

Summary*

The recovery of the international economy continues thanks to the progress achieved in vaccination campaigns, especially among the advanced countries, but global growth appears to have peaked in the summer. The International Monetary Fund (IMF) has broadly confirmed its July forecasts for world GDP growth, with improvements for the euro area and downward revisions for the United States. Commodity and transport prices are accelerating, which could slow the recovery of activity going forward. Central banks are preparing the ground for the normalisation of monetary policy, which is currently highly expansionary.

In Italy, the easing of measures imposed to combat the pandemic fostered a rapid acceleration of GDP in the spring (2.7 per cent with respect to the previous period), outpacing the average for the euro area. Households have partially drawn down the savings accumulated during the recession, and the services sector, which had been affected most severely by the pandemic, has rebounded. Value-added continued to grow both in industry, boosted in part by the strengthening of exports, and, especially, in construction. The contribution of inventories to growth has turned negative, meaning that demand has outstripped supply. A similar imbalance is also starting to emerge in the labour market, where vacancies have increased rapidly, while the decline in the unemployment rate is gradual.

The recovery in spending, together with the increase in the prices of commodities and intermediate goods, have also driven consumer price inflation in Italy, which reached 2.5 per cent in September (according to the national index). Expectations collected in surveys of households and firms point to an increase in inflation in the near future as well.

According to the short-term models of the Parliamentary Budget Office (PBO), GDP growth slowed only slightly in the third quarter compared with the previous period, edging down to 2.6 per cent, thanks to the continuing strong impetus from the services sector. In the final quarter of 2021, economic activity is expected to continue to recover, albeit decelerating to around 1 per cent, after two quarters of very rapid growth.

Short-term forecasts are highly uncertain due to the scarcity of reliable real-time indicators for the services sector. The short-term projections are exposed to balanced risks, while in the coming years those on the downside will continue to predominate, as already reported at the time of the endorsement exercise for the macroeconomic scenario of the Update to the 2021 Economic and Financial Document.

* Prepared by the Macroeconomic Analysis Department. Information updated to 20 October 2021.

The international environment

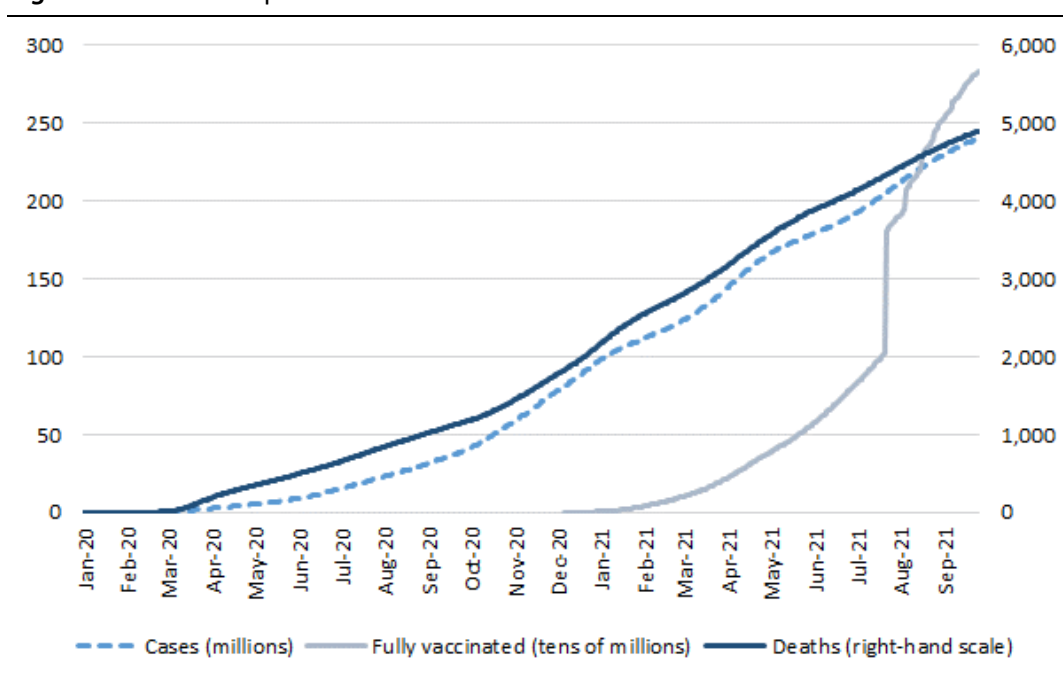
Vaccination campaigns continue but the economy is slowing

Vaccination campaigns are continuing at a rapid pace: by mid-October over a third of the world's population had been fully vaccinated (Figure 1) and almost half had received a first dose. However, large regional disparities remain, with some advanced countries approaching 90 per cent vaccination levels while many others in the developing world are just beginning their campaigns. The approach of winter, which can foster the spread of viruses, together with the low percentage of vaccinated people in the emerging countries could trigger new waves of the pandemic or produce new variants of the disease.

Although still pointing to expansion, purchasing manager confidence indices (PMI) are signalling a slowdown, largely caused by the problems faced in procuring goods and the lengthening of delivery times. Despite a modest recovery in September, the global composite index is 5.5 points below its May peak (Figure 2). Economic activity is marginally more robust in the advanced countries (53.8) than in the developing countries (52.3), while at the sectoral level manufacturing (54.1) appears to be performing slightly better than services (53.4).

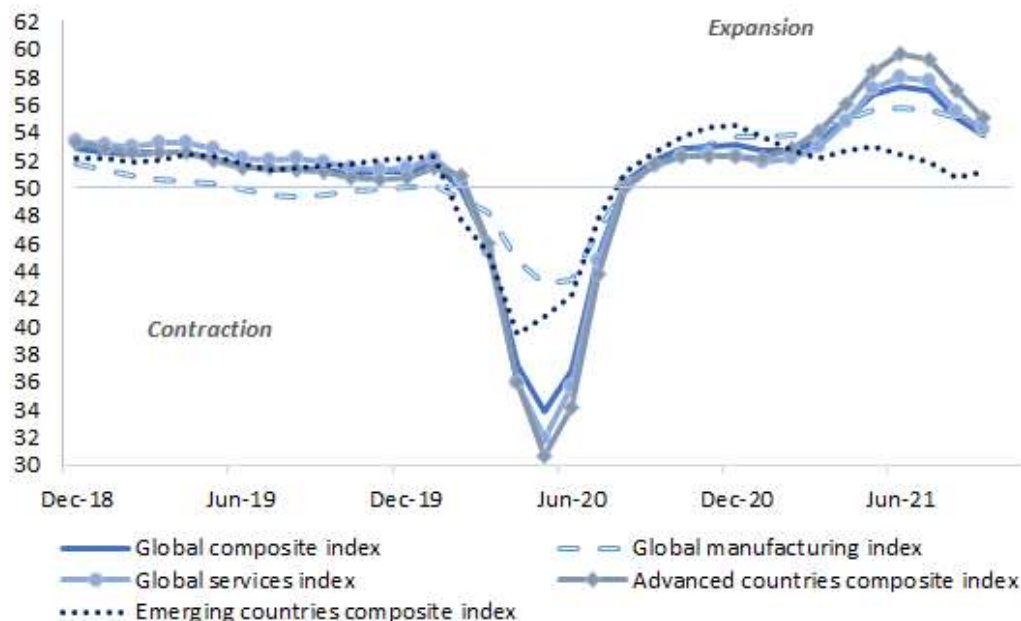
In the first half of the year, the United States recorded an average quarterly growth rate of over 1.5 per cent on the previous quarter. In the euro area, after a slightly negative first quarter, the growth in economic activity rebounded by more than two percentage points in the second quarter. In China, GDP grew by just under 13 per cent in the first half of the year compared with the year-earlier period, but slowed sharply in the summer (to 4.9 per cent).

Figure 1 – Developments in COVID and vaccinations in the world



Source: ourworldindata.org.

Figure 2 – JP Morgan Global PMI
(three-month moving average)



Source: IHS Markit.

As regards the labour market, unemployment continues to decline both in the euro area and, more rapidly, in the United States. Across the Atlantic, the unemployment rate stood at 4.8 per cent in September, while in the euro-area countries it was 7.5 per cent in August.

International trade peaks but logistical bottlenecks persist

After recording an all-time high last March, world trade has begun to decelerate, mainly due to bottlenecks in global supply chains. The scarcity and high cost of containers and merchant vessels for outbound routes from Asia, the temporary blockage of the Suez Canal in March and subsequent port closures in China due to COVID outbreaks, as well as anti-COVID procedures that slowed the unloading of goods, have created bottlenecks in the supply of raw materials and semi-finished products. Despite the slowdown, Central Planning Bureau data indicate that the growth in world trade already acquired for 2021 was 9.4 per cent in July. In October, maritime freight costs had doubled on an annual basis both for vessels (Baltic Dry Index) and containers (Shanghai Containerized Freight Composite Index; Figure 3).

Figure 3 – World trade, commodity prices and freight costs (1)
(annual percentage change in three-month moving average)



Source: based on data from Central Planning Bureau, Baltic Exchange, Shanghai Shipping Exchange and Bloomberg.

(1) BCI – Bloomberg Commodities Index; BDI – Baltic Dry Index; SCFI – Shanghai Containerized Freight Composite Index.

IMF forecasts

On 11 October, the IMF published its autumn forecasts in the *World Economic Outlook* (Table 1). The IMF notes that vaccines are proving effective in preventing severe cases of COVID-19, but there are large differences in vaccine availability between the advanced and developing countries. Vaccination has permitted the resumption of economic activity, but the circulation of variants is a source of considerable uncertainty about the outlook. Compared with its July forecast, the IMF has made a small downward revision to its projection of global economic growth in 2021 (to 5.9 per cent, from 6.0 per cent three months earlier), prompted by the deterioration in forecasts for the advanced countries (now 5.2 per cent, 0.4 percentage points lower than in July), especially for the United States and Japan. At the same time, the IMF revised its projection for euro-area GDP growth upwards for 2021 (to 5.0 per cent), thanks to the improved prospects for Italy (raised by 0.9 percentage points) and France (raised by 0.5 points), despite the deterioration in the forecast for Germany (lowered by 0.5 points). For 2022, the changes were smaller, with the overall world economy expected to expand by 4.9 per cent. Supply bottlenecks are causing imbalances between supply and demand and, consequently, increases in prices, which the IMF considers transitory and which should normalise over the course of 2022. Nevertheless, this expected path to normality is affected by considerable uncertainty.

Table 1 – IMF forecasts

	WEO October 2021			Difference with WEO <i>update</i> July 2021	
	2020	2021	2022	2021	2022
World GDP	-3.1	5.9	4.9	-0.1	0.0
<i>Advanced economies</i>	-4.5	5.2	4.5	-0.4	0.1
<i>United States</i>	-3.4	6.0	5.2	-1.0	0.3
<i>Euro area</i>	-6.3	5.0	4.3	0.4	0.0
<i>Emerging economies</i>	-2.1	6.4	5.1	0.1	-0.1
<i>China</i>	2.3	8.0	5.6	-0.1	-0.1
World trade	-8.2	9.7	6.7	0.0	-0.3

Source: IMF (2021), *World Economic Outlook*, October.

Commodity prices continue to rise

The rebound in economic activity has led to a sharp increase in demand for energy and non-energy commodities and for semi-finished products. The expansion of supply has been less robust, due both to pricing strategies, such as that adopted by OPEC for oil, and to the logistical bottlenecks noted earlier. The acceleration of the transition to renewable energy has also diverted much of the demand for oil and coal to natural gas, the use of which is seen as an intermediate step towards the goal of zero emissions. From the low recorded in the final ten days of April of last year to mid-October this year, the price of Brent and coal has increased about 5 times (to \$85 per barrel and \$243 per ton, respectively; Figure 4), while that of gas has soared by more than 13 times (to €87 dollars per megawatt/hour).

Figure 4 – Oil prices and dollar/euro exchange rate

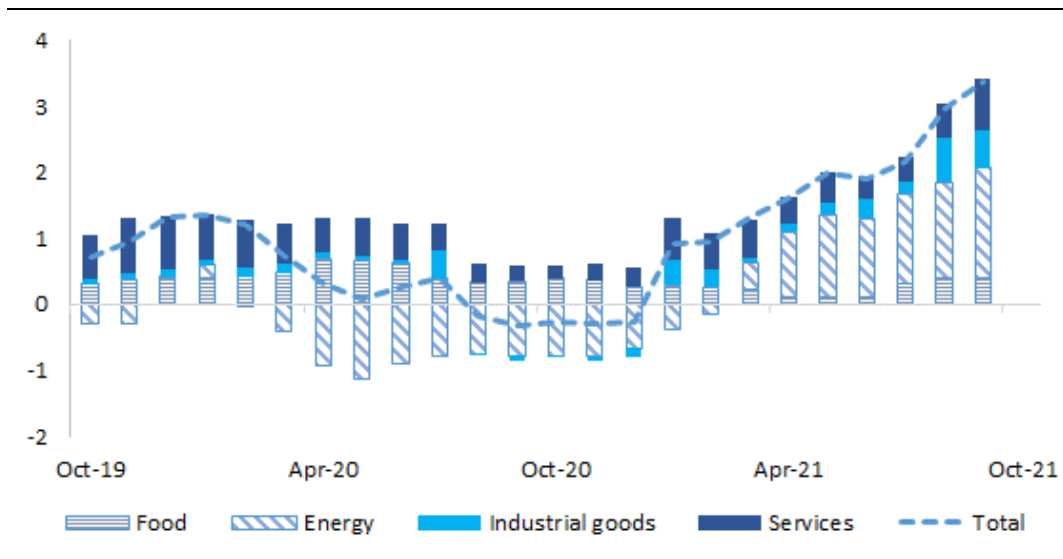
Source: Refinitiv.

The euro has weakened against the dollar since last June, going from \$1.22 per euro to just over \$1.15. The expectation of market participants for an early reversal of the Federal Reserve's policy stance contributed to the strengthening of the US currency. The current acceleration in prices, while considered transitory, requires careful monitoring to keep expectations anchored to the monetary policy objective.

Inflation is high but market expectations are anchored

The constraints on the supply of commodities and semi-finished products, together with the delays in international maritime transport, have produced a sharp increase in import prices, which have been passed through to consumers. In the euro area, the harmonised inflation index has increased since the beginning of the year, rising from 0.9 per cent in January to 3.4 per cent in September. Over the same period, the contribution of the energy component went from -0.4 to 1.6 percentage points (Figure 5). In the United States, the acceleration in prices was even faster, and in September the annual change stood at 5.4 per cent. Despite this rapid dynamic, monetary policy authorities continue to consider the phenomenon to be transitory, as labour costs are moderate and core inflation is in line with monetary policy objectives.²

Figure 5 – Inflation in the euro area and contributions of components
(year-on-year percentage change and contributions)

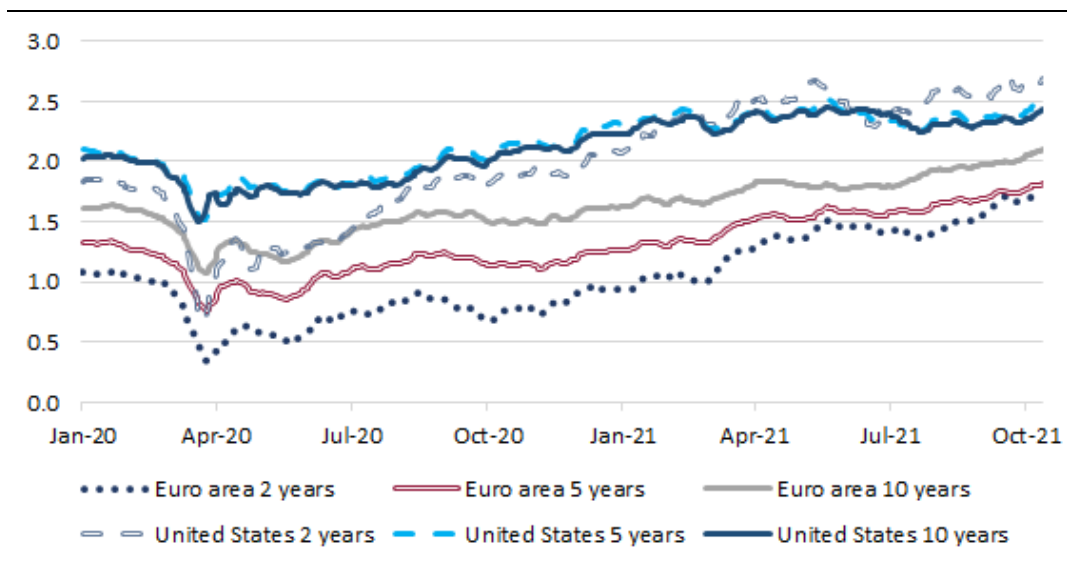


Source: based on Eurostat data.

² See recent remarks by officials of the ECB (<https://bit.ly/3p2M0Zs>) and the Fed (<https://bit.ly/3iTue7d>).

The marked increase in current inflation has not significantly changed the expectations of market participants, which remain anchored to monetary policy targets. In the United States, five-year expectations were virtually unchanged (between 2.2 and 2.5 per cent; Figure 6) in the first nine months of the year, while they rose for the euro area but in any case remained below 2.0 per cent. Expectations also reflected changes in central bank strategy, with the Federal Reserve declaring that it will also tolerate short-term overshoots of the 2.0 per cent inflation target and the ECB making the target symmetrical.

Figure 6 – Inflation expectations implied in inflation swaps
(percentages; seven-day moving average)



Source: Refinitiv.

The Italian economy

GDP growth strengthened in the spring

The Italian economy staged a gradual recovery in the first half of the year, in conjunction with progress in the vaccination campaign and the gradual relaxation of restrictions on economic activity and the movement of individuals.

According to Istat's latest quarterly data released at the beginning of October, in the second quarter GDP increased by 2.7 per cent on the previous period and by 17.2 per cent compared with the corresponding period of 2020. GDP growth in volume terms reflected the expansion of all the main sectors, especially private services, which had contracted the most in the wake of the pandemic. On the demand side, the increase in income was mainly fuelled by domestic spending, which was also buoyed by the decline in the propensity to save. In spring the Italian economy grew more rapidly than the euro area as a whole (2.0 per cent), narrowing the gap with the other major continental economies by comparison with the difference prior to the health emergency. Compared to the previous release at the end of August, the statistical carry-over impact on GDP growth in volume terms this year remained equal to 4.7 per cent, while the one in nominal terms declined (to 5.7 per cent, from 6.2 per cent; Figure 7).

Private consumption gained momentum in the spring

After the quarter-on-quarter decline in the first quarter of the year, private consumption jumped by an average of five percentage points in April-June, reflecting the lifting of the restrictions imposed to counter the health emergency and a less conservative orientation of household spending decisions. The recovery in spring was mainly fuelled by spending on services (9.6 per cent), which benefited most from the relaxation of the restrictive measures, although it remained nearly 14 percentage points lower than its level in the fourth quarter of 2019, the period immediately preceding the outbreak of the pandemic. In the second quarter of the year, households purchasing power increased only marginally (0.1 per cent), so that the propensity to save fell rapidly, to 12.9 per cent (more than 4 percentage points lower than in the previous period; Figure 8), while remaining markedly higher than the values prevailing before the pandemic.

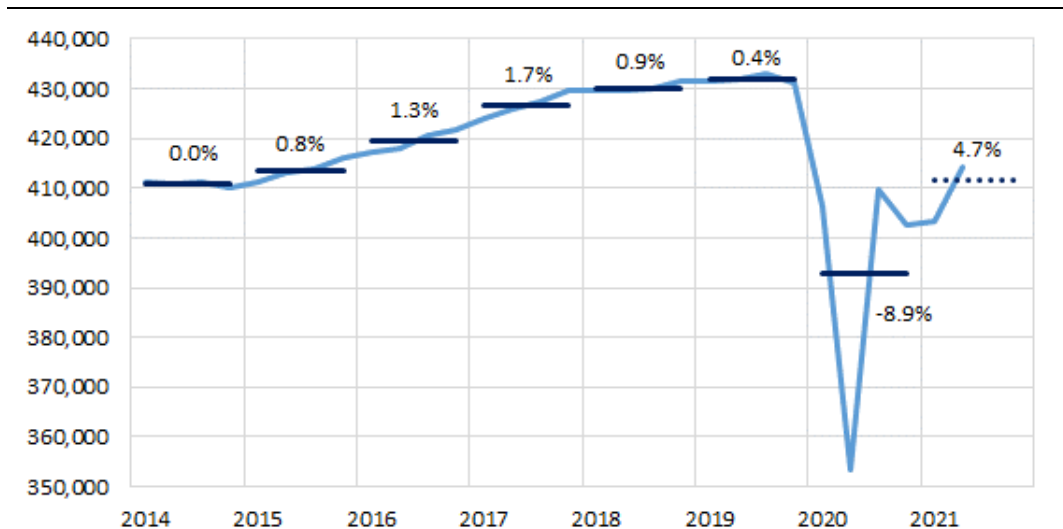
The recovery in consumption continued in the summer. Based on PBO calculations, the quarterly change in Confcommercio's seasonally adjusted consumption indicator (in volume terms) was over two percentage points on the average for the third quarter, mainly driven by the jump in the services component. Positive signs also emerged from retail sales (in value and volume terms) as recorded by Istat, which on average for the July-August period posted a slight increase compared with the second quarter. The stock of savings accumulated during the most acute phases of the health emergency remains large and could continue to fuel household demand even in the second half of this year. Conversely, any

strengthening of inflation would adversely impact the purchasing power of families and, therefore, their spending.

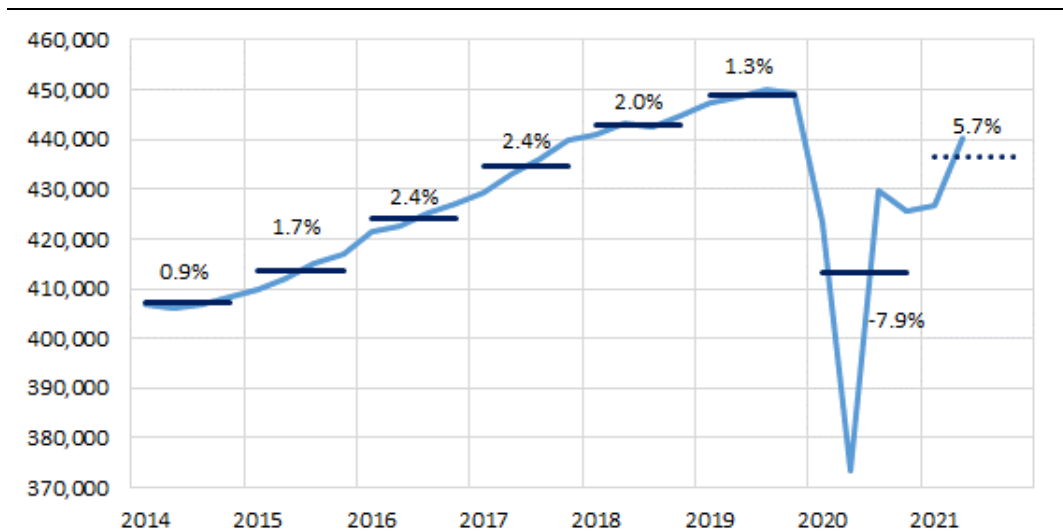
Consumer confidence has progressively improved during the year. In September the index reached an all-time high (119.6, over two points higher than the previous peak in June 2001). In the third quarter as a whole, the consumer confidence index was mainly driven by assessments of the general economic situation and current sentiment.

Figure 7 – Real and nominal GDP in Italy (1)
(millions of euros and annual growth rates)

Chain-linked values, 2015 base year



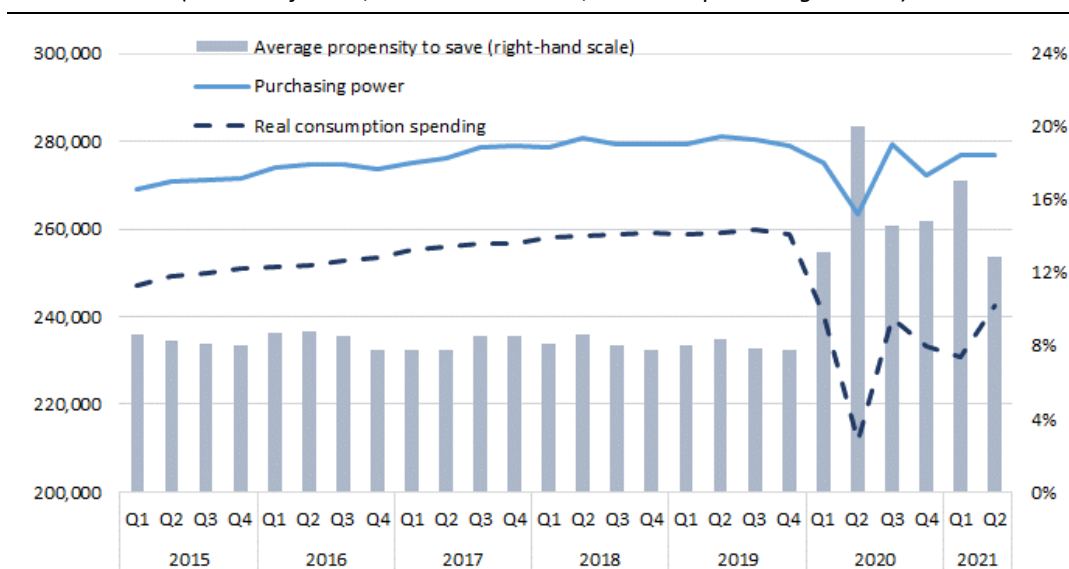
Nominal values



Source: Istat.

(1) The dashes indicate the annual growth rate acquired as of the second quarter of 2021.

Figure 8 – Household purchasing power, consumption and saving
(millions of euros, chain-linked values, 2015 and percentage shares)



Source: Istat.

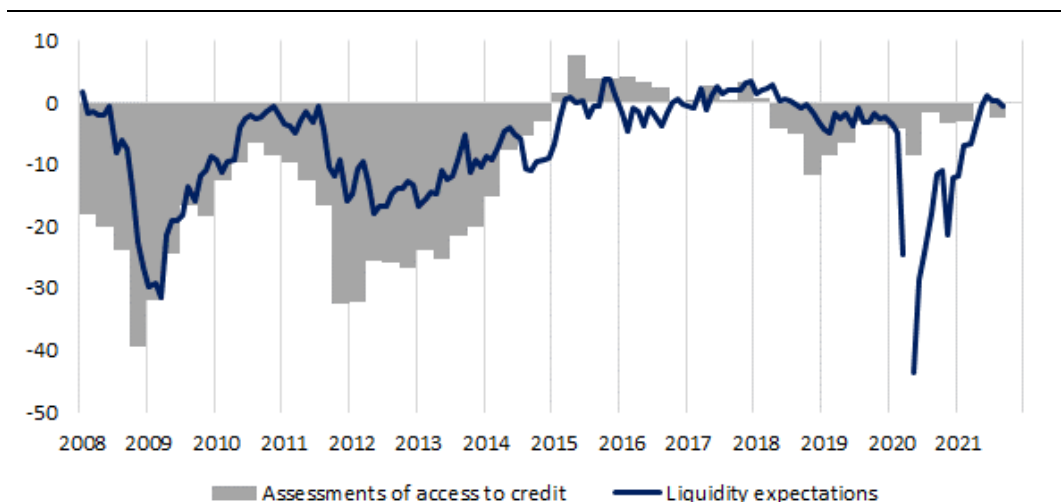
The investment rate is high

After the jump in the first quarter, investment continued to expand on a broad front even in spring, albeit at a slower pace (2.6 per cent on the previous quarter, down from 4.1 per cent). The volume of total investment in spring was already more than five percentage points higher than in the period immediately preceding the pandemic (fourth quarter of 2019), thanks to the favourable performance of the construction sector, while expenditure on plant and machinery declined by 1.5 percentage points, mainly due to the decline in the transport equipment component (-18.2 per cent).

In the second quarter, the investment rate (the ratio of gross fixed capital formation to value added) remained stable at 22.3 per cent, close to the highs of the last decade. Profitability (measured as the ratio of gross operating profit to value added at basic prices for non-financial corporations) fell for the fourth consecutive quarter (to 42.2 per cent, more than two points below the peak recorded in the third quarter of 2020).

The summer was also characterised by the prevalence of very relaxed conditions on the financial markets and bank credit (Figure 9), reflecting a decidedly expansionary monetary policy stance. Firms' demand for credit, also favoured by the coverage offered by public guarantees, was fuelled by the need for debt restructuring and to finance investment.

Figure 9 – Assessments of credit conditions in manufacturing and liquidity expectations
(difference between percentage shares of positive and negative responses)



Source: Istat.

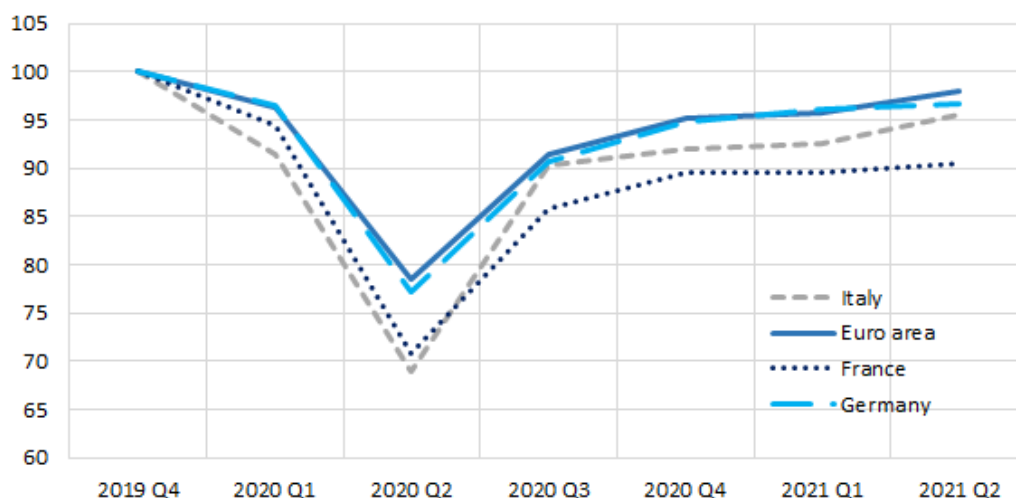
The Bank of Italy-Sole 24 Ore Survey on Inflation and Growth Expectations carried out in August-September showed a further improvement in assessments of the general economic situation. Firms' short-term expectations for sales and operating conditions were more optimistic, foreshadowing an increase in investment for all sectors in the final part of the year, driven in part by the launch of the measures provided for in the NRRP.

Foreign trade strengthens

In the second quarter, the volume of exports of goods and services grew by 3.2 per cent compared with the previous quarter. Overall, in the first half of the year Italian exports expanded more rapidly than the euro-area average (2.9 per cent; Figure 10), thanks to the strong performance of the merchandise component. Energy and intermediate goods have provided largest contribution to foreign sales, especially to the countries of the European Union.

Foreign trade data for the third quarter remains favourable. In July-August, exports in value terms increased by an average of 3.4 per cent compared with the second quarter, driven by the good performance of both sales to non-EU markets (3.6 per cent) and the European Union countries (3.1 per cent). Surveys point to an expansion of foreign trade in the short term: Istat's quarterly survey on the confidence of exporting firms conducted in June showed largely positive balances both in assessments of conditions and short-term expectations for turnover on international markets. Assessments of foreign orders, although deteriorating slightly in August-September, remained above those registered in the spring on average in the third quarter.

Figure 10 – Exports in volume terms in Italy and the euro area
(index; 2019 Q4=100)



Source: based on Eurostat data.

Imports also increased in April-June (2.4 per cent compared with the first quarter), reflecting the strengthening of capital accumulation as well as sales abroad. The smaller increase in imports compared with exports meant that net foreign demand made a positive contribution to GDP growth in the second quarter (0.3 percentage points), in contrast to the two previous periods, when the negative contribution averaged more than half a percentage point.

Recent sectoral indicators are broadly positive

In industry, the quarter-on-quarter increases in the first two periods of the year (1.5 and 1.2 per cent, respectively) were followed by a further expansion in output in July (0.8 per cent) and a slight retrenchment in August (-0.2 per cent). The index is about 1.5 percentage points higher than the value immediately preceding the pandemic (February 2020), but the most recent surveys of firms show signs of a loss of momentum in the sector. After the peak recorded in May (62.3), the PMI for the manufacturing sector has begun to decline. Firms report that demand conditions remain strong but also that strains are rising in logistics, in the availability of materials and in production costs. Surveys of manufacturing firms reveal the initial signs of manpower shortages, although in Italy this does not represent a major obstacle to production, as it does in other European countries. In September, the Istat sectoral confidence index registered its second decline since the highs of July, although it remained at a level (113.0) that was some eight points higher than the average for the first half of the year.

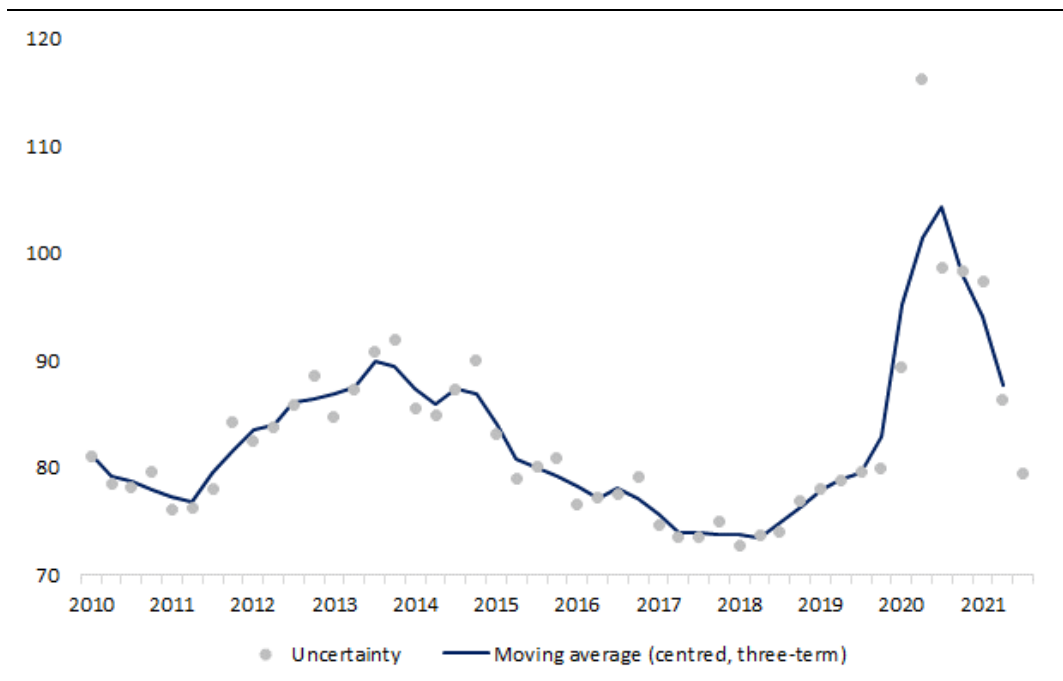
In July, the construction production index decreased by eight-tenths of a percentage point compared with the previous month, before recovering by 1.4 per cent in August. The gain acquired for the third quarter is nil compared with the April-June average,

while that for 2021 remains very high (21.3 per cent). In the second quarter, the price index of homes purchased by families increased, mainly for new residential properties. Favourable signs emerge from the housing market survey conducted by the Revenue Agency, the Bank of Italy and Tecnoborsa between June and July: according to real estate agents, the outlook for the national market is improving and expectations for sales prices have also been revised upwards. The climate of confidence in buildings this year consolidated the expansion that began in the spring of 2020.

The services sector, which was impacted more severely than any other industry from the restrictions imposed to combat the pandemic, began to recover in the spring. Value added increased by 2.9 per cent on the previous period, benefiting from the gradual easing of restrictions on economic activity and mobility. The PMI for the services sector has improved since late spring, driven by new orders. It reaching a peak in August (at 58.0) before retreating in September (to 55.5), reflecting slower growth in new orders and increasing cost pressures. The Istat's confidence index for the sector strengthened on average in the third quarter, with the improvement involving all the main components.

Overall, the aggregate index of business confidence, obtained as the weighted average of sectoral indices, posted a sharp increase in the third quarter compared with the April-June average, consolidating the expansion that began in the second half of last year. According to the PBO index, the uncertainty of households and firms gradually subsided over the course of the year, especially in manufacturing and services (Figure 11).

Figure 11 – PBO indicator of uncertainty
(index; 1993 Q1=100)



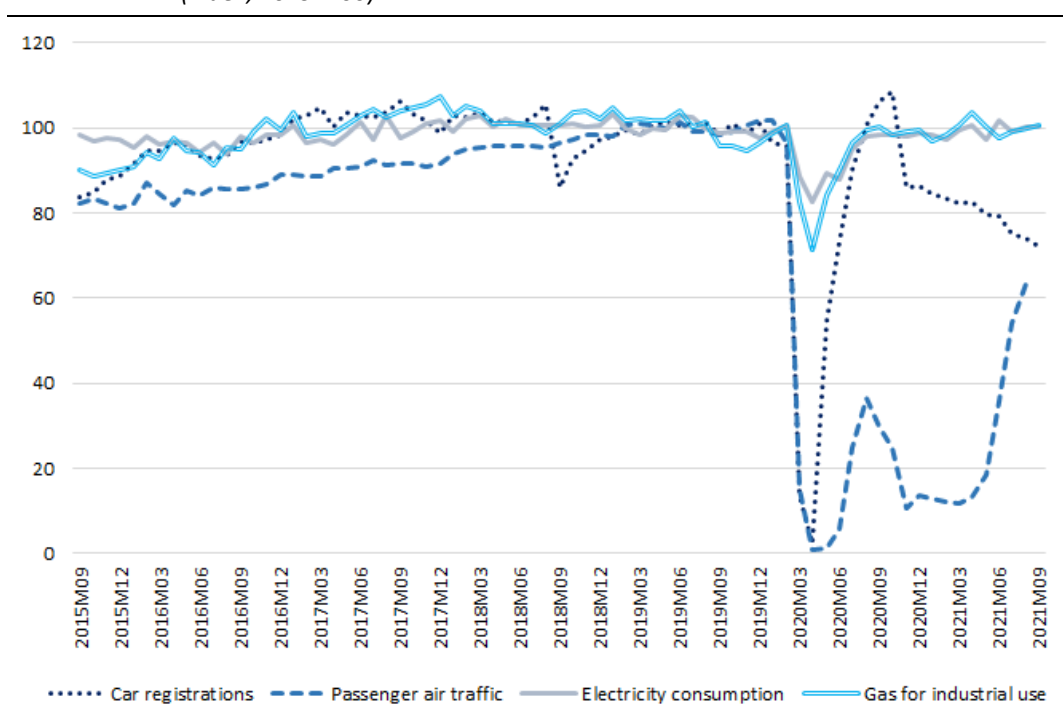
Source: based on Istat data.

Real-time indicators and short-term forecasts

The signs of economic recovery are confirmed by the timeliest quantitative variables (Figure 12): in July-September, electricity consumption and the consumption of gas for industrial use were virtually in line with the levels observed prior to the outbreak of the health emergency. In August, passenger air traffic increased for the fifth consecutive month, although it remained below the level registered prior to the pandemic. On the other hand, new car registrations are struggling to return to pre-COVID levels, suffering from the termination of certain tax incentives and a shortage of electronic components caused by supply bottlenecks.

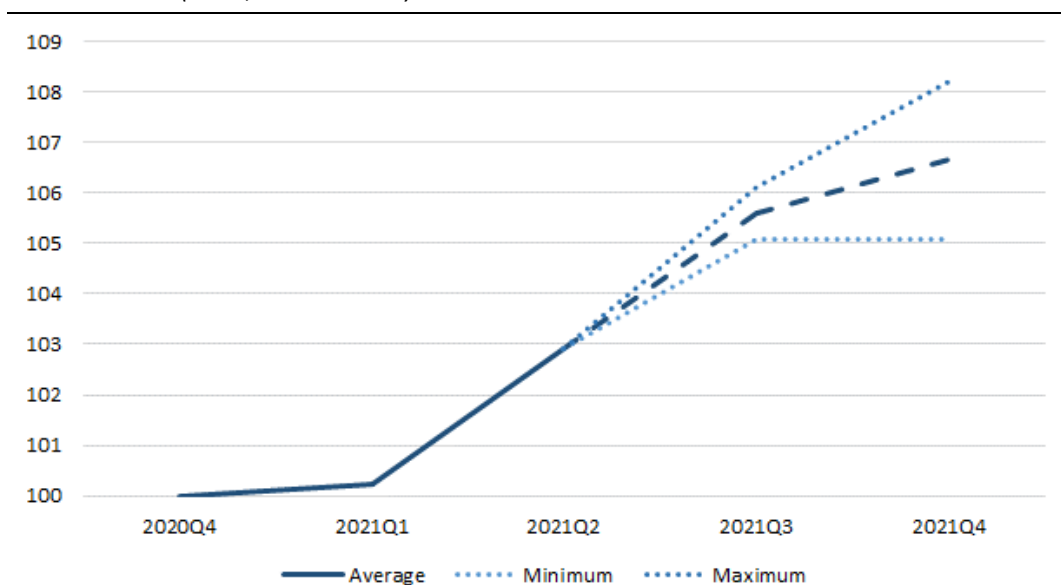
In the second half of this year, economic activity is expected to continue the recovery begun in the spring, approaching pre-COVID values. Based on the short-term models of the PBO, in the third quarter, GDP is forecast to have grown by 2.6 per cent compared with the previous three months, albeit with an extremely large range of variability (from a low of 2.1 to a high of 3.1 per cent; Figure 13). The uncertainty of the estimates is very high, mainly due to the lack of reliable real-time indicators for the services sector. In the final part of the year, the restrictions imposed in response to the health emergency are expected to be eased further and GDP is projected to expand by 1 percentage point, slowing down after two periods in which it recouped a total of more than five percentage points.

Figure 12 – Real-time indicators of economic activity
(index; 2019=100)



Source: based on data from Assaeroporti, ANFIA, Terna and Snam.

Figure 13 – Short-term GDP forecasts (1)
(index; 2020 Q4=100)



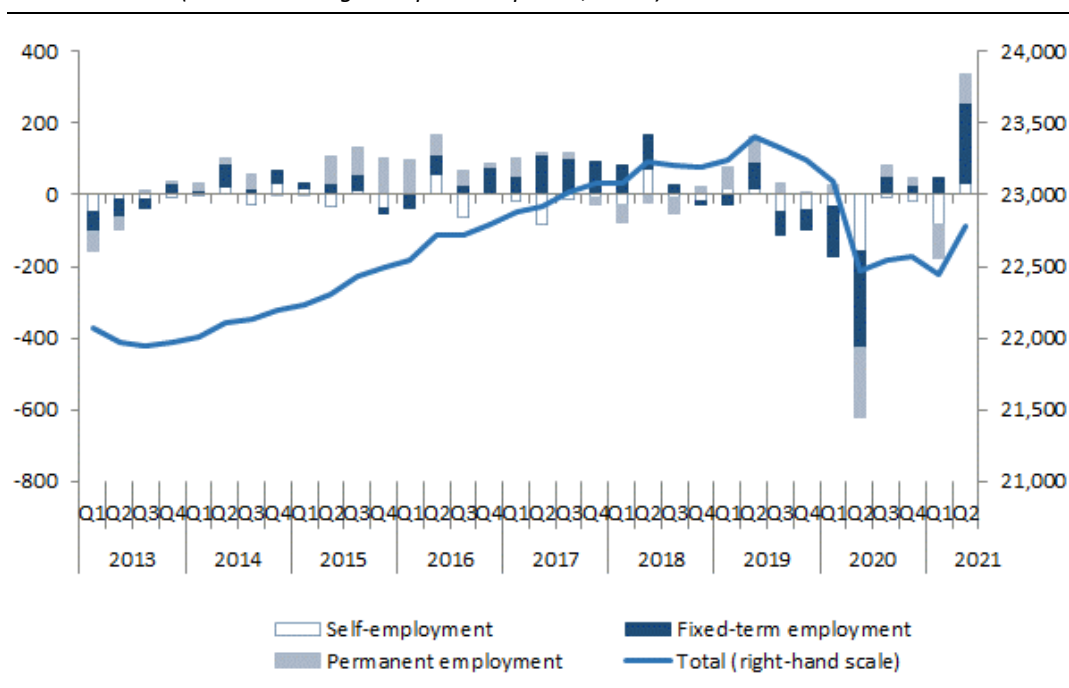
(1) The GDP forecasts are obtained using the PBO's short-term models (for more details, see <http://www.upbilancio.it/wp-content/uploads/2018/01/Nota-tecnica-previsione-macro-upb.pdf>). The continuous line indicates historical data, while the dashed line indicates PBO forecasts.

Employment recovers and inactivity continues to decline

In the second quarter, labour inputs registered a substantial increase, driven by the strong expansion of GDP. The jump in hours worked (3.0 per cent on the previous period), after the stagnation of the first three months of the year, was the result of a broadly-based improvement both in industry (2.9 per cent in manufacturing and 1.8 in construction) and services (3.3 per cent). The gap with respect to pre-pandemic levels has narrowed considerably for industry but is still wide (-7.0 per cent) for services. In the same period, the number of persons in employment increased by 1.5 per cent (338,000 more people according to the quarterly Labour Force Survey), reversing the decline posted in the previous three months and raising employment above the level recorded of a year earlier. This improvement is largely attributable to the jump in fixed-term employment (8.3 per cent; Figure 14), which is most sensitive to the economic recovery. The change in permanent employment was more moderate (0.5 per cent), with self-employment performing similarly.

Employment growth slowed down in the summer, especially the female component. Nevertheless, in July-August as a whole, the overall number of persons in employment showed gains (0.4 per cent compared with the previous three months), thanks to the strong statistical carry-over impact from June.

Figure 14 – Payroll employment and self-employment
(absolute changes on previous period; levels)



Source: Istat.

According to data from the mandatory notifications of new hirings, terminations or contract transformations, 112,000 more contracts were activated in July-August than in January-June, mainly for fixed-term positions. The incidence of dismissals was low, despite the partial lifting of the moratorium on layoffs,³ as they involved just over 1.0 per cent of total terminations.

The use of wage supplementation programmes has declined significantly. The number of hours of wage supplementation (CIG) authorised in the second quarter decreased by 8.1 per cent, compared to the previous three months, and the decline also continued in July and August. In the first eight months of the year, applications for CIG benefits were about one-fifth the level registered in the same period of 2020. Effective drawings on authorised hours decreased further (39.0 per cent in January-June), standing about five percentage points lower than in 2020.

The strengthening of economic activity in the second quarter fostered a decline in the number of inactive individuals (-2.4 per cent) and an increase in the labour supply. The unemployment rate, which had fluctuated around 10 per cent since the summer of last year, was just below this threshold (at 9.8 per cent) thanks to a greater increase in

³ The second Support Decree lifted the moratorium on layoffs (and terminated the CIG wage supplementation programme for COVID-19 reasons) from the beginning of July for industrial and construction firms that are eligible to the ordinary wage supplementation programme (with the exception of textile, clothing and footwear companies, and excluding craft businesses), while the moratorium was extended until 30 October for companies that use the exceptional wage supplementation programme or the Wage Supplementation Fund (FIS).

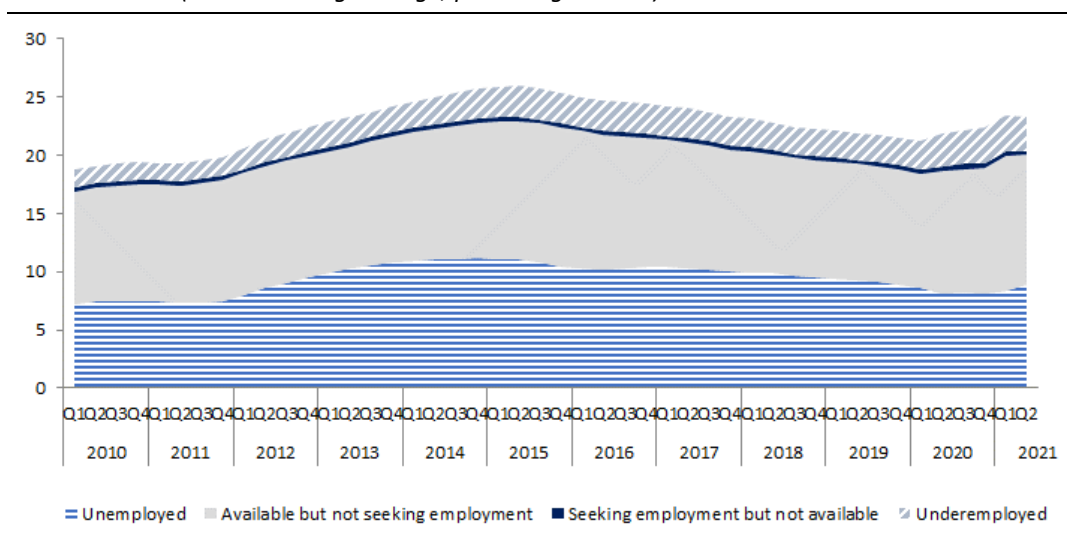
employment than that in the labour force. The degree of under-use of labour edged down to 23.3 per cent (Figure 15).

The decline in the unemployment rate continued in July-August (to 9.3 per cent on average), reflecting favourable developments in the employment rate (58.2 per cent, 0.3 percentage points higher than in the second quarter), while there was no change in the activity rate (64.3 per cent).

With the easing of restrictions on economic activity and layoffs, the unemployment rate has begun to regain its power to signal conditions in the labour market. Labour demand was simultaneously reactivated, while the vacancy rate in the second quarter was at the highest levels since the beginning of the time series. The negative relationship between these two variables (known as the Beveridge curve), considered in terms of average values for sub-periods (Figure 16), can be used to evaluate possible imbalances between the skills required by firms and those offered by workers.

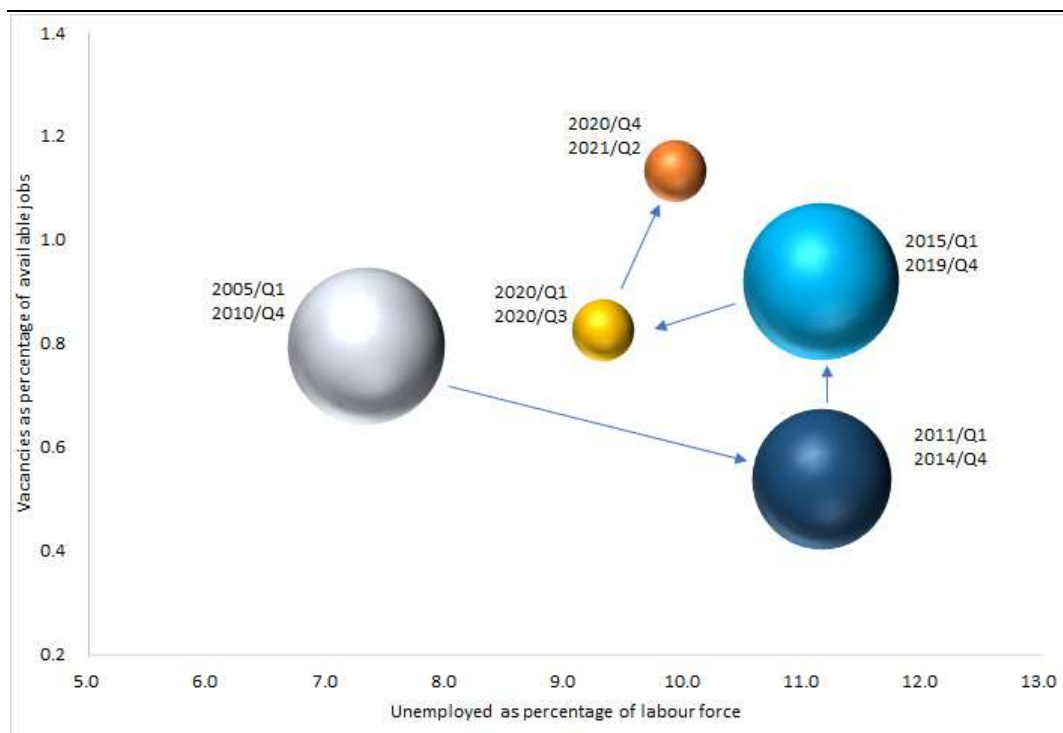
With the outbreak of the health emergency and the introduction of measures rendering the labour market less flexible (restrictions on individual mobility, wage supplementation and the moratorium on layoffs), the unemployment rate had lost its informative capacity, as the contraction in the number of jobs was more than offset by the growth in non-participation. With the lifting of anti-COVID restrictions, the vacancy rate has suddenly jumped upwards to very high values in historical terms, signalling possible imbalances in the matching of the demand for and supply of labour. Compared with the position of the curve that characterised the last decade, an unemployment rate of 9.8 per cent should have been associated with a lower vacancy rate than that recorded in the second quarter of 2021 (equal to 1.4 per cent).

Figure 15 – Unemployment, underemployment and potential additional labour force (1)
(4-term moving average; percentage shares)



Source: based on Istat data.
(1) Ages 15-74 years.

Figure 16 – Unemployment and vacancies
(average percentage values)



Source: based on Istat data.

The growth in hourly contractual earnings in the second quarter of this year (0.6 per cent year-on-year) remained moderate, reflecting growth of less than 1.0 per cent in the private sector and zero growth in public employment (from the third quarter of 2020). Wage pressures should remain modest on average this year (at 0.6 per cent according to Istat estimates), both as a result of the postponement of part of the wage increases incorporated in contractual agreements and the large number of bargaining agreements to be renewed (although decreasing, the share of employees waiting for a new agreement was still 53.2 per cent in August).

Growth in hourly labour costs continued to slow in the second quarter (0.4 per cent year-on-year), well below the growth in actual earnings, due in part to the contribution relief measures envisaged for certain types of hiring. The decline in hourly productivity supported the rise in unit labour costs.

Price increases spread to more spending items

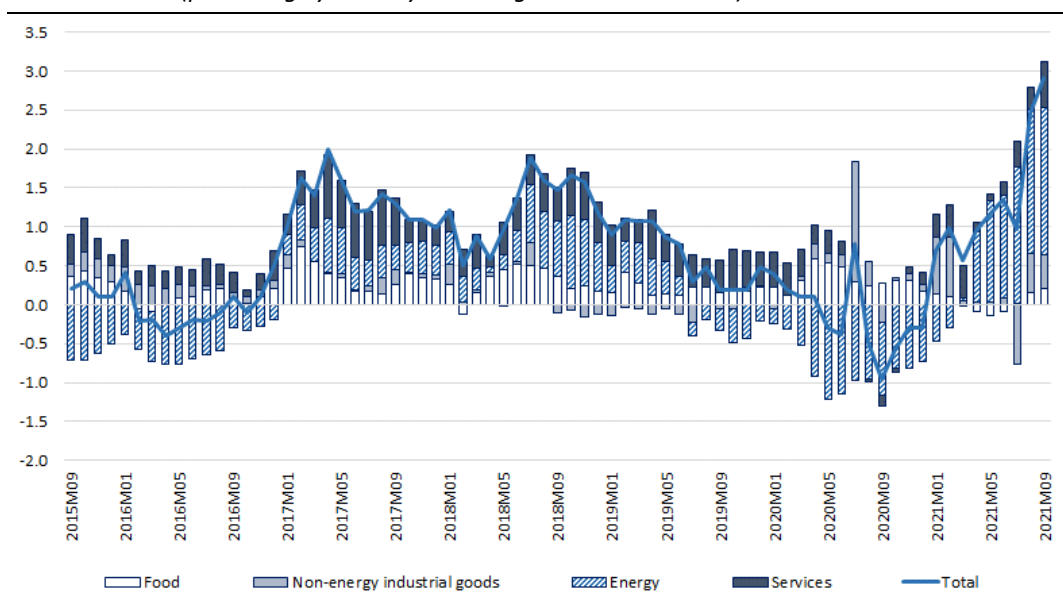
Inflation in Italy continues to rise, driven not only by the surge in the prices of energy products but also by the increase in the costs of supply, transport and intermediate goods.

The consumer price index decreased slightly in September (-0.2 per cent) compared with the previous month. However, it accelerated year-on-year, rising to 2.5 per cent (from 2.0 per cent in August), partly attributable to the base effect compared with the low level recorded in 2020. Price dynamics are largely reflecting the increase in the prices of energy products (20.2 per cent year-on-year from 19.8 per cent in August) as well as a rise in the prices of food products (1.0 per cent in September, from 0.7 per cent), transport (7.0 per cent, from 5.3 per cent) and hotel and restaurant services (2.7 per cent, from 2.3 per cent in August). The year-on-year acceleration in the harmonised index of consumer prices (HICP) was even sharper, rising to 2.9 per cent (from 2.5 per cent in August; Figure 17), as consequence of differences in the measurement of summer sales, which in 2020 were postponed to August.

The rebound in prices of non-energy components is reflected in inflation excluding energy products and unprocessed food, which accelerated to 1.0 per cent in September (from 0.6 per cent in August). The inflation acquired for 2021 stands at 1.7 per cent for the general index, while it remains below a percentage point (0.8 per cent) for core inflation.

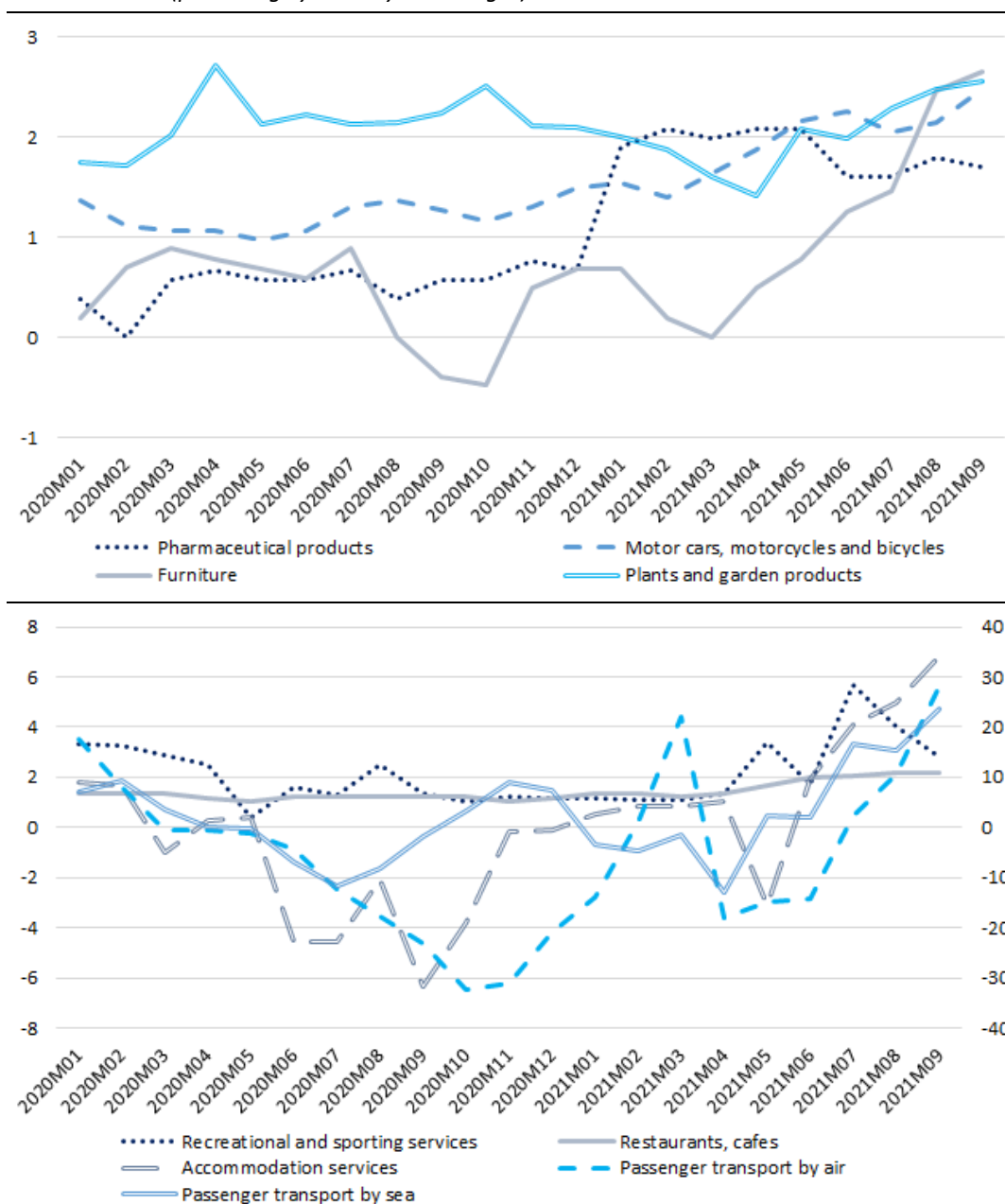
In September, price increases affected 85 per cent of expenditure items, and in about 32 per cent of cases the price surges exceeded 2.0 per cent. The effects of the pandemic on product prices, both in the acute phase and subsequently, appear to differ in the way they have emerged and in their timing. Some items of expenditure had already experienced price increases in the spring of 2020 (such as pharmaceuticals or furniture), while others have only recently increased (such as transport or some leisure services), reflecting in part the recovery in demand, increases in commodity prices and the scarcity of intermediate products (Figure 18).

Figure 17 – Harmonised consumer price index and contributions of components
(percentage year-on-year change and contributions)



Source: based on Eurostat data.

Figure 18 – Selected items of the Harmonised Index of Consumer Prices
(percentage year-on-year changes)



Source: based on Eurostat data.

In the upstream segment of the distribution process, foreign and domestic tensions are contributing to the rise in consumer price inflation. In July, the year-on-year change in import prices rose to 10.5 per cent (from 9.5 per cent the previous month), driven by increases of over 50 per cent in the prices of energy goods and steep increases in those of intermediate goods (12.5 per cent). At the same time, the rise in producer prices continued (accelerating in August to 11.6 per cent, from 11.2 per cent in July), with increases affecting among almost all sectors. Much of the pressure in the upstream portion of the production process comes from the increase in the price of energy goods. However, in August the prices of intermediate goods also rose sharply (over 12 per cent

year-on-year), including rubber products, plastics and wood. The increase in producer prices also continued in the construction sector, with a rise of 5.0 per cent in August compared with a year earlier, both for buildings (with a clear preponderance of the non-residential segment, which saw prices rise by 7.8 per cent) and for roads and railways. The services sector has experienced widespread increases in producer prices. While moderate overall (0.5 per cent year-on-year in the second quarter), price increases have exhibited strong volatility within the sector. For example, the cost of passenger air transport fell by 5.6 per cent in the second quarter compared with a year earlier, while freight costs increased by 14.7 per cent.

The expectations of firms and households measured in Istat surveys are beginning to reflect the ongoing rise in prices. For some months now, surveys of firms have indicated an expectation of price increases, so much so that in June the balance was around 30 (a level seen previously only in 1995), with peaks of over 40 for intermediate goods and consumer durables. In the summer, consumers also gradually shifted their expectations towards more rapid inflation in the coming months (the balance reached 15.2 in the summer, compared with -6.7 in the spring). According to the IHS Markit survey of purchasing managers, the considerable concern of manufacturing firms over the higher costs of supplies persisted in September, with companies reporting that they had largely passed on those increases to sales prices. Similarly, the Bank of Italy's Survey on Inflation and Growth Expectations reveals upward revisions of prices in the third quarter of the year for firms in all sectors and expectations for further increases in the next 12 months, attributable to the higher costs of raw materials and intermediate inputs.

Box – The resurgence of global inflation: a number of possible evolutionary scenarios

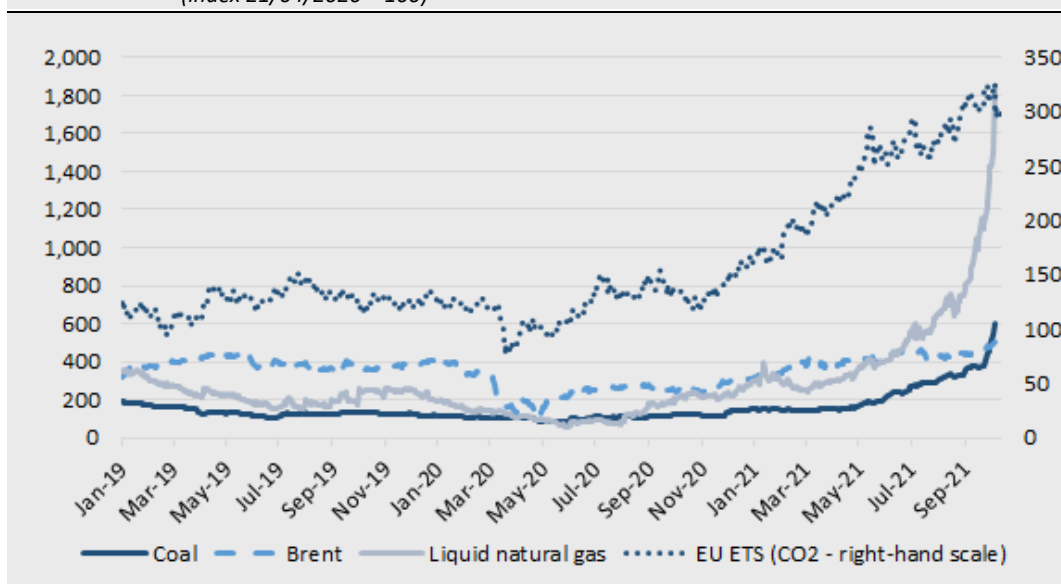
With the ongoing recovery of economic activity, which has mainly been driven by vaccination campaigns, inflation has returned in many countries after remaining dormant for a considerable period. A number of factors have contributed to the recent rise in prices, which in combination have begun to engender significant concern.

The first, mainly temporary, determinants are logistical bottlenecks. Last year, the Chinese economy had already resumed activity in the spring, when most other countries were still in lockdown, meaning that they did not produce but instead purchased consumer goods from the East. This mainly outbound movement of goods from China gradually led to the accumulation of ships and containers in the ports of other countries, partly attributable to slower port procedures connected with anti-COVID regulations.

Added to this is strong volatility in the commodities markets. In the second quarter of last year, the pandemic had depressed crude oil prices to such an extent that many producers elected to wait for prices to rise, using oil tankers anchored offshore as storage facilities as other storage sites grew scarce.⁴ In the second half of 2020, economic activity also resumed in the West, causing a sudden increase in the demand for raw materials. While at the beginning supply and demand were still in equilibrium, beginning in 2021 initial pressures on the prices of commodities and semi-finished products (in particular, semiconductors) began to manifest themselves. A series of concomitant events contributed to this imbalance: a colder winter and a hotter summer than normal, the complete blockage of the Suez Canal for a few days in March, the partial closure of certain Chinese ports due to pandemic outbreaks, maintenance work on gas pipelines in northern Europe and the positioning of ships and containers noted above, which did not reflect the needs of goods exporters.

The increases in the price of inputs have gradually begun to be passed on to consumer prices, which began to rise significantly last spring. More recently, the imbalance between the supply of and demand for goods have been accompanied by an increase in the price of CO₂ emission rights within the European Emission Trading System (EU ETS) market, partly in response to the new European emissions reduction objectives connected with the European Green Deal and the Recovery and Resilience Facility, almost doubling since the beginning of the year (Figure B.1).

Figure B1 – Prices of commodities and emission allowances
(index 21/04/2020 = 100)



Source: Refinitiv.

⁴ The shortage of storage capacity was especially severe in the United States, where on 20 April 2020 the price of WTI crude actually turned negative.

At the moment, central banks seem confident that the recent increases in prices and costs are transitory, as wage growth and expectations remain moderate, so they do not believe that changes in the stance of monetary policies are necessary. However, without necessarily arguing that a *commodity supercycle* has emerged, we cannot rule out a scenario in which the prices of inputs and services related to international trade remain at current levels for a considerable time or continue to rise moderately.

The effects of various alternative scenarios to the baseline for developments in commodity prices have been simulated with the aid of the Oxford Economics GEM (Global Economic Model) macroeconomic model. Under the model, the prices of all commodities, with the exception of agricultural products, and manufactured goods peak between the second and third quarters of this year, after which they begin to gradually decline. Specifically, the Brent oil price is expected to decline steadily over the next three years, reaching just over \$60 per barrel at the end of 2024.⁵

What would be the economic consequences if prices failed to subside, assuming that in the next three years commodity prices remain constant once they peak?⁶ To answer this question, two exercises are proposed: one involving only oil and the other involving all the commodities considered in the GEM model, so as to highlight the relative importance of the primary energy source compared with the others. In order to eliminate the feedback effects of possible monetary policy responses, which are difficult to predict on the basis of an econometric model, the exercise assumes that no central bank interventions are carried out. There is not much difference between the two exercises (Table B.1) in terms of the impact on GDP, and the loss of output is a few tenths of a percentage point. With regard to inflation, however, the stabilisation of commodity prices at peak values would lead to an increase of more than 1 percentage point in consumer prices at the end of the period.

In the second ten days of October, the Brent price reached \$85 per barrel, but futures prices still anticipate a drop of around 10 per cent over the next twelve months. We can therefore ask what the consequences would be of a further 10 per cent increase in the peak value over that considered in the previous year. The results of these simulations, which are more striking, are shown in Table B.2.⁷

Table B1 – Macroeconomic impact of constant commodity prices at peak values

		All commodities					Oil only				
		2021	2022	2023	2024	Cumulative	2021	2022	2023	2024	Cumulative
World	GDP	0.00	-0.09	-0.11	-0.05	-0.25	0.00	-0.06	-0.10	0.00	-0.16
	Consumer prices	0.02	0.62	0.73	0.40	1.77	0.01	0.33	0.34	-0.05	0.63
United States	GDP	-0.01	-0.11	-0.08	-0.04	-0.21	0.00	-0.08	-0.05	-0.02	-0.15
	Consumer prices	0.03	0.59	0.48	0.12	0.99	0.01	0.37	0.13	-0.20	0.31
China	GDP	0.00	-0.03	-0.13	-0.08	-0.24	0.00	-0.07	-0.14	-0.07	-0.28
	Consumer prices	0.00	0.33	0.58	0.29	1.20	0.00	0.24	0.37	0.04	0.65
Euro area	GDP	0.00	-0.07	-0.12	-0.03	-0.22	0.00	-0.07	-0.16	0.01	-0.22
	Consumer prices	0.01	0.49	0.48	0.21	1.19	0.01	0.33	0.32	-0.24	0.42
Italy	GDP	0.00	-0.08	-0.12	-0.02	-0.22	0.00	-0.06	-0.17	0.04	-0.19
	Consumer prices	0.01	0.56	0.59	0.27	1.43	0.00	0.32	0.38	-0.32	0.38

⁵ The reference baseline for the GEM is the release of 1 September 2021.

⁶ In this first scenario, the prices of manufactured goods and agricultural commodities were not modified as they are trending upwards in the baseline scenario.

⁷ In this second scenario, manufactured goods and agricultural commodities have also been changed. The price shock of international manufactured goods was used to approximate price developments for a number of semi-finished goods, such as microprocessors and other consumer electronics components that are currently especially difficult to procure.

Table B2 – Macroeconomic impact of constant commodity prices at 10 per cent above peak values

		All commodities					Oil only				
		2021	2022	2023	2024	Cumulative	2021	2022	2023	2024	Cumulative
World	GDP	-0.02	-0.16	-0.19	0.00	-0.37	-0.02	-0.13	-0.11	-0.02	-0.28
	Consumer prices	0.41	1.74	1.26	0.62	4.03	0.12	0.58	0.32	-0.06	0.96
United States	GDP	-0.11	-0.24	-0.05	0.01	-0.39	-0.03	-0.15	-0.05	-0.07	-0.30
	Consumer prices	0.54	1.79	0.76	0.22	3.31	0.17	0.55	0.01	-0.24	0.49
China	GDP	0.00	0.00	-0.13	0.00	-0.13	-0.02	-0.15	-0.21	-0.07	-0.45
	Consumer prices	0.11	0.96	1.24	0.53	2.84	0.07	0.47	0.44	-0.01	0.97
Euro area	GDP	-0.01	-0.06	-0.29	-0.09	-0.45	-0.02	-0.18	-0.18	0.04	-0.34
	Consumer prices	0.31	1.47	1.13	0.42	3.33	0.12	0.62	0.19	-0.32	0.61
Italy	GDP	-0.04	-0.07	-0.33	-0.07	-0.51	-0.01	-0.18	-0.17	0.10	-0.26
	Consumer prices	0.29	1.80	1.44	0.44	3.97	0.09	0.69	0.20	-0.44	0.54

Perturbing all commodities, the impact on consumer prices is about double that of the case in which the shock is limited to the oil price. With regard to economic activity, the scale of the impacts differs between geographical areas owing to differences in transmission channels. A change in commodity prices reduces both consumption and imports, so the impact on GDP will be larger or smaller depending on the relative response of the two components.⁸ Table B.2 shows that a shock to all commodities causes a larger cumulative contraction in GDP than that observed in the case of an increase in the price of oil alone, with the sole exception of China. In that country, the impact on imports would be greater than that on consumption, due to the lower elasticity of labour costs to commodity prices. The result is a smaller decrease in GDP compared with the exercise in which only the price of oil changes.

In conclusion, if commodity prices were to remain high for an extended period, the consequences for inflation in the coming years would be significant. If prices were to stabilise at values higher than the peaks already observed, the effects on economic activity would also begin to be non-negligible. Developments not only in oil prices but also in those of commodities will be crucial, as the transmission channels differ across the different geographical areas.

The simulations presented here reflect the dynamics of the specific quantitative instrument adopted and must be interpreted with caution, considering various factors that are difficult to represent accurately in econometric models. First, the medium-term evolution of inflation will greatly depend on the expectations of households and firms, but the reaction of expectations to any further shocks to commodity prices is highly uncertain. A key factor will certainly be the orientation and communication of central banks. If they should react more vigorously than expected by market operators, the impact on economic activity could be sharp. For some areas, the evolution of the foreign exchange market will be relevant. This is the case of the euro area, where movements in the exchange rate against the dollar would mitigate or exacerbate the impacts on imported inflation. The reaction of the financial markets, which is often not linear with respect to macroeconomic dynamics, is also likely to be crucial, as high commodity prices could be associated with strong volatility in the markets for various financial assets. Furthermore, as noted earlier, the price dynamics of commodities are now closely intertwined with new phenomena, both temporary - such as logistical bottlenecks - and structural - such as environmental policies - for which the quantification of macroeconomic impacts is very uncertain.

⁸ In household budgets, the real purchasing power of consumers decreases and, consequently, so does consumption. As regards international flows, the increase in the prices of commodities and manufactured goods impacts unit labour costs in all countries. If domestic labour costs increase by less than in the rest of the world, domestic products become more competitive than foreign goods and as a result imports will be substituted by domestic goods.