2020 with *Brexit*. For the United Kingdom, therefore, the index is the non-harmonised CPI provided by the UK's ONS.

How to read it: in October 2021 in the United States, consumer prices were 7.3% higher per year than their level in October 2020.

Source: Eurostat, ONS

## ► 4. Google searches for “restaurant” fell back sharply with the effect of the new wave of the epidemic in Germany

in %



Note: the last point is 4 December 2021.

How to read it: on 4 December, the 7-day moving average for the number of Google searches for the word “restaurant” in Germany was 33% lower compared to the average of the 7-day moving averages for each 4 December between 2016 and 2019.

Source: Eurostat, ONS

## ► 5. Previous and forecast GDP growth in the main western economies and China

	2020	2021	Overhang mid-2022	Difference compared to Q4 2019 forecast for Q2 2022
France	-8.0	6.7	3.0	+1.4
Germany	-4.9	2.7	3.0	+0.8
Italy	-9.0	6.5	3.6	+0.8
Spain	-10.8	4.4	5.0	-2.4
United-Kingdom	-9.7	6.8	3.6	+0.1
United-States	-3.4	5.5	3.3	+4.6
China	1.9	8.0	2.7	+11.6

■ Forecast

Note: shaded columns correspond to forecasts.

Sources: INSEE, Destatis, Isatstat, INE, ONS, BEA, forecast INSEE

# Energy and commodities

As 2021 came to an end, the global economic recovery continued to be affected by a substantial increase in energy prices. Gas and coal prices in particular rose sharply, reaching a peak in October (+540% and +320% respectively year-on-year). The price of coal has since fallen back, however, gas prices are still very high. These increases have contributed to bringing even more tension to the global oil market, where there is still a supply deficit and stocks are now below their five-year average. In Q3 2021, the price of oil averaged \$73.5 per barrel, up 71% year-on-year. In October, it exceeded \$85 for the first time since 2018 (► [Figure 1](#)). Prices fell back in late November, however, hit by the uncertainties associated with the health situation. In addition, the price of coal on the European market reached a record level, at over €80 per tonne for the first time in 16 years (► [Figure 2](#)). This is mainly related to the new direction taken by the European Union on this subject and, more recently, following the latest coalition agreement in Germany.

Meanwhile, the world commodities market was also still very strained at the end of 2021, although some prices have fallen back in recent months. In France, prices of imported industrial commodities remained high (+23.1% year-on-year in November 2021), although they were down after a historic high point in H1 2021 (► [Figure 3](#)). The prices of mineral commodities also contracted recently (-11.5% between July and November) due to the strong downturn in the price of iron, affected by the slowdown in steel production in China. Finally, prices of imported food commodities remained very high year-on-year (+33.8% in November).

For several months, the effect of the price hikes in energy and other commodities has been passed on to production prices. As a result, production prices in French industry and agriculture picked up vigorously in October year-on-year (+14.0% and +14.5% respectively). Meanwhile, consumer prices of energy products increased by 20.2% year-on-year in October.

Over the forecasting period, the conventional assumption is that energy prices remain constant, with notably the price of a barrel of Brent fixed at \$75.<sup>1</sup> However, in a health context that is once again precarious, uncertainties remain as to the future direction of OPEC production. ●

<sup>1</sup> i.e. €66.4 assuming a euro-dollar exchange rate of 1.13 dollars for 1 euro.

### ► 1. Price of oil (Brent) in dollars and euros

daily values



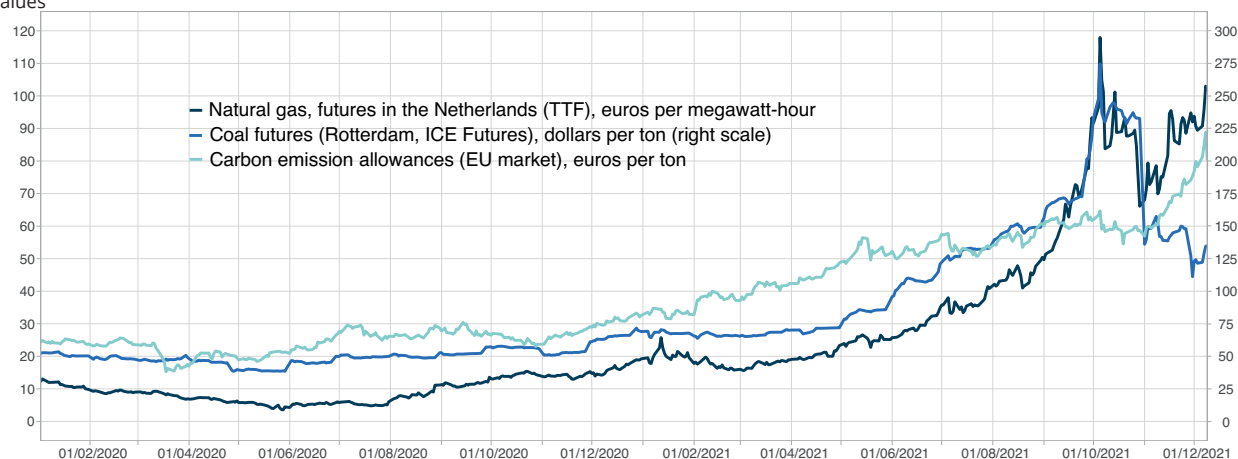
Last point: 9 December 2021

How to read it: on 9 December 2021, the price of a barrel of Brent was \$74

Source: Commodity Research Bureau

## ► 2. Prices of natural gas, coal and tonnes of CO<sub>2</sub>

daily values



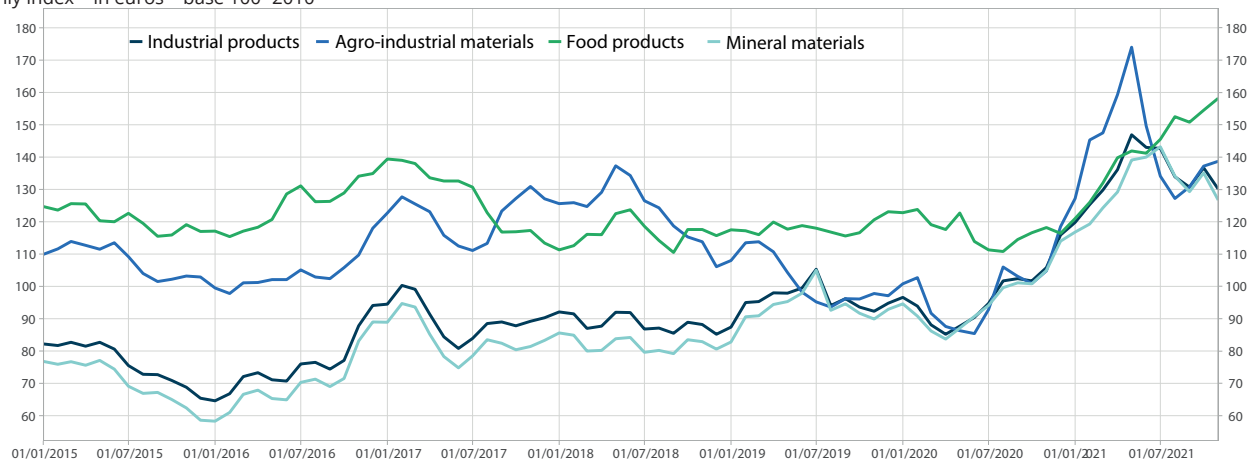
Last point: 9 December 2021

How to read it: on 9 December 2021, the value of natural gas contracts at the next expiry date in the Netherlands (TTF) is €101.7 per megawatt hour.

Source: ICE Futures Europe

## ► 3. Price indices for imported commodities in France

monthly index – in euros – base 100=2010



Last point: November 2021

How to read it: on November 2021, the price index in euros of industrial products was 130.1.

Source: INSEE

## World trade

In Q3 2021, world trade in goods and services slowed, but growth continued despite supply chain problems: +0.4% after +1.3% in spring (► [Figure 1](#)). As in Q2, this improvement was due to increased trade by the advanced countries. For the emerging economies, and especially China, trade fell back slightly, in a context of closures of some shipping terminals. World trade therefore surpassed its pre-crisis level by 2.2% this summer, but was significantly below its pre-crisis trend (► [Figure 2](#)).

At the end of the year, world trade is expected to continue to grow at a similar pace (+0.5%). The advanced economies are once again expected to contribute to trade growth, in contrast to the subdued trade in the emerging countries.

World demand for French products also slowed this summer (+0.5% in Q3 after +2.3% in Q2), but remained buoyant thanks to the dynamism of imports by European partners (► [Figure 3](#)). France was therefore able to get back to its pre-crisis level. By the end of the year, it should grow a little more, benefitting from the buoyancy of trade in the advanced countries. As an annual average, world demand for French products is expected to rebound by +9.4% in 2021, after -9.1% in 2020.

At the start of 2022, world trade looks set to accelerate, mainly as a result of the revival of trading activity in the emerging countries, despite supply chain difficulties which are not expected to be fully resolved over the forecasting period. As a result, world demand for French products should be more vigorous than at the end of 2021, both because of its European partners and the emerging economies. ●

### ► 1. Forecast scenario for international trade

	2020				2021				2022		2020	2021	2022 ovhg
	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2			
<b>World trade</b>	-3.2	-15.1	13.1	5.1	3.0	1.3	0.4	0.5	1.3	1.3	-7.8%	10.2%	2.8%
Imports from advanced economies	-3.3	-17.1	13.7	5.2	1.2	2.3	0.8	0.8	1.0	1.1	-9.7%	9.1%	3.2%
Imports from emerging economies	-3.2	-10.9	11.8	4.8	6.6	-0.8	-0.5	-0.3	1.9	1.6	-3.8%	12.2%	2.1%
<b>World demand for French products</b>	-3.3	-16.8	13.2	5.2	1.7	2.3	0.5	0.7	1.1	1.3	-9.1%	9.4%	3.1%

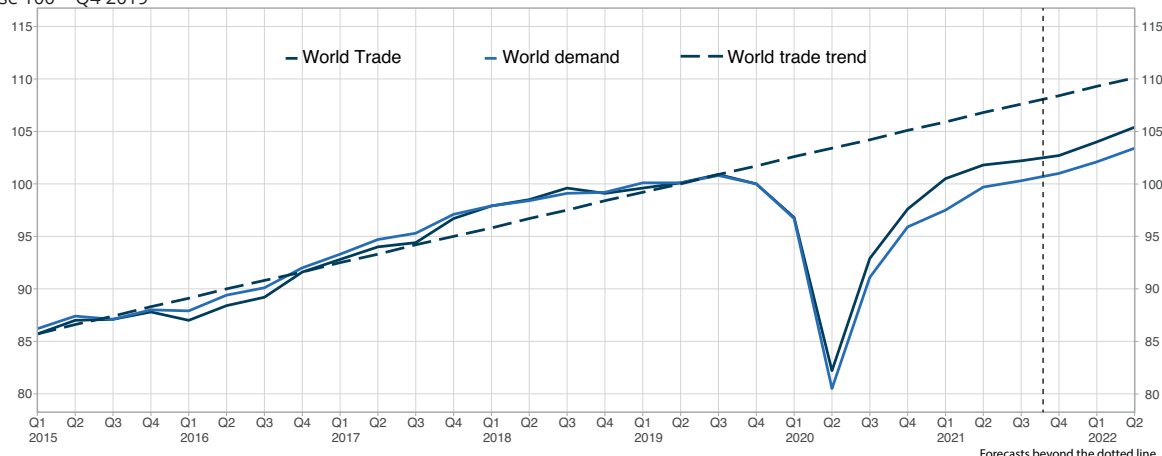
■ Forecast

Note: the category "advanced countries" includes the main Eurozone countries, the United Kingdom, the United States, Canada, and South Korea. The category "emerging countries" includes China, India, Turkey, the OPEC countries, Russia, Poland, Brazil and Mexico.

Source: INSEE

### ► 2. World trade is expected to remain well below its long-term trend

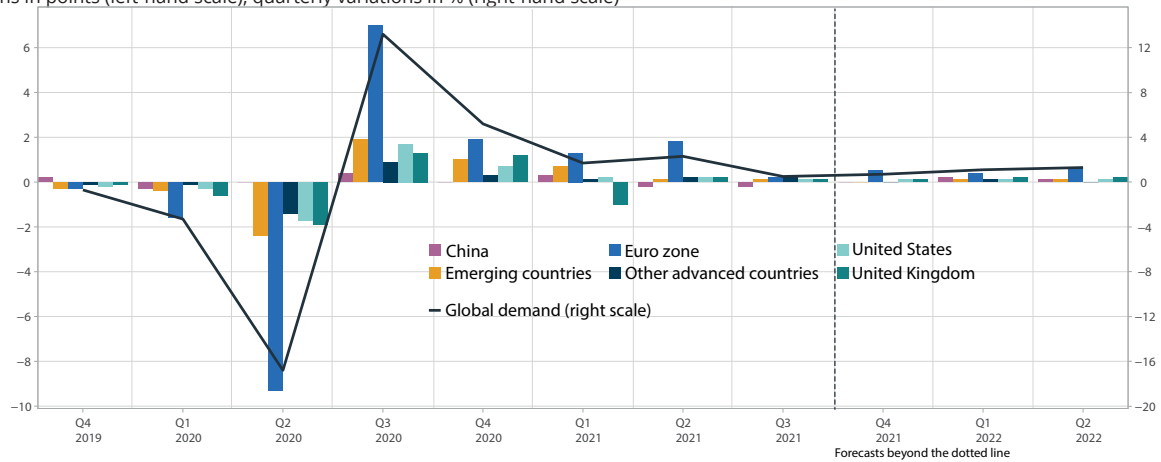
in level, base 100 = Q4 2019



How to read it: in Q3 2021, world trade stood at 2.2% above its pre-crisis level, but below its long-term trend (calculated over the period 2015-2019 inclusive). Source: INSEE

## ► 3. World demand for French products and contributions by trading partners

contributions in points (left-hand scale), quarterly variations in % (right-hand scale)

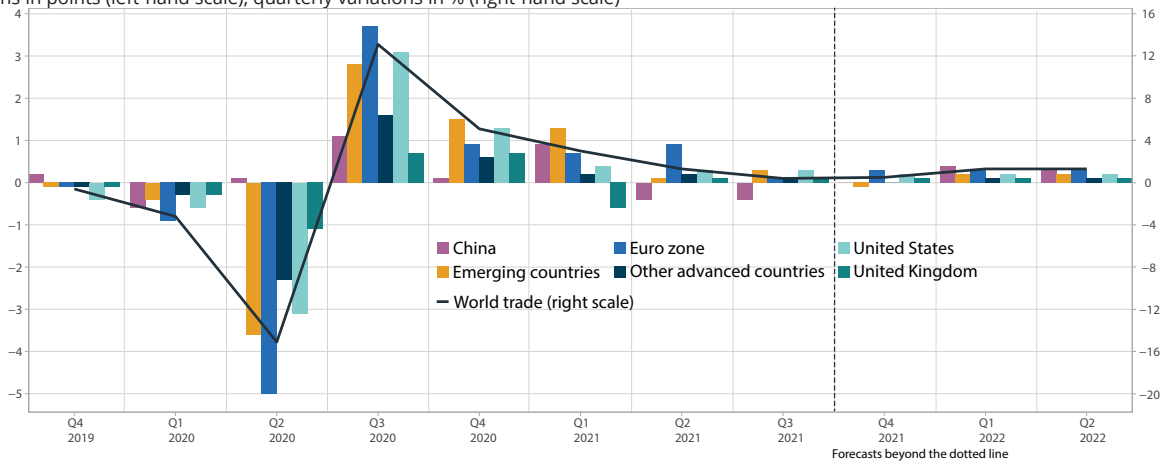


How to read it: in Q3 2021, trade by the Eurozone countries contributed 0.2 points to change in world demand for French goods.

Source: INSEE

## ► 4. World trade and contribution by the main zones

contributions in points (left-hand scale), quarterly variations in % (right-hand scale)



How to read it: in Q3 2021, trade by the Eurozone countries contributed 0.1 points to change in world trade.

Source: INSEE

## Eurozone

After an upturn in activity over the summer, driven for the most part by household consumption, the short-term outlook in the Eurozone countries was gloomy for the end of 2021: inflation, supply chain difficulties and a worsening health situation are likely to slow down activity in Q4 2021. At the start of 2022, this slowdown is expected to continue in those countries that are already back to their pre-crisis level of activity, like France and Italy, while GDP is likely to still require a catch-up effect in Germany and especially in Spain.

### In the Eurozone, the recovery continued in Q3 2021

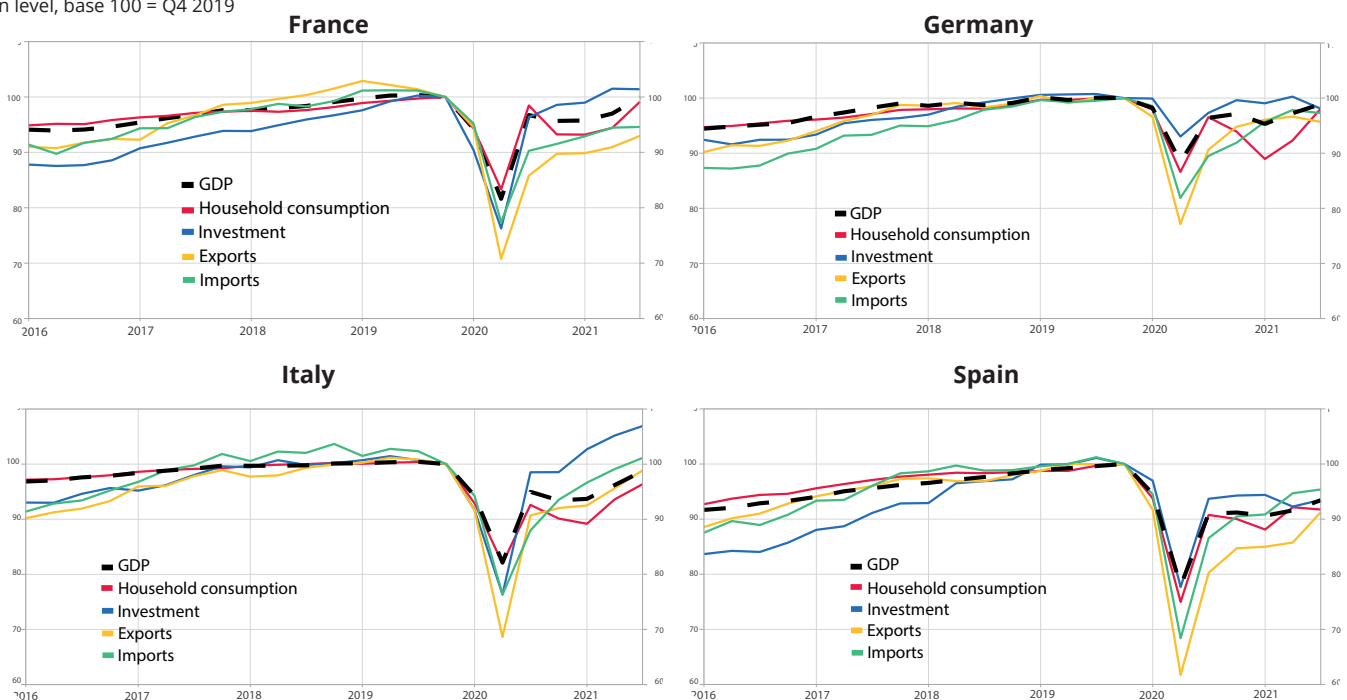
In Q3, activity in the Eurozone maintained its pace of growth: +2.2%, after +2.2% in Q2. The recovery continued to varying degrees according to the country: activity accelerated in France (3.0% after +1.3%) and Spain (+2.0% after +1.1%), while growth remained more or less stable in Germany (+1.7% after +1.9%) and Italy (+2.6% after +2.7%). Thus activity in France was back to its pre-crisis level from this summer (−0.1% compared to Q4 2019), whereas Germany and Italy were a little over one point below (−1.1% and −1.3% respectively, ► **Figure 1**). In Spain, activity is still a long way from its pre-crisis level (−6.6% in Q3), still with high losses in construction and services linked to tourist activities, such as accommodation-catering and transport services and also leisure.

The differences between the four main Eurozone economies, in terms of their level of activity compared to pre-crisis, are firstly linked to the dynamics of private consumption. While household consumption was virtually back to its pre-crisis level in the summer in France, and to a lesser extent in Germany, its recovery seems to be more sluggish in Italy, as health measures in Q1 had a considerable effect. In Spain, consumption is still very much affected and even saw a decline in Q3 (−0.4%).

French activity has also benefitted from dynamic investment, which overtook its pre-crisis level from Q2. Investment is even more buoyant in Italy, where it increased vigorously in H1, driven by the construction sector (+13.4% above its pre-crisis level in Q3). In Germany, investment remains just below its pre-crisis level, while in Spain it is still depressed.

### ► 1. In the Eurozone, investment has picked up vigorously since mid-2020, whereas the upturn in consumption follows the lifting of the health restrictions

in level, base 100 = Q4 2019



Source: INSEE, Destatis, Istat, INE

Finally, there is still a marked difference between imports and exports, with imports much nearer to their pre-crisis level, in line with the momentum of domestic demand. Meanwhile, exports are still affected by production difficulties in the exporting sectors, like the automobile sector (in Germany, Spain and France) or the aeronautics sector (in France), and by the return of foreign tourists, although still in very limited numbers (in Spain, Italy and France).

Payroll employment also continued to increase in Q3 in the main Eurozone countries (► [Figure 2](#)). In France and Italy, the pre-crisis level was reached in Q2 2021, and has now been exceeded. Germany is approaching its Q4 2019 level of payroll employment, whereas Spain is still far from it, although there was acceleration in Q3.

## At the end of 2021, the short-term outlook is gloomy

After the upturn in Q3, supply chain problems, the rise in inflation and the deterioration in the health situation are factors that are likely to hamper activity in Q4 2021.

Since the beginning of the year, more and more businesses in the four main Eurozone economies report that their production is restricted by supply chain problems. In October, these difficulties were intensified, reaching a record high in industry (► [Figure 3](#)). In industry excluding building construction, it was in Germany in particular that these problems were felt most keenly, with more than 85% of businesses affected in October.

In construction, these difficulties are more varied from one country to another and are less intense compared to the rest of industry. However, they are again most vigorous in Germany, although they have declined since the summer, and are increasing steadily in France and Italy. In Spain, these difficulties have not emerged in the surveys of businesses in the sector, which is perhaps related to the fact that the main problem facing construction is reduced demand: there are still just as many businesses in Spain reporting that they are restricted because of insufficient demand, whereas these numbers have fallen sharply in France and Italy.

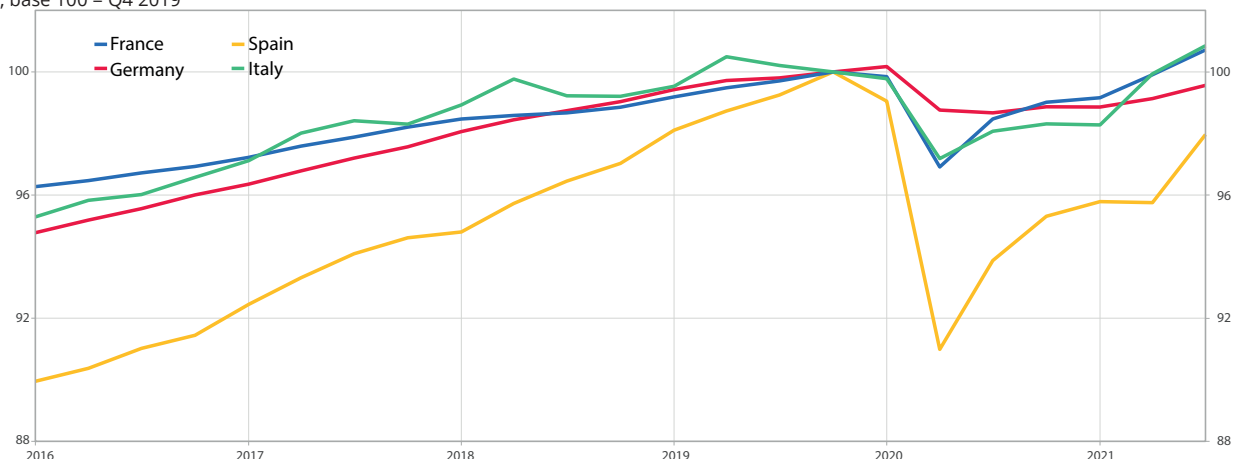
In line with these growing difficulties with supply chains, industrial production has been sluggish since early 2021 (► [Figure 4](#)). In Q3, German industrial production fell, whereas in the other countries it stabilised across the quarter. In October, German industrial production increased but was still below the pre-crisis level. In the other countries, production remained stable, slightly lower than the level at the end of 2019 in France and Spain, but slightly higher in Italy.

Concerning the construction sector, production increased over Q3 in Italy, exceeding its pre-crisis level by 13.4%, in contrast to German production which deteriorated, falling back to its pre-crisis level, despite having overtaken it in March 2021. In France and Spain, production remained stable, lagging behind pre-crisis levels (-5.0% and -16.7% respectively).

Regarding inflation, it has grown steadily since the end of 2020, driven by the increase in oil prices and energy prices generally, and to a lesser extent by rising commodity prices, especially mineral and agricultural commodities (► [Focus](#)). In November, inflation (within the meaning of the Harmonised Index of Consumer Prices) reached 6.0% per year in Germany, 5.6% year-on-year in Spain, 4.0% in Italy and 3.4% in France. This rise in inflation will stretch households' purchasing power, which is then liable to impact on their consumption dynamics, even if they have a surplus in previous savings. For businesses, the rising price of inputs is yet another factor weighing on supply, in addition to the supply chain problems.

## ► 2. In Spain, payroll employment is struggling to return to its pre-crisis level

in level, base 100 = Q4 2019



Note: this graph represents payroll employment of physical persons as a quarterly average (employment in the sense of national accounting), it may therefore differ from payroll employment at the end of the quarter, as published by INSEE, DARES and ACCOSS.

How to read it: in France and as an average in Q3, total payroll employment was 0.7% above its pre-crisis level.

Source: INSEE, Eurostat

# International economic outlook

Lastly, the health situation has deteriorated since the beginning of November in Europe (► [International Overview](#)). In particular, the number of new Covid cases in Germany reached a record level since the start of the pandemic. In several Länder, measures were introduced to combat the spread of the virus: Christmas markets were cancelled, entry to certain places of consumption required a vaccine pass and a negative Covid-19 test result. These restrictions could hamper the consumption of services. For the time being, France, Spain and Italy seem to be less affected by the latest flare-up of the epidemic, but its effect on tourism could penalise exports in these countries.

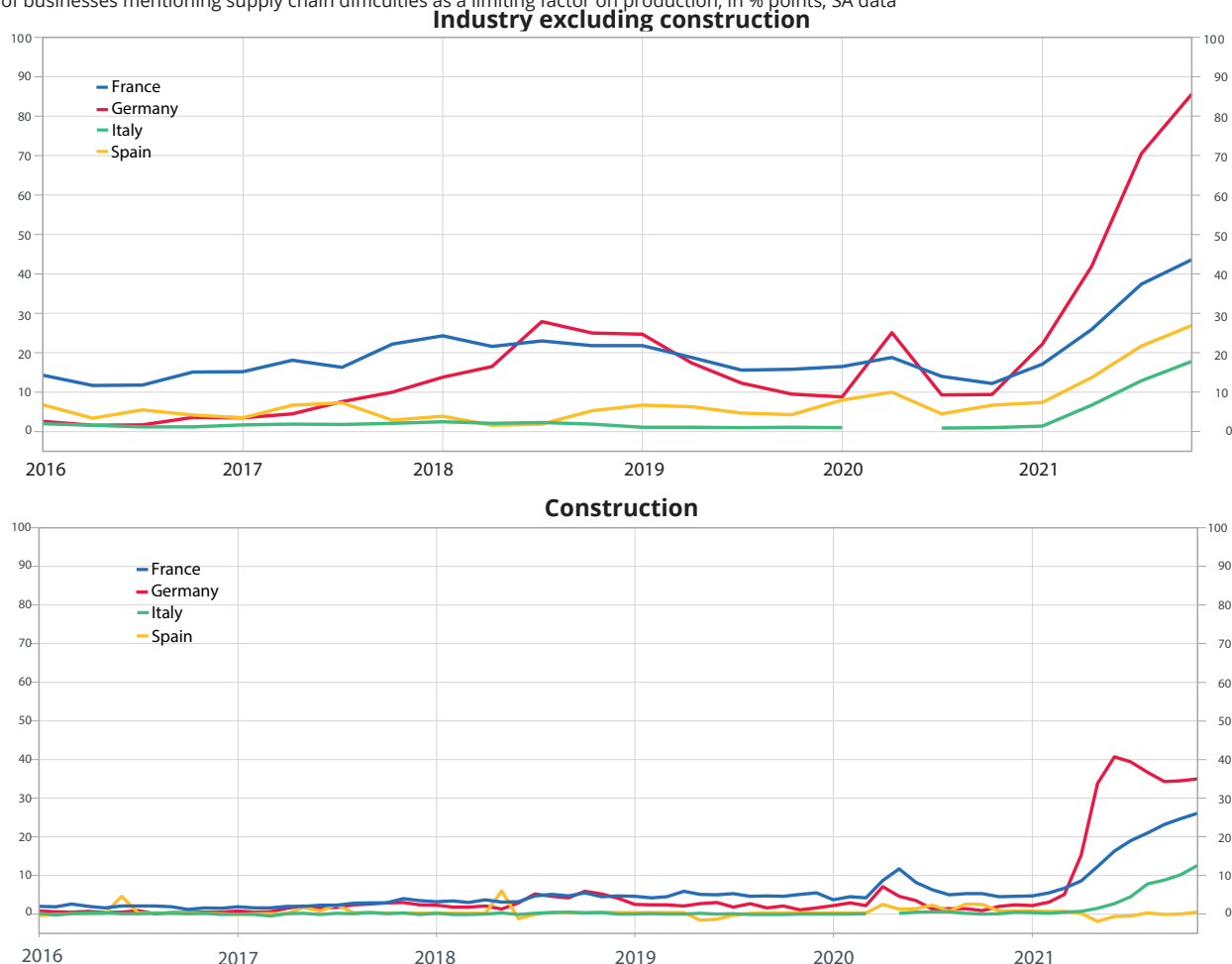
## In Q4 2021, growth is expected to slow down

In Q4, given the factors described above and the catch-up momentum that is dwindling in some countries, activity in the Eurozone is expected to slow. Growth should remain substantial in Spain (+1.5% as a quarterly variation), where activity is lagging furthest behind compared to its pre-crisis level. There is also likely to be considerable growth in Italy (+1.2%). French activity, which has already returned to its Q4 2019 level, is expected to slow (+0.4%), as is German activity (+0.2%), which is penalised by the deterioration in the health situation.

In most countries, the slowdown in activity in Q4 is likely to be the result of less buoyancy in household consumption and exports. Household consumption is expected to decelerate in France, Germany and Italy after its dynamism in Q3, although it could continue to benefit from a catch-up trajectory in Italy. In Spain, however, it is expected to bounce back, after the minor downturn in Q3, and could also benefit from catch-up effects. Regarding exports, they look set to slow

## ► 3. In the main Eurozone economies, more and more businesses in the industrial sector report supply chain difficulties

share of businesses mentioning supply chain difficulties as a limiting factor on production, in % points, SA data



Note: these data are taken from business tendency surveys. They represent the proportion of businesses that have identified supply chain difficulties as a factor limiting production. The balance of opinion is quarterly in industry excluding construction and monthly in the construction sector. In April 2020, no surveys were carried out in Italy. These statistics correspond to European surveys centralised and harmonised by DGE/ECFIN, especially with regard to seasonal adjustment. Their values may therefore differ from those disseminated by INSEE using the same source; trends are similar nevertheless.

Source: DG ECFIN

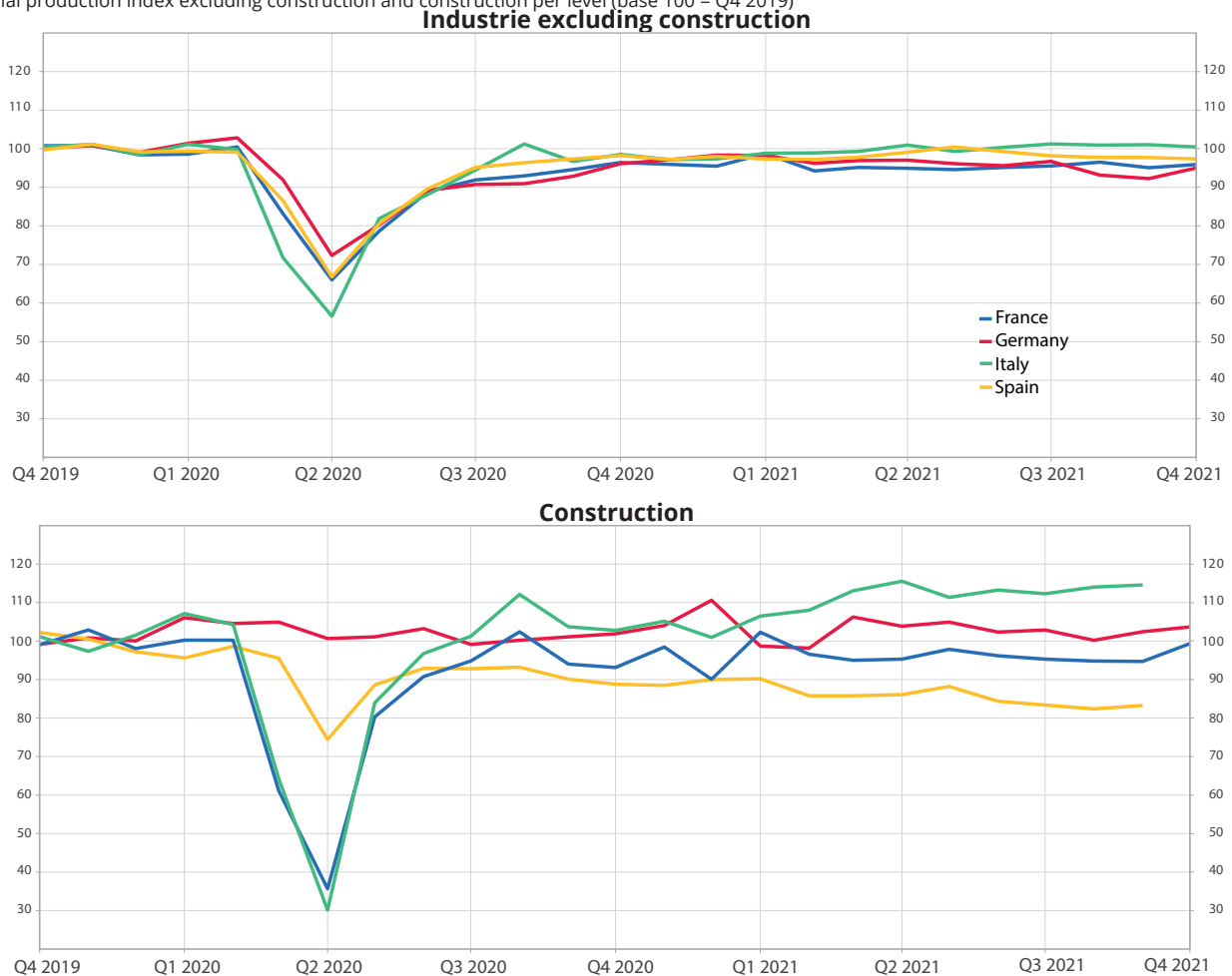
or stagnate in the four main Eurozone economies, linked to supply chain difficulties, the rise in inflation and the health risk. While supply chain problems are expected to disrupt production in some export sectors, inflation is likely to penalise exports via increased production costs for businesses. Meanwhile, the health risk is expected to affect the return of foreign tourist at the end of the year.

In H1 2022, the dynamics of activity are likely to be varied across the Eurozone, with two main trends. In France and Italy, countries where activity had already returned to its pre-crisis level by the end of 2021 or is likely to do so soon, growth rates will tend to be more moderate. In Germany and Spain, provided that the short-term outlook does not deteriorate further, activity should once again benefit from a catch-up effect, with Germany getting back to its Q4 2019 level of activity in Q2 2022.

These scenarios are contingent on there being no new health restrictions in the main Eurozone economies, although a rise in cases may affect economic behaviour even without further restrictions. They are also based on a very gradual easing of supply chain difficulties, which will probably still be felt in mid-2022. If the health situation were to continue to deteriorate, it could have even more of an impact on consumption, and growth in the Eurozone would be lower than forecast. Conversely, supply chain difficulties could be resolved sooner, which would result in a more favourable development in activity than in the scenario presented here. ●

## ► 4. In September 2021, industrial production declined in Germany and stagnated in France, Italy and Spain

industrial production index excluding construction and construction per level (base 100 = Q4 2019)



Source: Eurostat

# International economic outlook

## Recent dynamics in inflation in France, Germany, Italy and Spain are linked to the increase in energy prices, but with specific features in each country

After falling in 2020 in the main Eurozone economies, inflation showed a significant upswing in 2021. This rise was mainly due to the rebound in energy prices, which had fallen to very low levels in 2020. In 2021, two types of country profiles stand out. On the one hand, Germany and Spain saw a sharp rise in inflation which exceeded its pre-crisis average, while on the other hand, France and Italy saw more moderate increases. For Germany, in addition to the base effect of the one-off cut in VAT in H2 2020, the carbon tax introduced at the beginning of 2021 contributed to pushing inflation upwards, whereas in Spain the rise was driven by electricity consumer prices, which are highly reactive to variations in production prices. These rises are likely to be passed on to prices of products other than energy to a greater extent in coming months. The rise in consumer prices does not seem to be having a knock-on effect on wages for the moment, however.

### Inflation increased significantly in 2021 after falling in 2020, due mainly to the fall in energy prices

Since the end of 2020, inflation has increased significantly in the main economies of the Eurozone (► Figure 1). In November 2021, the rise in the harmonised consumer prices index<sup>1</sup> (HICP) had reached 6.0% year-on-year in Germany, 5.6% in Spain, 4.0% in Italy and 3.4% in France. In Germany and Spain, these inflation rates are the highest observed since the creation of the index in 1996. France and Italy, meanwhile, are at slightly lower rates than in the summer of 2008, which marked their all-time high.

However, this continuous rise in inflation came after the particularly low price levels reached during the health crisis. In 2020, the HICP fell in several Eurozone countries,

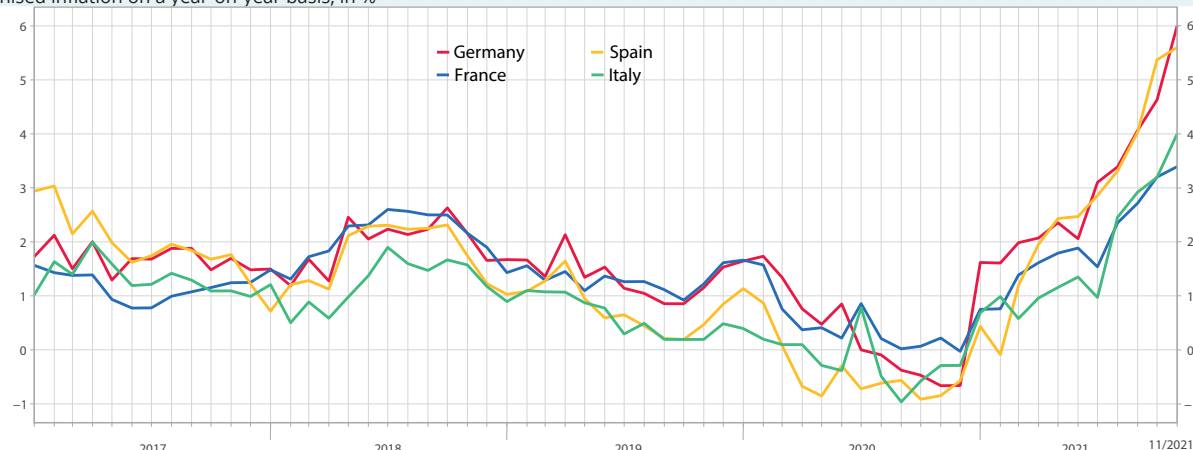
mainly driven by the fall in energy prices, and notably in oil (► Figure 2). At the time, the fall in activity worldwide caused a drop in demand for energy around the world, which decreased more than supply, thereby driving a fall in energy prices.

In Spain and in Italy, this fall in energy prices, and notably in fuels, caused a sharp decline in the HICP in spring 2020: inflation went negative from April in Spain and from May in Italy. In Germany, where inflation also fell in spring 2020 due to energy prices, there was a further fall in the summer further to the cut in VAT made from July through to December in order to stimulate consumption: inflation then became negative there, driven down not only by energy prices, but also by those of other products, notably manufactured goods. In France, the fall in inflation was also significant, but more moderate than

<sup>1</sup> The HICP should be preferred for international comparisons because unlike the national CPIs, it is based on the same basket of goods in all the different countries (although the structure of the basket of products reflects that of household consumption, and therefore differs from one country to another).

### ► 1. Variation in the HICP in the four main Eurozone economies

harmonised inflation on a year-on-year basis, in %



How to read it: in November 2021, according to the provisional estimate, year-on-year inflation stood at 6.0% in Germany, 5.6% in Spain, 4.0% in Italy and 3.4% in France.

Source: Eurostat

in the neighbouring countries. Inflation remained positive there or close to zero towards the end of 2020. Finally, although energy prices were the main factor in the fall in inflation in 2020, other consumption items also made their contribution, such as services and in particular air transport in France, and tourist packages in Germany and Spain, which were very sluggish or even saw their prices fall, against a backdrop of travel restrictions.

These different factors partly explain the difference between inflation in France and Germany at present. While inflation was comparable in the two countries over the period prior to the health crisis, in November 2021 it was more than two points higher in Germany. German inflation was driven this year by the introduction of a carbon tax at the beginning of 2021 and by the return to the normal VAT rate after the one-off reduction over H2 2020. In November 2021, there was also a stronger acceleration in inflation in Germany than in France, as the transmission of higher energy and commodity prices to consumer prices of manufactured goods would

appear to have been visible already to a slight extent in Germany, but not yet in France.<sup>2</sup>

**In addition to the 2020 base effect, the sharp rebound in inflation in 2021 was driven by energy everywhere, although with specific features from one country to another**

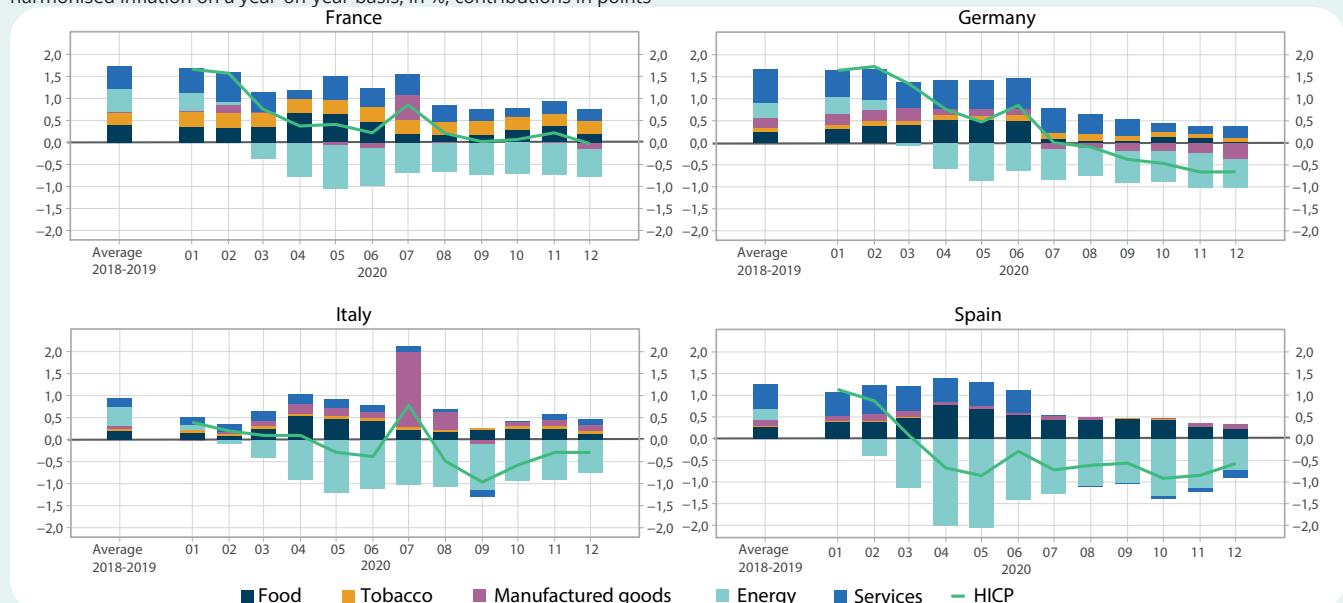
Traditionally, inflation is analysed via the year-on-year variation in consumer prices, and therefore necessarily depends on price levels in the previous year. As regards 2021, the low prices in 2020 therefore automatically induce a high year-on-year variation in the HCPI, in other words high inflation.<sup>3</sup> One way of removing this “base effect” and the specifics of 2020 consists in analysing the HCPI on a two-year basis, meaning in relation to the same month in 2019, rather than in 2020. In the rest of this part, the HCPI is therefore presented on an annualised two-year basis and it is this “two-year inflation” that is analysed.

<sup>2</sup> This comparison is based on analysis of the components of the CPI, as the components of the HCPI for November for Germany and France were not available in time for this publication.

<sup>3</sup> Additionally, the structure of the weights of the aggregates within the HCPI for 2021 was adjusted more significantly than usual further to the atypical profile of consumption in 2020 (► **Box 1** in the Inflation sheet).

## ► 2. Contribution of the main aggregates to the HCPI for the four main Eurozone economies in 2020

harmonised inflation on a year-on-year basis, in %, contributions in points



How to read it: in France in December 2020, harmonised inflation stood at 0.0% year-on-year and the contribution of food was 0.2 points.  
Source: Eurostat

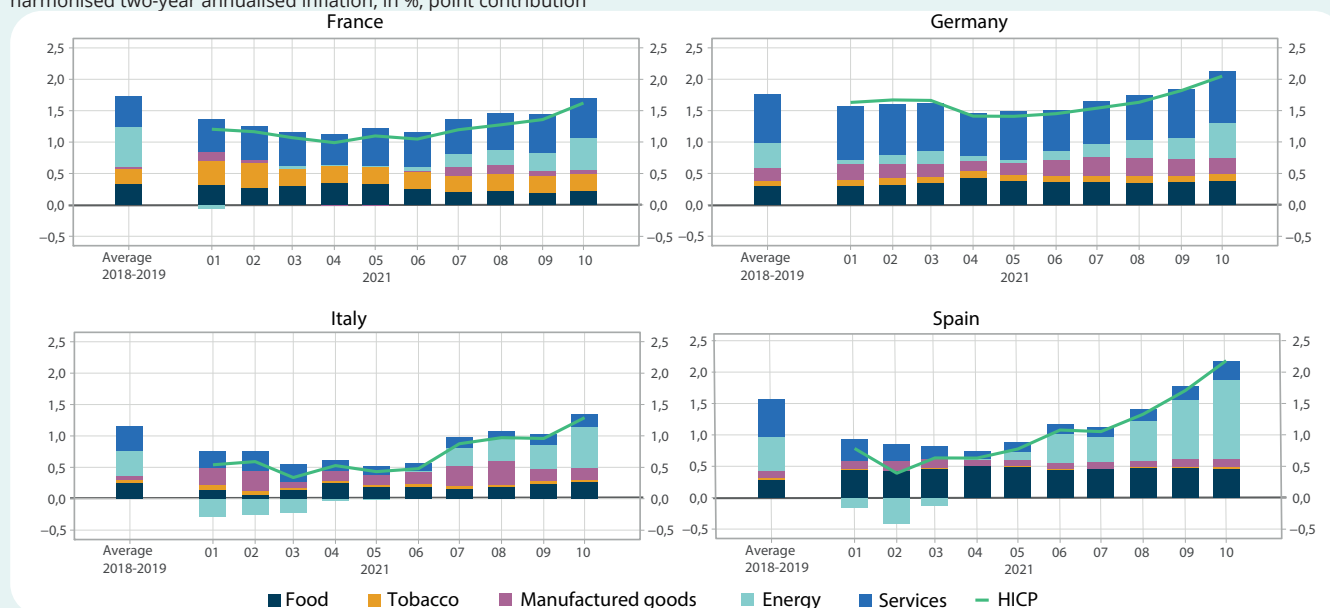
# International economic outlook

In the four main economies in the Eurozone, this two-year inflation showed an upward trend in 2021, with sharp increases in Spain and in Italy, and more modest and similar increases in France and Germany (► **Figure 3**). The level reached in October stood at an annualised rate of a little over 2% in Germany and in Spain, and at around 1.5% in France and in Italy, representing a much more moderate level than that of the year-on-year variation in the HCPI, as seen previously.

The increase in energy prices contributed significantly in all four countries to the rising trend in inflation over the two years in a symmetrical manner to the situation observed in 2020. This was the case notably in Spain and in Italy, where the contribution of energy was amplified considerably over recent months. In Germany and France, the contribution of energy has appeared less dynamic than in Spain and Italy since the start of the year. To understand these differences

## ► 3. Two-year inflation in the four main Eurozone economies in 2021

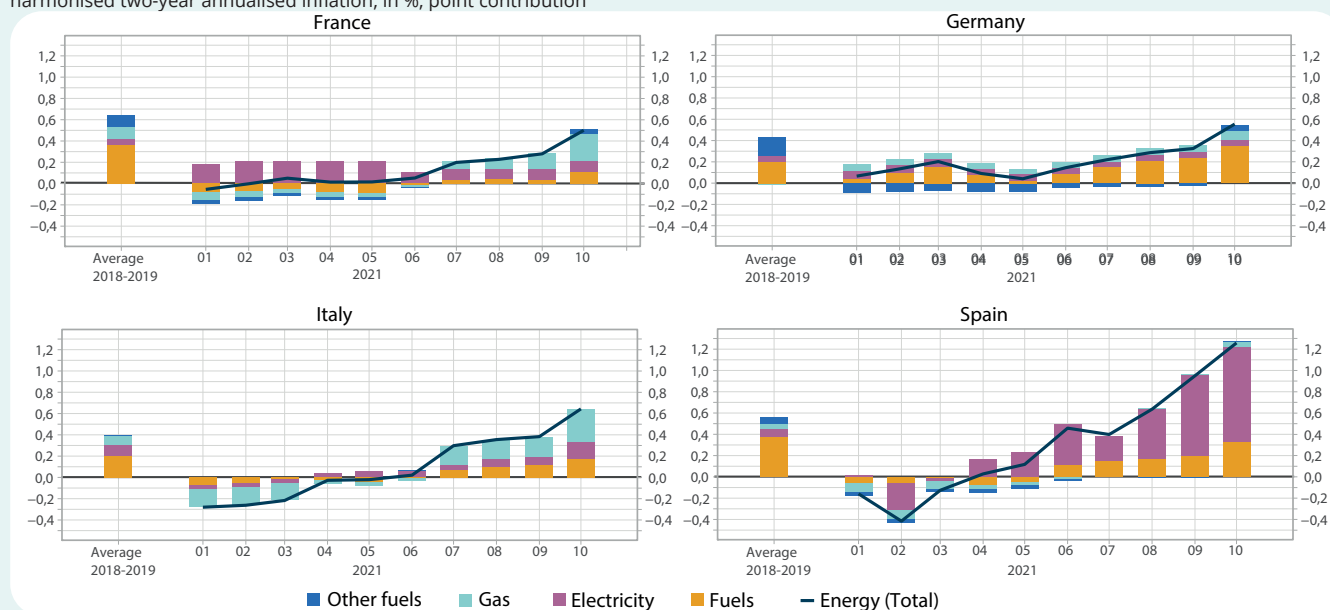
harmonised two-year annualised inflation, in %, point contribution



How to read it: in France in October 2021, the contribution of food to the variation in harmonised inflation over two years on an annualised basis was 0.2 points. Source: Eurostat

## ► 4. Breakdown of the contribution of energy to two-year inflation, in the four main Eurozone economies

harmonised two-year annualised inflation, in %, point contribution



How to read it: in France in October 2021, the contribution of energy to two-year inflation on an annualised basis came to 0.5 points, of which 0.1 points for fuels. Source: Eurostat

in scale and dynamics between countries, we broke down the energy contribution into three main components: fuel, gas and electricity.

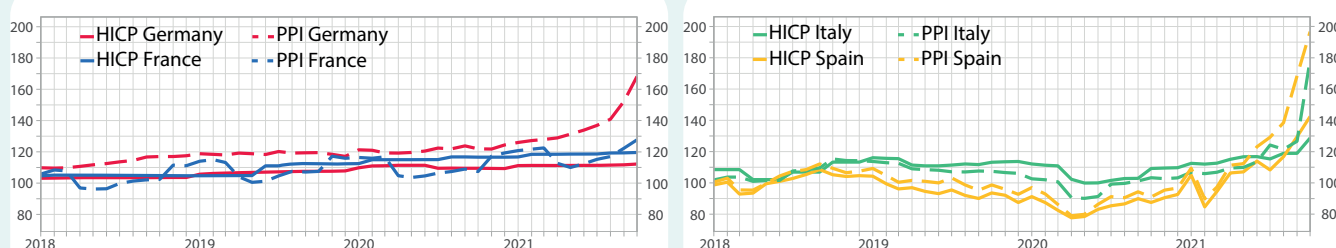
In Spain, the particularly strong increase in energy inflation over the two years was driven mainly by electricity prices (► [Figure 4](#)). In Italy, the contribution of electricity also appears to have been positive, but to a lesser extent, with the main factor in the rise in two-year energy inflation being the price of gas. This was also the

case in France, while in Germany it was fuels that made the main contribution to energy inflation, with gas and electricity playing only a very moderate role.

The singular situation in Spain regarding electricity may be a result of specific national mechanisms in passing on energy production prices to households. In Spain and Italy, for instance, electricity consumer prices appear quite closely correlated to production prices: in Spain in particular, the significant rise the consumer price of

## ► 5. In Italy and Spain, the consumer price index (HCPI) for electricity follows the producer price index (PPI) for electricity closely

indices in base 100=2015

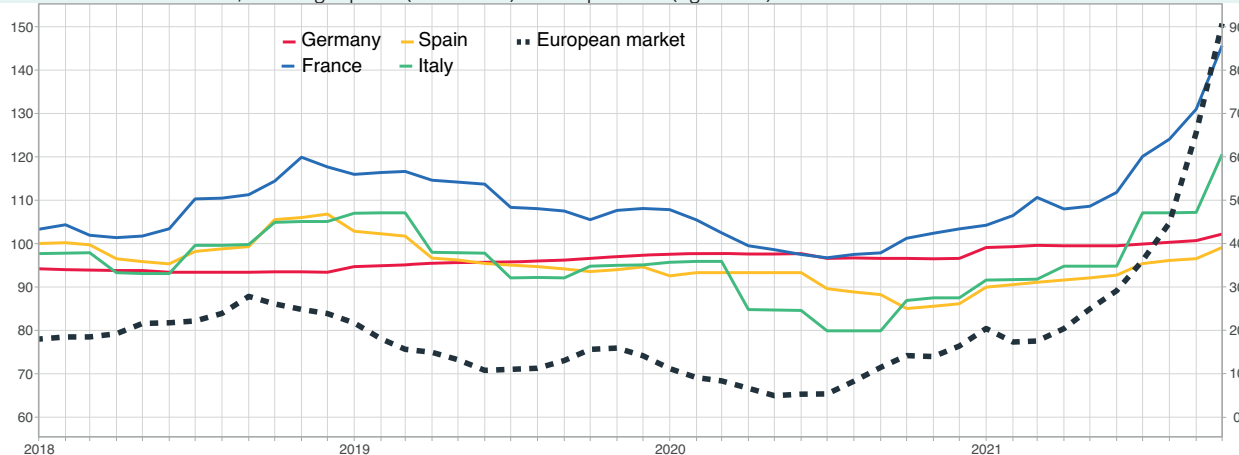


How to read it: in Germany in October 2021, the producer price index in the German industry for “electricity production, transport and distribution” for the German market stood at 168.

Source: Eurostat

## ► 6. In France and Italy, the consumer price index for gas has a similar profile to that of gas prices on the European market

price indices in base 100 = 2015, natural gas prices (TTF futures) in euro per MWh (right scale)



How to read it: in France in October 2021, the consumer price index for gas stood at 146.

Note: the TTF price of natural gas is the value of contracts at the next maturity date for natural gas in the Netherlands. It is the European benchmark for natural gas market prices.

Source: Eurostat

## ► 7. Weight of the different components of the “energy” aggregate in the four main Eurozone economies

weight as a % of household consumption

	France	Germany	Italy	Spain
Fuels	32	33	41	52
Electricity	32	30	23	35
Gas	13	27	23	14
Others	10	17	3	5
Total energy	87	108	89	106

How to read it: in France in 2020, the “energy” aggregate represented 87% of household consumption. The “fuels” component represented 32% of household consumption.

Note: the weights of the different components in household consumption in 2020 were used in the calculation of the HCPI for the year 2021.

Source: Eurostat

# International economic outlook

electricity since spring 2021 can be seen to be parallel to a sharp rise in production prices (► **Figure 5**). In Germany and in France, meanwhile, the variations in consumer prices would appear to follow those in production prices only with a time lag and in a manner that is smoothed out over a longer period. One explanation is no doubt to be found in the pricing mechanisms for the electricity supplied to households: in Spain, the development of dynamic pricing for electricity makes the consumer price more dependent on fluctuations in production prices;<sup>4</sup> in France, this type of pricing is marginal compared to regulated prices that are revised twice a year.<sup>5</sup> Spain is also the country where electricity represents the largest weight in household consumption, which increases the contribution of this component to the HCPI (► **Figure 7**).

The prices for gas followed the same upward trend, with Germany being the exception. Once again, this can be explained by the different pricing models. In Germany, energy distributors review their prices annually. Consumer prices would therefore appear to have adjusted slowly following the rise in production prices.

More generally, energy distributors may have been able to limit their price rises by profiting from a reduction in the tax on electricity in January 2021.<sup>6</sup> In the four

countries, measures have been taken to contain this rise in energy prices that weighs down on household purchasing power, in many cases paying particular attention to the least advantaged households<sup>7</sup>: energy vouchers,<sup>8</sup> tax reductions, price regulation, etc.

In addition, the increase in fuel prices linked with that in oil prices also contributed to the rise in inflation over the two years in the different countries. This remained limited in its extent, however, as oil prices in 2019 were between €50 and €65, which is to say comparable to the levels in spring 2021. It was in Germany that the contribution of fuels would appear the largest on average, however: this may be a result of the carbon tax introduced in January 2021 in the German taxation system and which has increased fuel prices since then.

## Price rises likely to be passed on to products other than energy to a greater extent in coming months

Energy aside, other inputs have also seen sharp price rises since the beginning of 2021, in particular mineral and agricultural commodities. However, unlike energy which is passed on directly to consumer prices through

<sup>4</sup> In Spain, "small" consumers who opt for regulated prices can choose between a fixed price that is revised each year or a price that is variable from day to day and index-linked to the wholesale price of electricity. <https://iea.blob.core.windows.net/assets/2f405ae0-4617-4e16-884c-7956d1945f64/Spain2021.pdf>.

<sup>5</sup> <https://www.cre.fr/content/download/24367/304131>

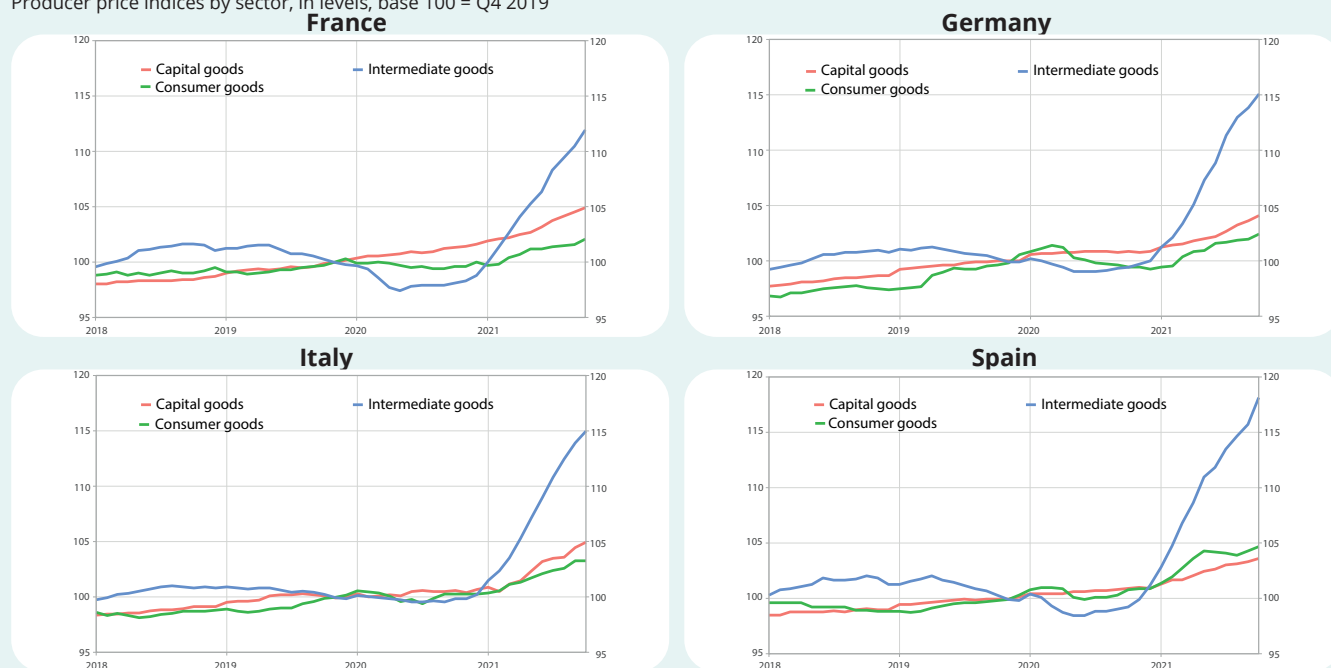
<sup>6</sup> In 2021, the German tax for the financing of renewable energies was cut by 3.9% to foster economic recovery.

<sup>7</sup> <https://www.bruegel.org/publications/datasets/national-policies-to-shield-consumers-from-rising-energy-prices/>

<sup>8</sup> Energy vouchers do not change the price paid by households and therefore have no effect on the HCPI.

## ► 8. The intermediate goods industries have seen a significant increase in their production prices since the end of the year 2020

Producer price indices by sector, in levels, base 100 = Q4 2019



Source: Eurostat

fuels and heating energy consumed by households, the rise in the prices of other inputs was only visible in October in products situated upstream from the household consumption basket.<sup>9</sup>

In the main Eurozone economies, producer price indices (PPI)<sup>10</sup> in industry have thus been increasing since the start of 2020, with pronounced differences between types of industry. Industries producing intermediate goods have seen a very sharp rise in their producer prices year-on-year, on account of their more direct reliance on commodities and fossil fuels.<sup>11</sup> For finished

products, meanwhile, which is to say consumer goods<sup>12</sup> and capital goods,<sup>13</sup> production prices are currently showing much more moderate increases (► [Figure 8](#)).

This moderate rise in the production prices of consumer goods, compared to that for intermediate goods, shows the time lag necessary for prices to be passed on through the production chain. In this respect, the increasing prices for intermediate goods suggest that inflation in the prices of manufactured goods and foodstuffs (excluding fresh products) could increase significantly in coming months. Under the assumption that energy prices do

<sup>9</sup> Among consumer goods, foodstuffs are already showing a rise in production prices.

<sup>10</sup> Producer price indices track variations in the prices paid to producers on different markets. There therefore provide a vision of changes in prices ahead of the HCPI.

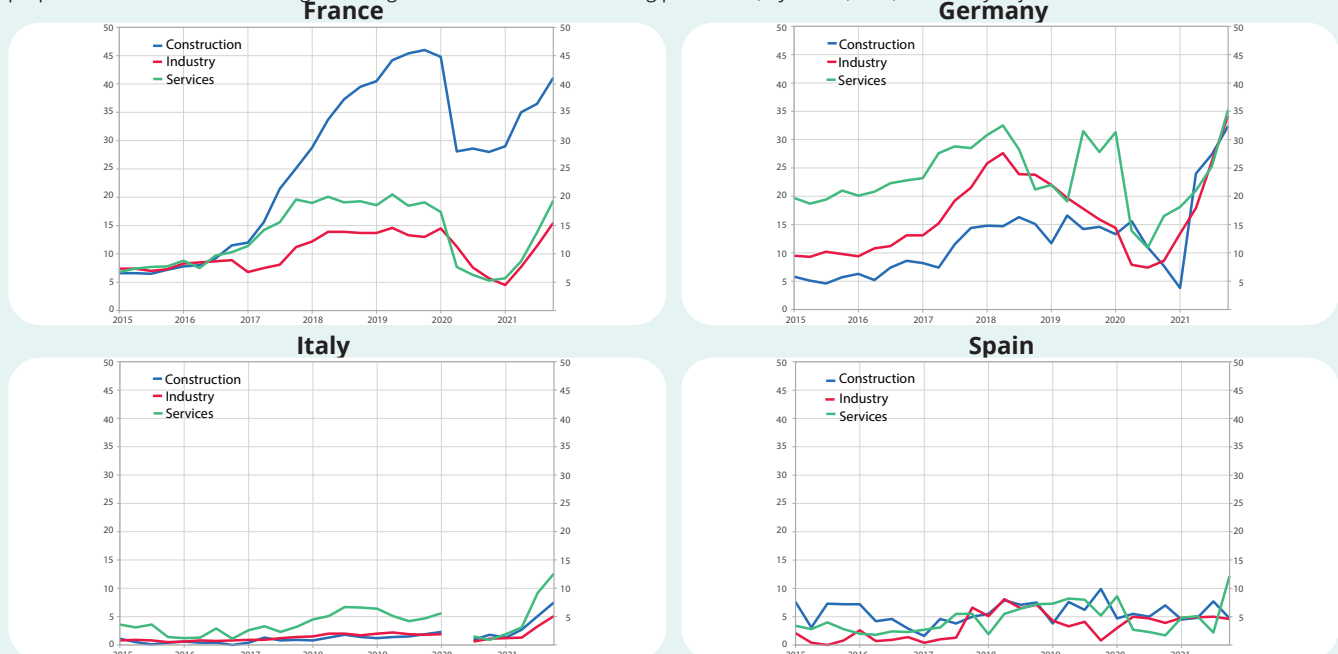
<sup>11</sup> Intermediate goods industries within the meaning of the MIG (main industrial grouping) classification: chemical industry, manufacture of paper, manufacture of rubber and plastic products, and other non-metallic mineral products, metallurgy and manufacture of metal products, except for machinery and equipment,

<sup>12</sup> Food industries, apparel industries, printing and reproduction, pharmaceutical industry, manufacture of furniture, etc.

<sup>13</sup> Manufacturing of machinery and equipment not included elsewhere, manufacture of motor vehicles and building of ships and boats., etc.

## ► 9. In H2 2021, recruitment difficulties are intensifying for European businesses

proportion of businesses declaring a shortage of labour as a factor limiting production, by sector, in %, seasonally adjusted data



Note: this data is drawn from the business tendency surveys. This is the proportion of businesses that identified a shortage of labour as a factor limiting production. The question is asked quarterly in the sectors of industry and services. It is monthly in the construction sector and has been switched to a quarterly basis by keeping the point from the first month in the quarter. In April 2020, the surveys were not conducted in Italy. These statistics correspond to the European surveys centralised and harmonised by DG ECFIN and their value may differ from those published by INSEE from the same source: the trends are nonetheless similar.

Source: Eurostat

# International economic outlook

remain stable, meanwhile, energy inflation should fall mechanically, as 2022 prices are seen in relation to the upward dynamics in 2021.

## For the moment, the rise in consumer prices does not seem to be being passed on to wages

In addition to rising prices for intermediate goods and the repercussions for consumer prices, other factors are likely to play a part in rising inflation: labour market tensions. In the four main Eurozone economies, according to the tendency surveys, the share of businesses declaring that a shortage of labour is limiting their production increased significantly in 2021 (► **Figure 9**). This proportion had reached a low point in spring 2020, but has returned to or exceeded its pre-crisis levels in most countries and sectors. In Germany, for instance, the declared difficulties have been increasing continually since the health restrictions were ended in spring 2021, and have significantly exceeded their levels over the past six years in construction and

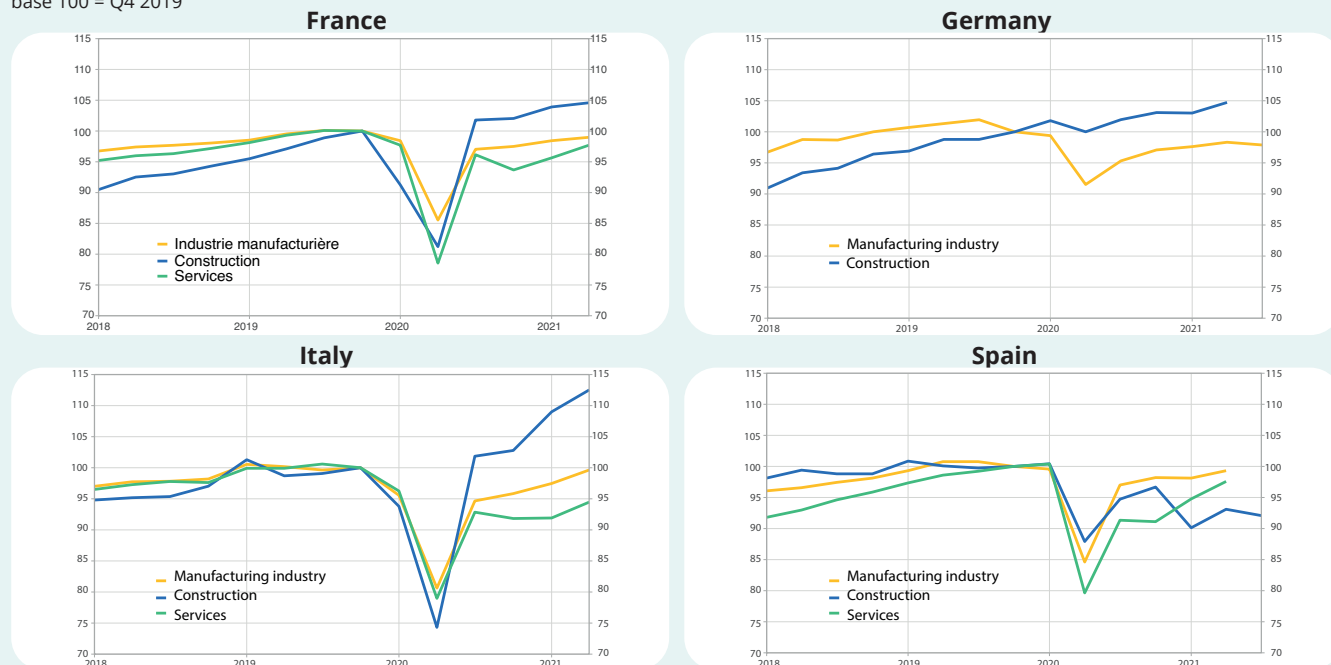
industry, as well as in services to a lesser extent. In France, the increases have been more modest, but the levels reached in October 2021 were close to the highest over the past six years. In Italy and Spain, services are particularly hard hit, with a share of businesses declaring that they are having recruitment difficulties now well above the highest points in recent times.

However, hourly wages do not seem to be showing any particular increases that might be a sign of a knock-on effect of prices on wages, at least at this stage: since the summer of 2020, the hourly wage would appear to be remaining on the same trend as in recent years, in manufacturing industry, construction and in services (► **Figure 10**). The only exception to this is the hourly wage in the construction sector in Italy which has seen a sharp increase since the end of the crisis. This is linked to the dynamic levels of investment in construction in the country and does not seem to be linked to inflation. In Q3 2021, investment in construction was 13.4% above its level in Q4 2019. ●

*Narjis Benchekara, Hugues Ravier, Meryam Zaiem*

## ► 10. Variation in hourly wages in industry and services in the main Eurozone economies

base 100 = Q4 2019



Note: services = service activities required by the STS Regulation.  
Source: Eurostat

# United Kingdom

After the rebound in Q2 associated with the lifting of lockdown, activity in the United Kingdom slowed in the summer (+1.3% after +5.5%) settling at -1.8% compared to its average level for 2019<sup>1</sup> (► [Figure 1](#)). The recovery continued mainly as a result of buoyant household consumption and government spending. In contrast, trade has remained depressed since the implementation of *Brexit* on 1<sup>st</sup> January 2021, especially exports, which declined again in Q3. Overall, investment has been relatively dynamic since the crisis, but has presented some contrasting situations in the different institutional sectors (► [Figure 2](#)).

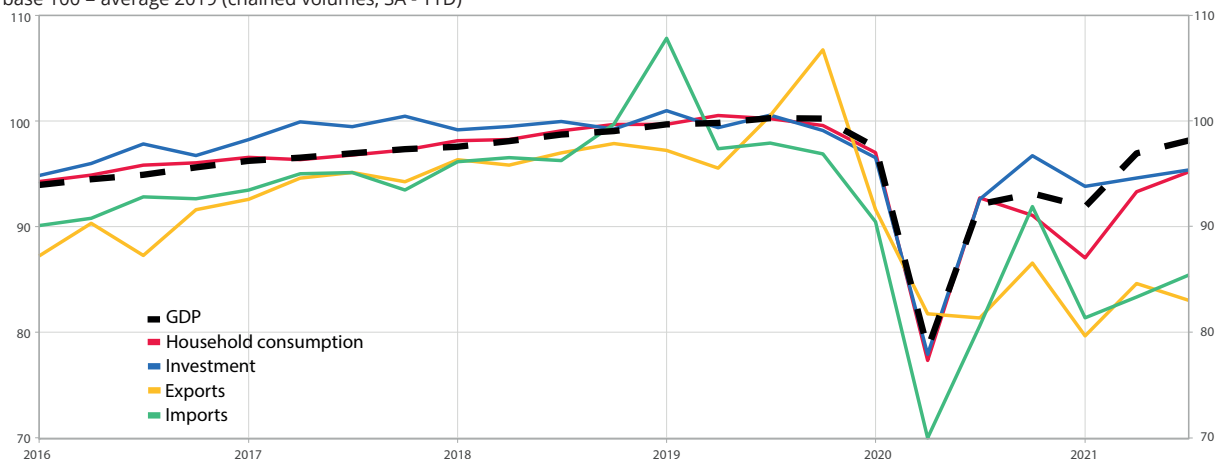
Since early Q4, the short-term outlook has deteriorated: the United Kingdom has faced growing supply chain difficulties, due to world shortages of inputs, and also hiring difficulties, which again were accentuated by *Brexit*. The labour market is therefore showing signs of tension (► [Box](#)). In addition, inflation rose sharply (+4.2% year-on-year in October after +3.1% in September), in the context of a global increase in energy prices. At the same time, the robustness of wages is likely to accentuate inflation further: the nominal median wage increased by +4.9% year-on-year in October (against an average annual increase of 3.2% between 2017 and 2020), and the workforce shortage is exerting upward pressures. Lastly, uncertainty surrounding the worsening health situation could affect growth.

At the end of 2021, activity in the United Kingdom is expected to slow further (+0.6%). Growth is likely to remain fairly modest in H1 2022, with household consumption still the main driving force, though limited by the increasing uncertainty over the health situation and the persistence of inflation in H1 2022. Corporate investment is likely to remain gloomy, penalised by supply chain problems and the increase in social contributions to be introduced from Q2 2022. In addition, exports are expected to remain depressed, and unlikely to close the gap in relation to imports (► [Figure 3](#)). ●

<sup>1</sup> The pre-crisis level of trade, which was strongly disrupted at the end of 2019 by *Brexit*, is reflected more accurately by the figures for the whole year rather than for Q4 2019 alone. The reference to pre-crisis considered here is therefore the average for the whole of 2019.

## ► 1. Consumption and investment are closer to their pre-crisis level, but foreign trade remains depressed

in level, base 100 = average 2019 (chained volumes, SA - YTD)



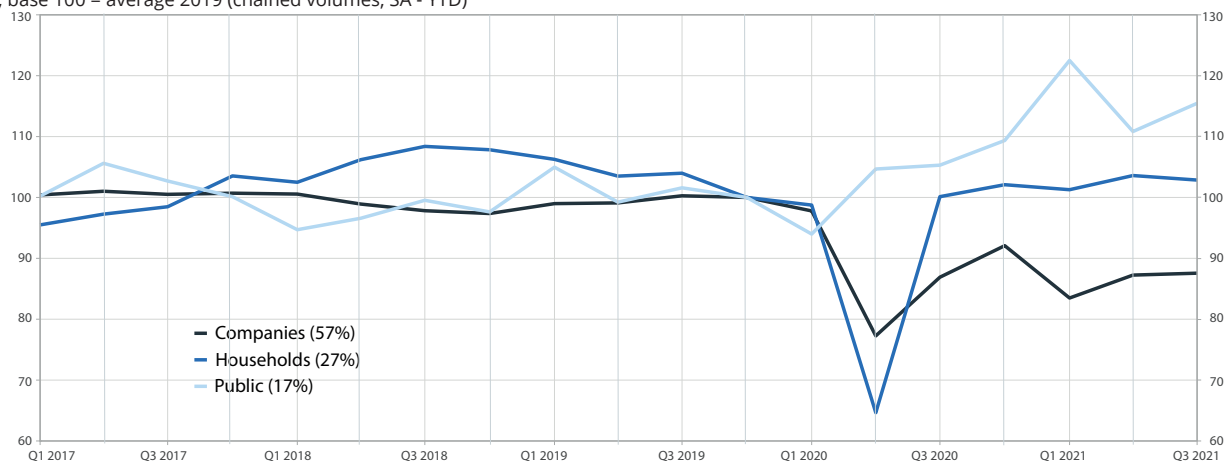
How to read it: in Q3 2021, the UK GDP stood at -1.8% below its average for 2019.

Source: ONS

# International economic outlook

## ► 2. Total GFCF is boosted by government spending, while corporate investment remains depressed

in level, base 100 = average 2019 (chained volumes, SA - YTD)



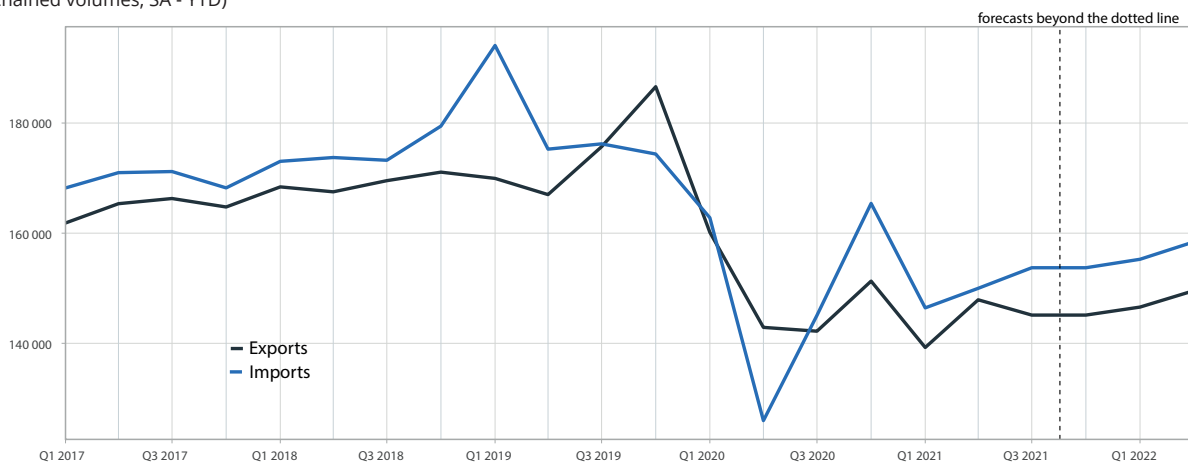
How to read it: in Q3, corporate investment was 12.4% below its level at the end of 2019.

Note: weightings shown in brackets are calculated for 2019. The total may not be 100 due to rounding

Source: ONS

## ► 3. Trade is expected to improve slightly over the forecasting period

in level (chained volumes, SA - YTD)



Source: ONS

## Workforce shortages reflect a tense labour market

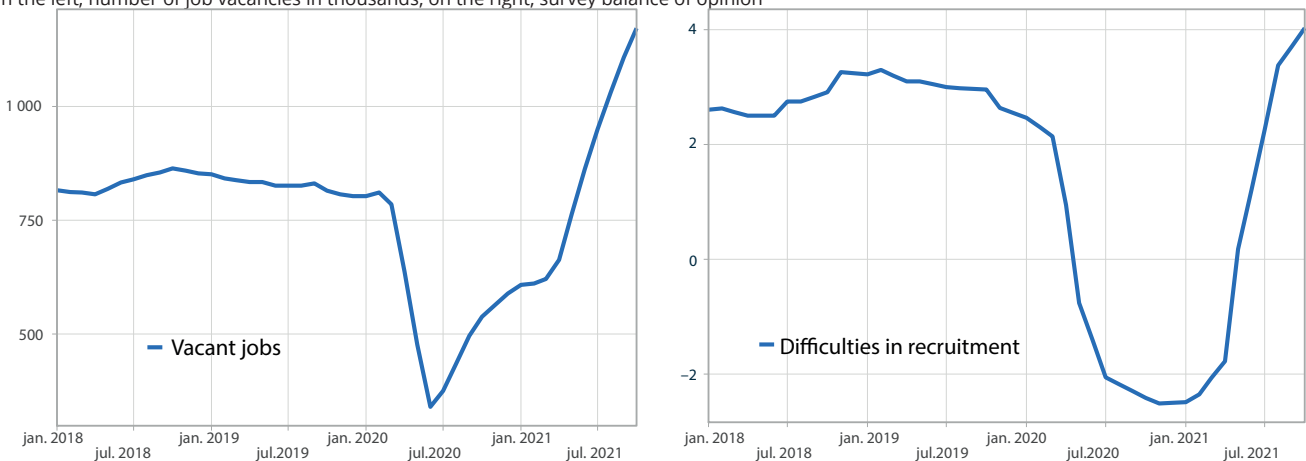
Although the unemployment rate is back to a fairly low level (4.3% in Q3) thanks to the recovery in employment, companies reported increasing hiring difficulties during the summer. These workforce problems appear to have intensified: job vacancies reached a record level between August and October, and the results from a survey on hiring difficulties published by the Bank of England were at their highest in October, after increasing throughout H1 (► **Figure 4**). In addition, “high-frequency” data from the *Indeed* hiring platform suggest that this trend has continued since October, with the number of job offers continuing to increase right up to the end of November (► **Figure 5**).

It would seem that Brexit has intensified these labour shortages, as the conditions for entering the UK have become much stricter since 1<sup>st</sup> January 2021, thus limiting arrivals of European workers. The road transport sector, where more than 10% of workers are from EU member countries, has been particularly hard hit by these problems.<sup>1</sup>

According to the indicators mentioned above, the tension in the labour market would appear to have intensified in Q4. ●

### ► 4. In October, the number of job vacancies reached a record level, and hiring difficulties were at their most severe

on the left, number of job vacancies in thousands, on the right, survey balance of opinion

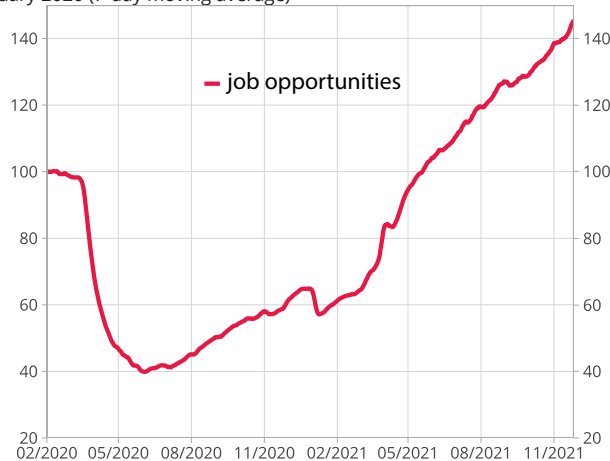


Note: the balance of opinion on hiring difficulties is not seasonally adjusted. Companies respond by comparing the situation in the last three months to the same period one year earlier. Since August 2016, balances have not been published in March, June, September or December (the missing points have been replaced by taking the averages of the two neighbouring points).

Source: ONS, Bank of England

### ► 5. The number of job offers on the *Indeed* platform continued to increase up to the end of November

number of job offers; base 100 = 1<sup>st</sup> February 2020 (7-day moving average)



How to read it: during the week of 26 November 2021, there were 46% more job offers on the Indeed job search platform compared to the week of 1<sup>st</sup> February 2020.

Source: INEED Hiring Lab

<sup>1</sup> All sectors combined, the share of foreign workers from the European Union in the United Kingdom workforce is less than 0.1%.

# United States

After sustained growth in H1 (+1.5% then +1.6% in Q1 and Q2), activity in the United States slowed substantially in Q3 (+0.5%), mainly because private consumption came to a sudden halt (+0.4% after +2.7% and +2.9%, ► [Figure 1](#)).

Until now, household consumption has been the driving force behind the economic recovery and it was almost back to its pre-pandemic trend, driven mainly by consumption of goods (+15.2% in Q3 2021 compared to Q4 2019, ► [Figure 2](#)) while consumption of services lagged behind (-1.6% in Q3 compared to the end of 2019). The marked slowdown in private consumption in Q3 was mainly the result of the decline in consumption of vehicles (-17.6% compared to Q2), probably associated with the shortages affecting production, the lessening effect of support measures for households, the resurgence of the epidemic with the Delta variant, and inflationary tensions.

Inflation is particularly high in the United States, with year-on-year change in the consumer price index reaching +6.8% in November. This rise in prices was mainly the result of increases in energy prices, but core inflation also increased significantly (+4.9% year-on-year in November), in a context of massive fiscal support and persistent supply chain difficulties.

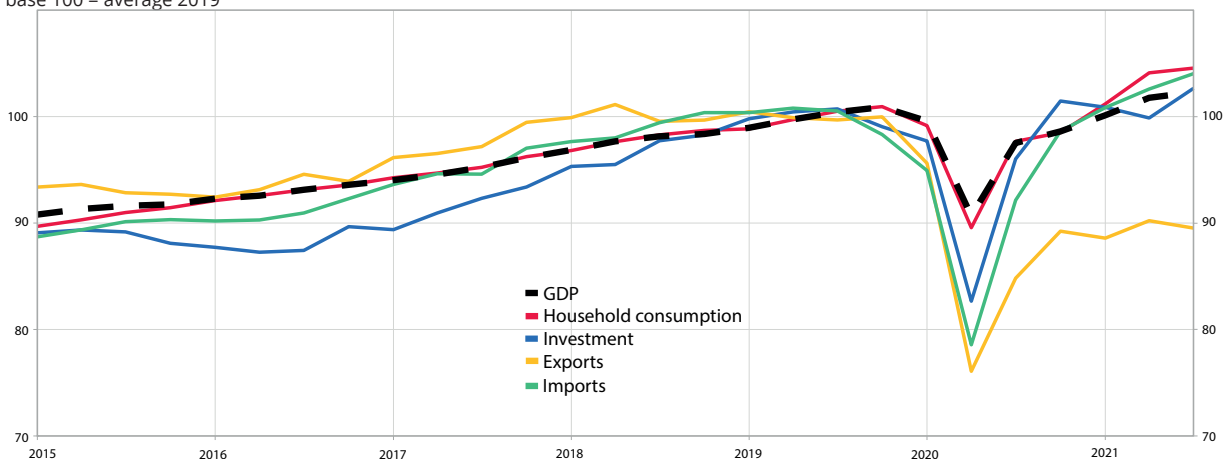
In addition, hiring difficulties in the labour market could lead to a wage hike: the pace of job creations has slowed since the summer, while the level of non-agricultural market employment is still 2.6% below what it was in February 2020, i.e. down 3.9 million jobs. Notably, the labour market participation rate has failed to return to its pre-crisis level (61.7% in Q3 against 63.1% in 2019), due to early retirements, but also an unprecedented number of resignations (4.2 million in October). This rate of activity is likely to remain depressed in H1 2022.

In Q3, the considerable difference between imports and exports compared to their pre-crisis levels (+4.1% and -10.4% respectively compared to 2019) escalated further: with imports of goods brought to a standstill, imports of services moved closer to their pre-crisis level. In contrast, exports of goods continue to suffer from production difficulties and a possible redirecting of this production to the domestic market, while in the absence of foreign tourists in the country, exports of services have remained sluggish.

In Q4, the improvement in the health situation compared to the summer should make it possible for an upswing, albeit limited, in household consumption. This would lead to a rebound in GDP growth (+1.1%), although still affected by production constraints and rising prices. This momentum is likely to slow slightly in H1 2022 in a situation where fiscal policy becomes more restrictive and assuming that production difficulties will be resolved only slowly. ●

### ► 1. In Q3, United States activity slowed in the wake of household consumption

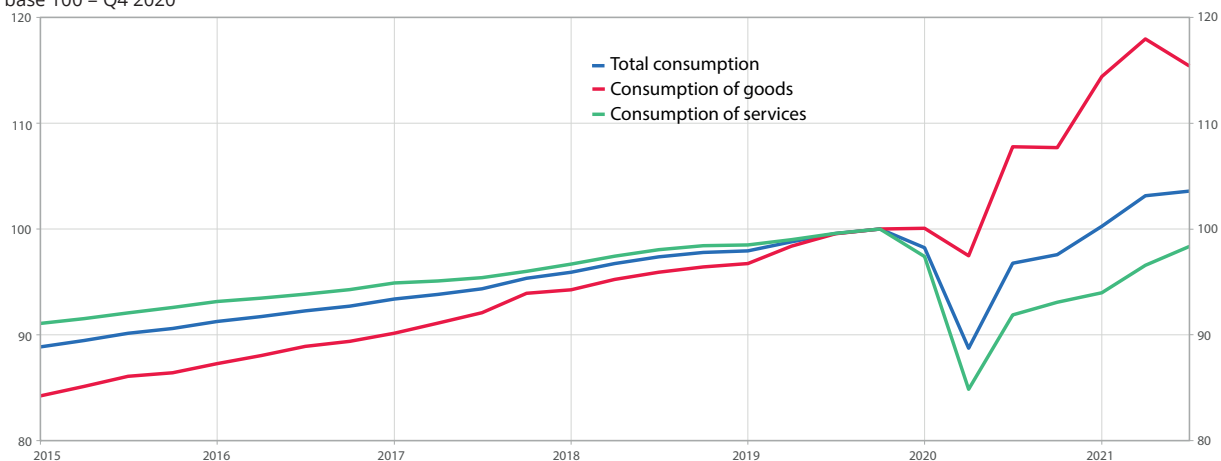
in level, base 100 = average 2019



Source: BEA

## ► 2. Consumption of services remains depressed compared to its pre-crisis level, unlike the consumption of goods

in level, base 100 = Q4 2020



Source: BEA

## China

In Q3 2021, activity in China declined for the first time since Q1 2020 (–0.8% as a quarterly variation, seasonally and working-day adjusted, and after +1.0% in Q2). It is still increasing year-on-year, however, (+4.9% compared to Q3 2020) and well above its pre-crisis level (+7.8% compared to Q4 2019).

The current loss of impetus in growth in China can be explained by a combination of several factors. First, the Chinese health strategy requires the introduction of temporary lockdowns of towns and factories, thus penalising economic activity, such as the closure of a terminal in Ningbo-Zhoushan, one of the world's main ports, for two weeks in August.

The Chinese economy has also been affected by an energy crisis, resulting both from the application of new targets for greenhouse gas emissions, and from difficulties with coal supplies and the price cap on sales of electricity, forcing some producers to reduce their supply. The recent electricity price hike, permitted by the authorities, could result in an upswing in industrial production (+0.5% increase in October, ► [Figure 1](#)), but could have repercussions for producer prices, which are already very high (+12.9% year-on-year in November, in a context of rising commodity prices).

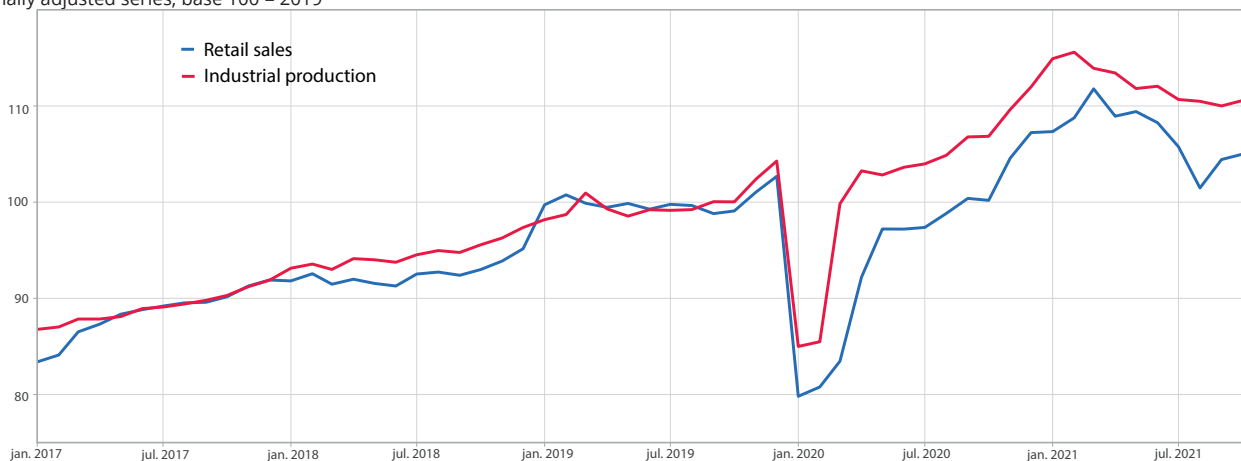
In addition, the real estate sector, a driver of Chinese growth in recent years and contributing directly and indirectly about a quarter of national GDP, has experienced a significant slowdown since the end of the summer. A tightening of regulations, embodied by the introduction of new prudential measures, aims to cut developers' debts. As well as Evergrande, several other real estate developers have defaulted on bond repayments, and can no longer fund their growth by new debts. Investment in the real estate sector has therefore declined (–3.5% in September year-on-year, then –5.4% in October), and sales of new buildings have been severely affected (–13% year-on-year in September, then –22% in October).

On the demand side, the domestic market is struggling to drive Chinese growth, for instance in retail sales (► [Figure 1](#)) and imports (–3.2% in Q3, reprocessed within the meaning of the national accounts and seasonally adjusted for the effects of the Chinese New Year). This sluggishness in domestic demand, combined with intense competition between companies, notably causes a divergence between the dynamics of producer prices and the much weaker dynamics of consumer prices (CPI at +2.3% year-on-year in November, ► [Figure 2](#)).

The persistence of these factors causing a slowdown at the end of the year is likely to continue to hamper Chinese growth in Q4, before gradually receding in 2022 to allow for a more dynamic recovery. ●

### ► 1. The decline in retail sales and industrial production came to a halt in October

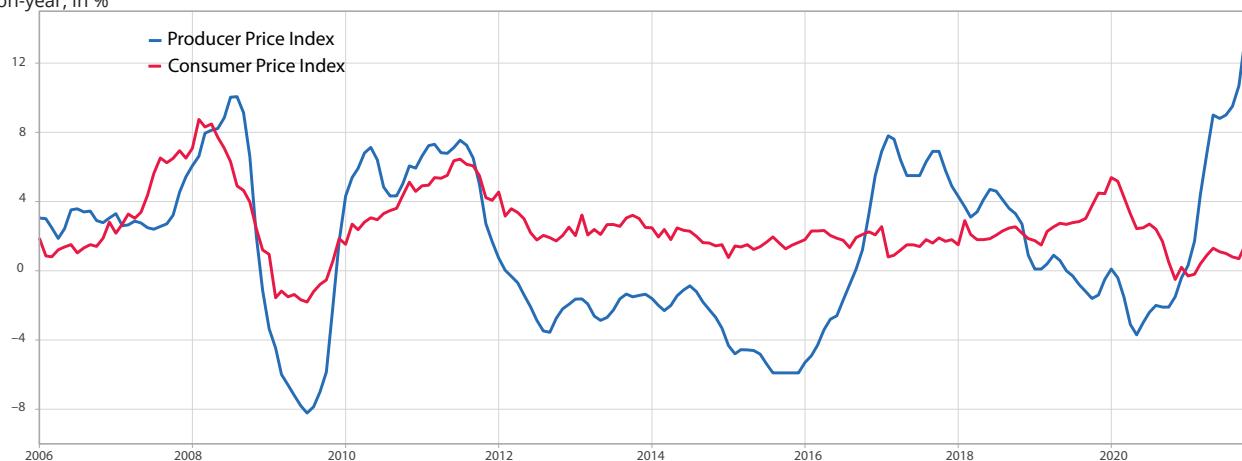
seasonally adjusted series, base 100 = 2019



Source: NBSC, INSEE calculations

## ► 2. At this stage, the increase in producer prices is not passed on to consumer prices

year-on-year, in %



Source: NBSC