

## Summary\*

*After having already weakened in the past two years, the international economy has been overwhelmed by the COVID-19 pandemic. According to the forecasts of the International Monetary Fund (IMF), this year will register the worst global recession since the Great Depression. The sharp deterioration in growth expectations quickly affected the markets, where the prices of the risky assets and oil prices posted large declines. Many countries are responding with significant fiscal stimulus measures, while the European Central Bank (ECB) has initiated new expansionary measures, which would increase the size of its balance sheet to a historically high level. According to the IMF, world trade in 2021 should recoup much of this year's contraction, but this forecast is extremely uncertain and depends considerably on the assumption that the pandemic will recede in the second half of this year.*

*Italy was the first European country to be affected by the pandemic. The health emergency has required the adoption of unprecedented prevention measures based on social distancing, which are limiting the spread of the pandemic but only at a very high economic cost. In some sectors, such as tourism and catering, retail trade, transport and logistics, activity has shrivelled to almost nothing.*

*According to estimates produced using the PBO's short-term forecasting models, Italy's GDP contracted by about five percentage points in the last quarter. The reopening of economic activity, starting in May, will necessarily be gradual, so in the second quarter the quarter-on-quarter decline in output is expected to be even more pronounced, on the order of ten per cent. Assuming that no new wave of the pandemic emerges in the coming months, the recovery of the Italian economy should begin to manifest in the third quarter. These forecasts are surrounded by unprecedented uncertainty, which can be mitigated by economic policy. The Italian government has implemented initial response measures aimed at supporting households and firms, sustaining employment, disposable income and easing lending conditions.*

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\* Prepared by the Macroeconomic Analysis Department. Information updated to 16 April 2020.

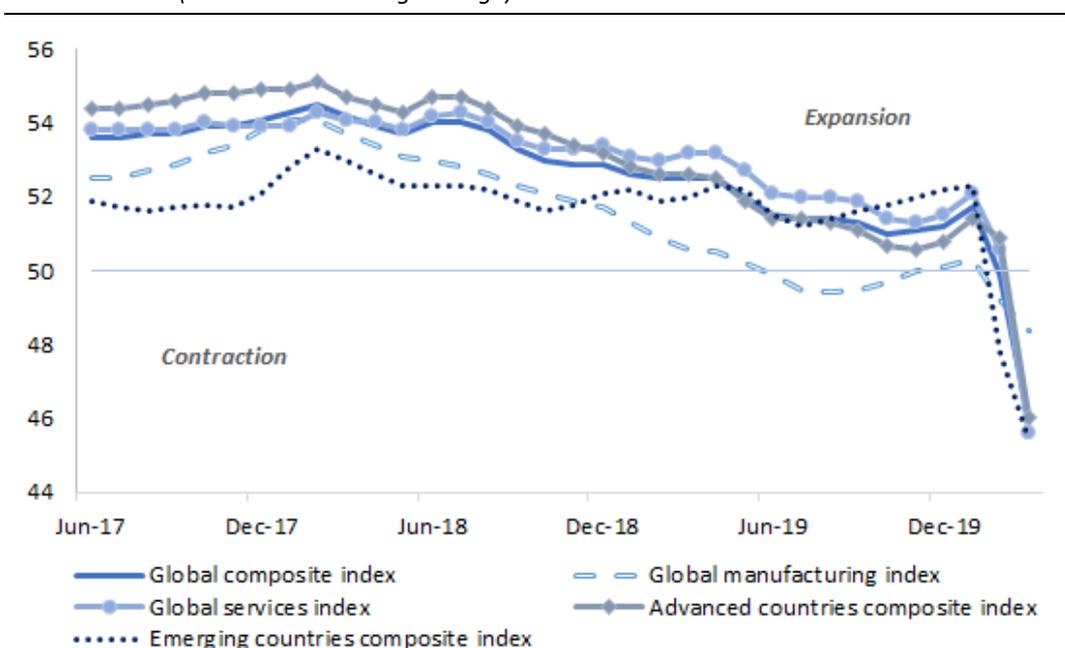
## The international environment

### The global spread of the coronavirus and the collapse of economic activity

The moderate deceleration in economic activity, which had affected many of the major economies in the past two years, appeared to have come to an end between the end of 2019 and the beginning of 2020 (Figure 1).

The spread of the coronavirus pandemic, first in China and then in the rest of the world, has radically changed the economic environment, triggering a deterioration in economic activity and the outlook on a scale not recorded since the Great Depression. In China, where the first restrictive measures were introduced at the end of January, economic activity collapsed in February, with the purchasing managers' index (PMI) for manufacturing and services declining to 40.3 and 26.5 respectively (from above the 50 point threshold in January) and value added in industry in the first two months dropped by 13.5 per cent year on year. Stringent containment measures paralysed a large portion of the Chinese economy for about two months, but have been effective in containing the diffusion of the virus. Activity gradually resumed at the end of March, but industrial production for the month nonetheless decreased on the previous period, albeit to a relatively limited extent (-1.1 per cent). The PMIs for manufacturing and services rose to 50.1 and 43.0 respectively. According to preliminary estimates, Chinese GDP in the first

**Figure 1** – JP Morgan Global PMI (1)  
(three-month moving average)



Source: IHS Markit.

(1) Confidence indicators based on the assessments of corporate purchasing managers. A value of more than 50 indicates an expansion.

quarter decreased by 6.8 per cent on an annual basis (down 9.8 per cent compared with the previous quarter), something that had never been registered since the beginning of the time series in 1992. The effects of the pandemic on China's foreign trade have been highly asymmetric: while imports have only decreased by 0.7 per cent on the previous year, exports have plummeted by more than 11 per cent.

In the west, the pandemic began to spread with a lag of more than a month, first in Italy and other European countries, later in the United States. The PMIs for manufacturing and services for the euro area rapidly dropped below 50 in March, to 26.4 and 44.5 respectively for services and manufacturing. In the United States, a country where the acceleration of the pandemic initially lagged slightly behind Europe, the coronavirus subsequently spread rapidly, with delays in adopting containment measures. The PMI in March was less affected by the effects of the pandemic than in Europe, due to the delay in the spread of the disease, but unemployment surged between the end of March and the beginning of April. Claims for unemployment benefits, which had been running at around 220,000 per week since the beginning of the year, exploded to about 3.3 million in the third week of March and to 6.9 million in the fourth. In just 4 weeks, the newly unemployed jumped to 22 million, a level close to the total number of new jobs created between the relative low registered in December 2009 and the beginning of 2020. Industrial production in March decreased by 5.4 per cent on the previous period, although the figures were only partially affected by the pandemic.

While the high-frequency indicators and surveys show a temporal mismatch of a few weeks among countries, stock markets instead reacted quickly and simultaneously. Between mid-February and the fourth week of March they posted record declines, with an average loss of around 30 per cent. The adoption of substantial monetary and fiscal policy measures by the major countries affected has mitigated the risk aversion of investors, leading to a partial recovery in the last two weeks.

### ***From the phase one agreement between the United States and China to the collapse in trade***

The year 2020 opened well for international trade. After two years of strains between the United States and China, the two countries signed an agreement in January for an initial phase of easing tensions. The agreement headed off the introduction of further restrictions and removed some of the tariffs already imposed by the United States. The Chinese authorities undertook to implement additional protections for the intellectual property of foreign companies that intend to locate in China,<sup>2</sup> to liberalise the financial markets and to increase imports of US goods (by \$200 billion a year). In January, the IMF

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<sup>2</sup> The US administration claimed that firms opening establishments in China were required by the authorities to find a Chinese majority partner or went through administrative proceedings that ensured that industrial secrets would not be protected.

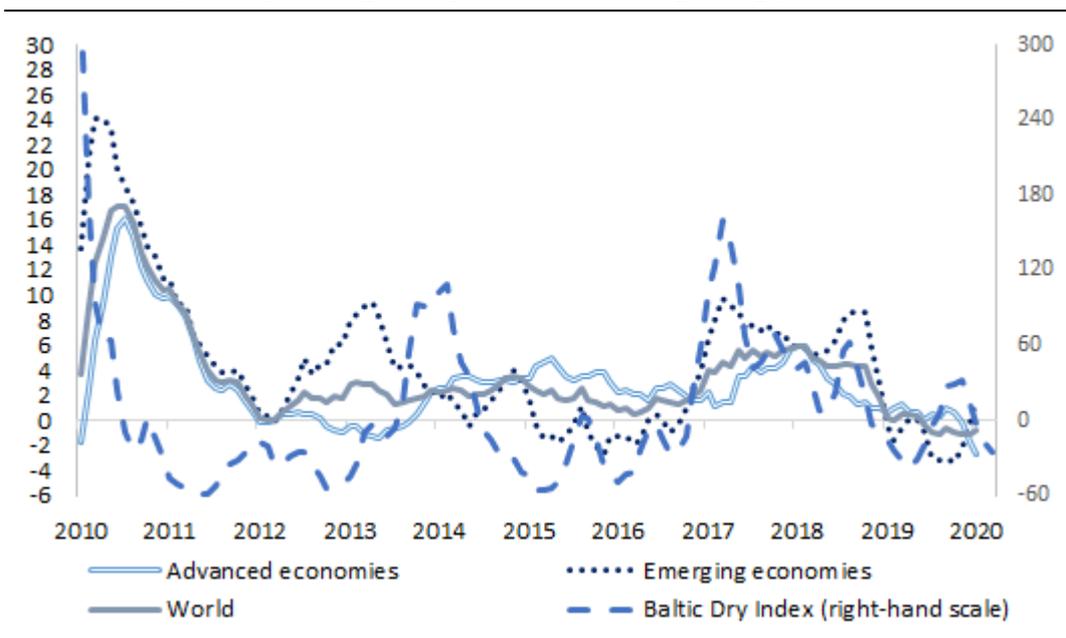
forecast that trade growth would rise to 2.9 per cent in 2020, with an elasticity in respect of output close to one.

The outbreak of the pandemic has dramatically changed the outlook. Globalisation and the close links between countries in global value chains have generated bottlenecks in the output of national goods that make significant use of imported intermediate inputs. The trade data available for February and March are still incomplete, but significant effects on the maritime freight rates indicated in the Baltic Dry Index can already be observed (the year-on-year change in the three-month moving average for the index went from 31 to -25 per cent between November 2019 and March 2020; Figure 2).

### *The recent forecasts of the International Monetary Fund*

The IMF forecasts released last week point to the deepest recession since the Great Depression for 2020 (Table 1). For the global economy as a whole, GDP is expected to contract by 3 per cent, with a downward revision of 6.3 percentage points from the January estimates. GDP growth is expected to remain positive in China and India, but given the pace of population growth, GDP in per capita terms would still show a decrease. For the advanced economies, the contraction is expected to be 6 per cent, 7.7 percentage points lower than the forecast at the beginning of the year. Trade forecasts are even more pessimistic, anticipating an 11 per cent contraction, a downwards revision of almost 14 percentage points compared with the January projections.

**Figure 2** – Growth rate of imports and index of maritime freight costs  
(annual percentage change in 3-month moving average)



Source: based on CPB and Refinitiv data.

**Table 1** – IMF forecasts  
(percentage change and difference in percentage points)

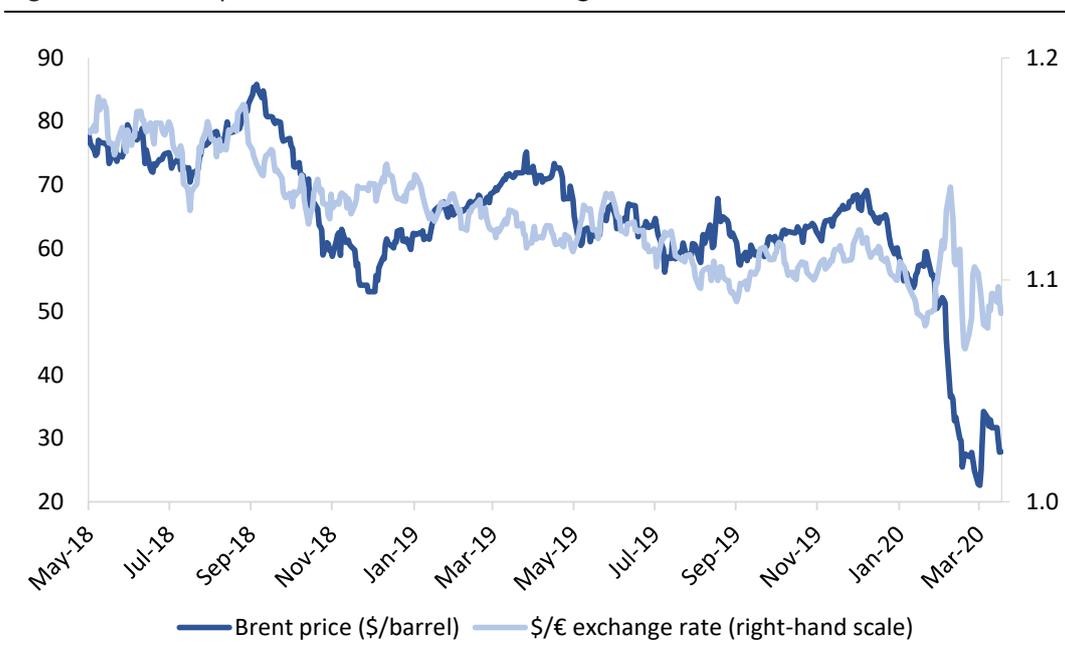
	WEO April 2020			Difference with WEO update January 2020	
	2019	2020	2021	2020	2021
World GDP	2.9	-3.0	5.8	-6.3	2.4
<i>Advanced economies</i>	1.7	-6.1	4.5	-7.7	2.9
<i>United States</i>	2.3	-5.9	4.7	-7.9	3.0
<i>Euro area</i>	1.2	-7.5	4.7	-8.8	3.3
<i>Emerging economies</i>	3.7	-1.0	6.6	-5.4	2.0
World trade	0.9	-11.0	8.4	-13.9	4.7

Source: IMF, *World Economic Outlook*, April 2020.

### **Disagreement among producer countries fosters oil prices to plunge**

The spread of the pandemic has sharply impacted the oil market. Already in early February, expectations of a substantial contraction in demand produced strong downward pressure on prices (Figure 3). To contain the downturn, at its meeting on 5 March OPEC+ proposed a production cut of 1.5 million barrels per day to be distributed on a pro-rata basis between the OPEC and non-OPEC countries. Russia's rejection of the deal prompted Saudi Arabia to threaten to increase output and sell its oil at a discount. The Saudi retaliation led to a drop in prices, which went from \$52 a barrel in early March to a low of \$22.6 at the end of the same month. The strong and unexpected demand shock

**Figure 3** – Oil prices and dollar/euro exchange rate



Source: Refinitiv.

also triggered expectations of a rapid depletion of storage capacity, thus inducing further downward pressure. The persistence of prices below \$25 a barrel, i.e. at break-even for many US shale oil producers, would risk a wave of bankruptcies. The US administration has therefore backed the producer countries to agree to support prices. An agreement reached on 12 April commits countries to reducing crude oil output by 9.7 million barrels per day, equal to about 10 per cent of global supply. The effect on the markets was temporary, as operators fear that the cut is still insufficient to match production with the lower demand. As of 16 April, oil was trading at just under \$28 a barrel.

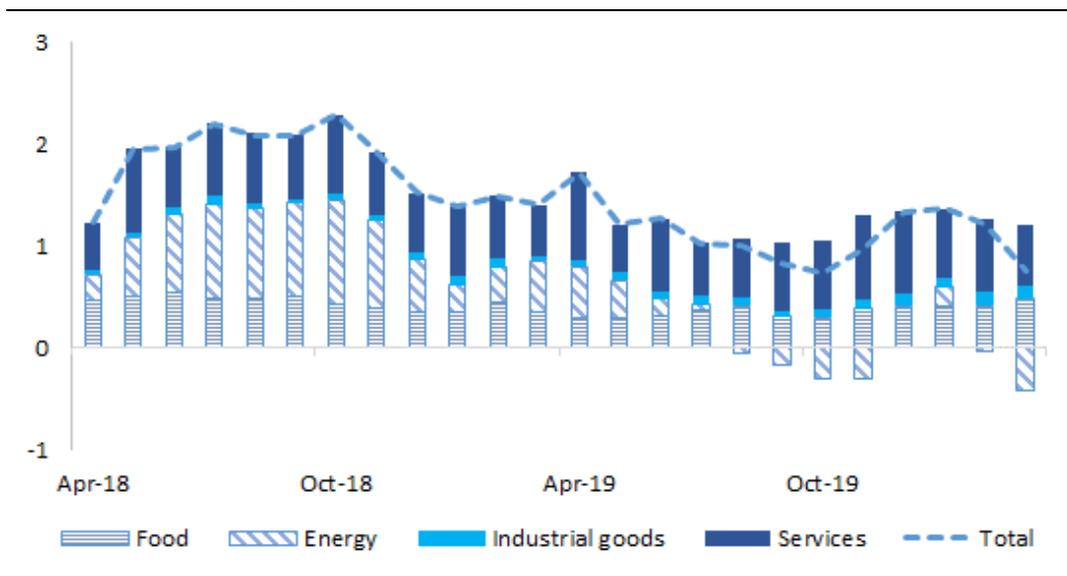
On foreign exchange markets, the exchange rate of the dollar against the euro has recently experienced strong volatility, with large fluctuations in a range between 1.08 and 1.14, with no clear trend emerging. Although the dollar remains the safe haven currency, it has also suffered from the turmoil in the financial markets. Between 1 January and 16 April, the US currency nevertheless appreciated by more than three percentage points against the euro (to 1.085).

#### ***Euro-area inflation expectations have fallen sharply***

Between the end of 2019 and February 2020, euro-area inflation fluctuated between 1.2 and 1.4 per cent on an annual basis, similar to developments in core inflation. In March, inflation decreased to 0.7 per cent (Figure 4), due to the drop in the energy component; excluding the latter, the index was in line with the previous months. Inflation expectations had already experienced a sudden decline towards the end of January, before the pandemic spread to Europe and the price of oil collapsed. The economic and monetary policy measures adopted have since reversed the trend and expectations have recovered partially since the end of March. On 16 April, 5-year expectations stood at around 1 per cent; those at 2 and 10 years were three-tenths of a point below and above that level, respectively (Figure 5).

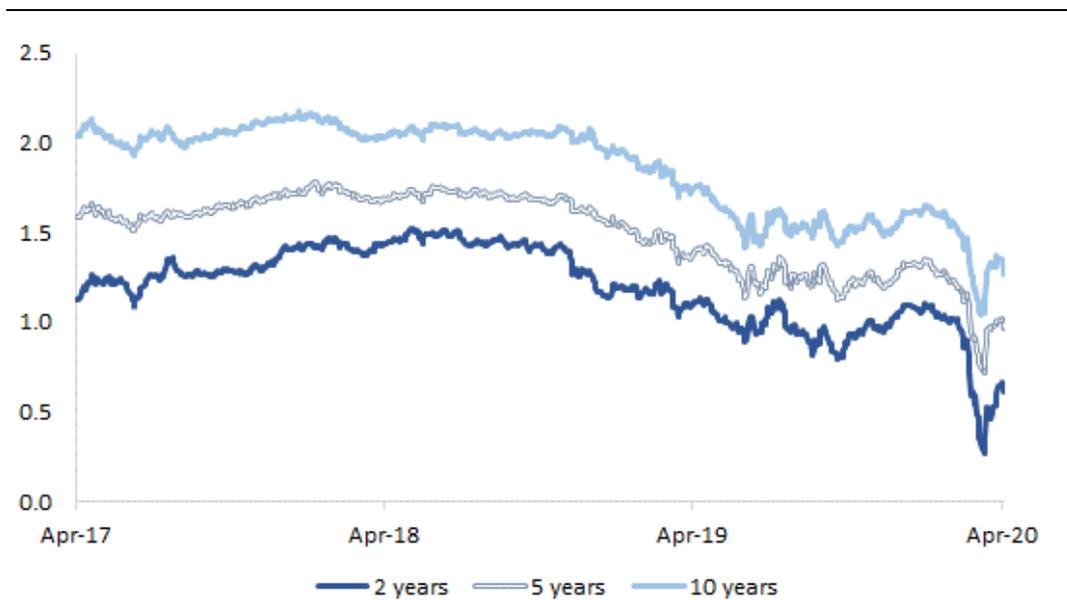
At the Governing Council meeting on 12 March, the ECB adopted an initial package of measures to deal with the pandemic. The negative reaction of market operators and the rapid expansion of the health emergency prompted the ECB to expand the monetary stimulus a few days later, with the launch of new measures, including a new purchase programme for private and public securities (the Pandemic Emergency Purchase Programme - PEPP, worth €750 billion). With this programme, the size of the ECB's balance sheet will expand to a record high level. Compared with the January average, by 10 April assets had already increased by almost €600 billion, or 12.7 per cent (Figure 6). In addition, the ECB has taken several other measures, including measures to broaden the range of eligible collateral, for example by including commercial paper.

**Figure 4** – Inflation in the euro area  
(percentage year-on-year change and contributions)



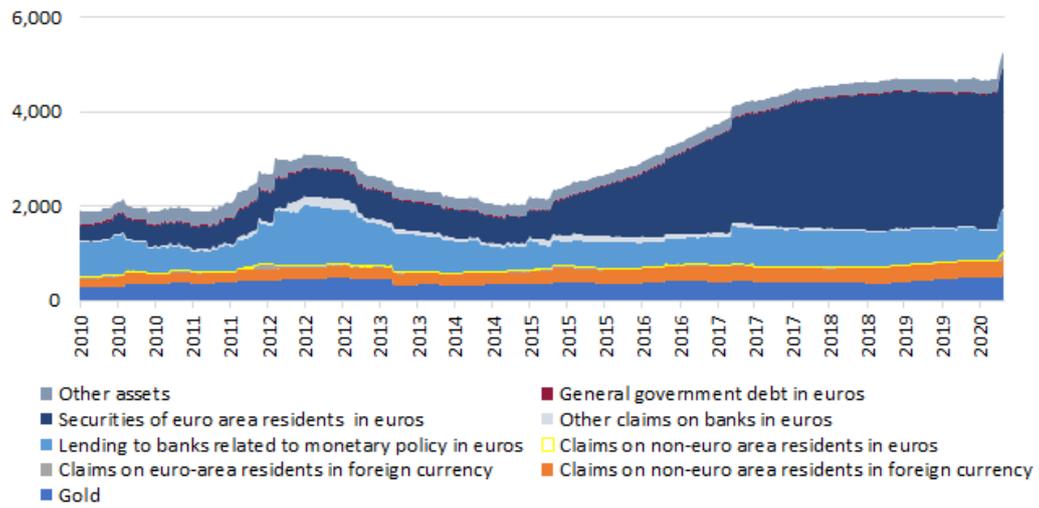
Source: based on Eurostat data.

**Figure 5** – Inflation expectations implicit in inflation swaps  
(percentages)



Source: Refinitiv.

**Figure 6** – Eurosystem consolidated assets  
(billions of euros)



Source: ECB.

## ***The Italian economy***

### ***Economic conditions had already been weakening before the health emergency***

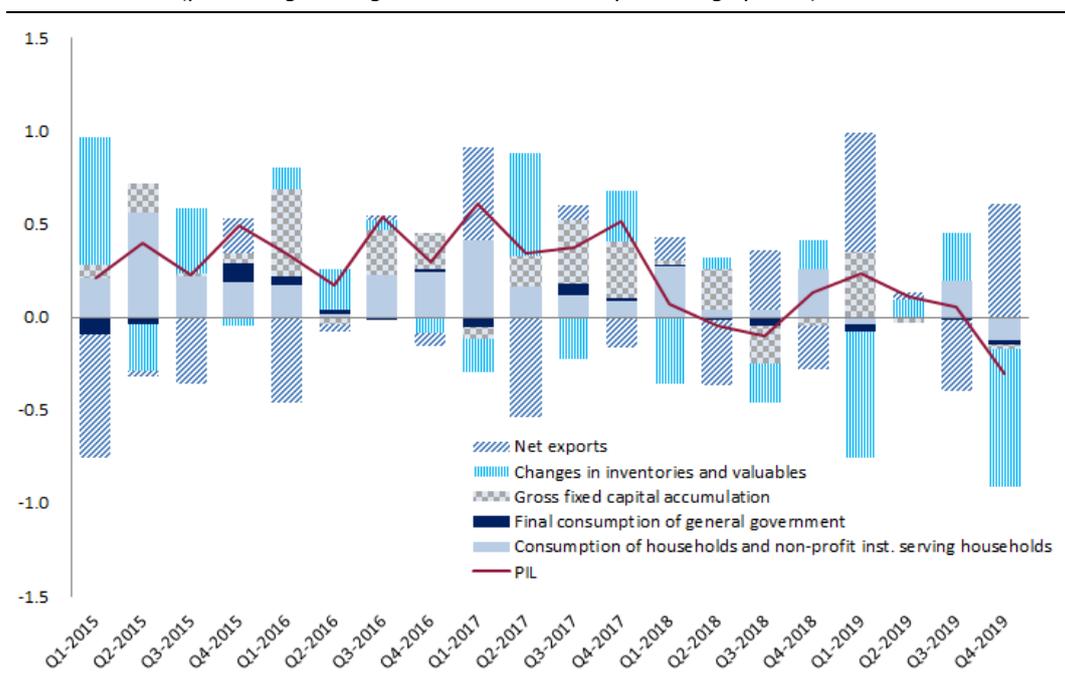
Conditions in the Italian economy, which stagnated overall last year, had already deteriorated in the last quarter of 2019. The economic downturn also involved the other main euro-area countries, but the decline was steeper for Italy: GDP contracted by 0.3 per cent on the previous period, with a negative statistical carry-over on the current year of -0.2 per cent. National accounts figures indicate that the decline in economic activity in Italy in the last quarter of 2019 mainly reflected the contraction in value added in industry (-1.2 per cent). On the demand side (Figure 7), the contribution to growth of domestic spending was negative, especially for inventories. The positive contribution of net foreign demand reflected the marked slowdown in imports (-1.7 per cent) rather than the strength of exports (0.3 per cent).

The rapid spread of the health emergency, starting from the end of February, has altered economic conditions with a speed and intensity unprecedented in peacetime. The first COVID pandemic case originating in Italy was officially reported on 21 February. Two days later, the government issued a decree containing restrictive measures for a dozen municipalities in northern Italy, extended on 8 March to Lombardy and a number of provinces in the Centre and North and shortly thereafter to the entire country. Containment measures have become progressively more stringent, with travel limitations and social distancing requirements, the suspension of school and university activities, as well as the closure of non-essential economic activities (according to Istat estimates, the restrictions involve about a third of the national totals for output and value added). According to PBO estimates, the sectors in which the crisis has a medium-to-high impact - not only due to the lockdown – account for about half of the revenues, wages and total tax revenue (IRPEF, IRES, IRAP and VAT) of companies registered for tax purposes.<sup>3</sup>

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<sup>3</sup> For more details, see the [memorandum of the Chairman of the PBO](#) on Bill AS 1766 ratifying Decree Law 18 of 17 March 2020).

**Figure 7** – GDP growth and contributions of the components of demand  
(percentage change and contribution in percentage points)



Source: Istat.

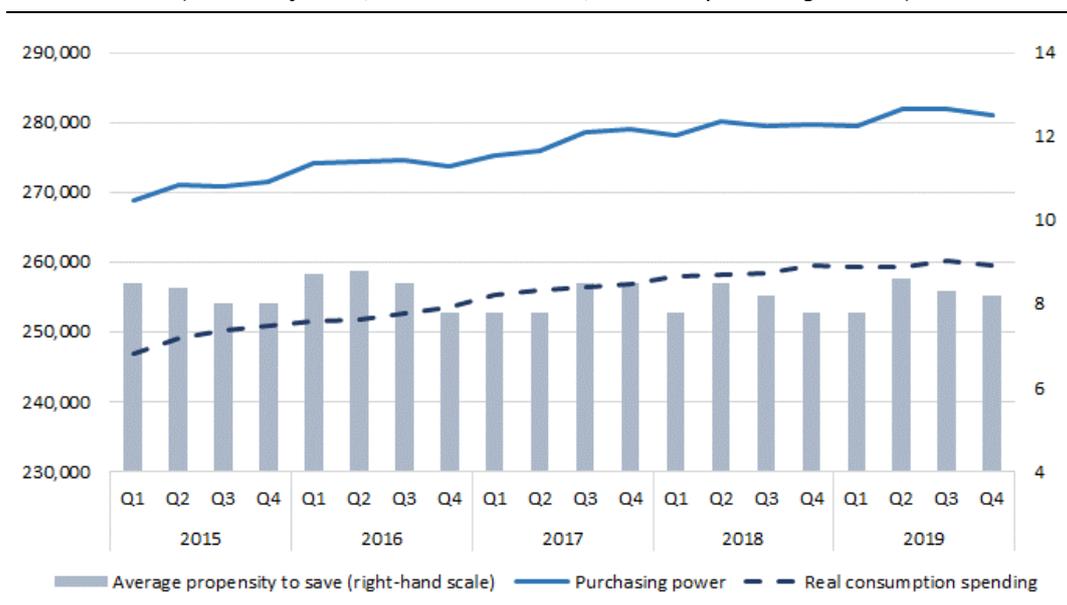
The health emergency has generated direct macroeconomic impacts on supply and demand variables. The response of household and business sentiment, as well as the risk appetite of financial market operators, must also be taken into consideration. The Box discusses these channels, the main international effects and the economic policy responses of the major countries.

On 17 March, the Government approved the first legislation (Decree Law 18/2020) with urgent measures to respond to the health emergency and the risk of bankruptcies and layoffs that would affect potential growth. The decree includes measures aimed at strengthening the resilience of the healthcare system and supporting the finances of households and businesses. On 8 April, another decree was issued, with measures to facilitate access to credit and to prevent temporary liquidity crises from having a lasting impact on the economy.

***The measures to counter the pandemic and great uncertainty are impacting consumption spending ...***

Private consumption had slightly decreased on average in the last three months of last year (-0.2 per cent). Purchases of goods, especially durables and semi-durables, decreased, while purchases of services had risen moderately (0.3 per cent). Households' propensity to save was essentially stable, at 8.2 per cent of disposable income (Figure 8).

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



Source: Istat.

Household expenditure on recreational, hospitality and transport services had started to reflect the health emergency as early as the end of February (with year-on-year decreases of between six and nine percentage points according to Confcommercio estimates). Beginning with the first ten days of March, with the closure of many distribution channels, demand essentially vanished with the exception of a few expenditure items (mainly attributable to food and pharmaceuticals).

The consumer confidence index, which until February had remained at levels close to the average for 2019, fell sharply in March, the first month since the start of the pandemic in which the survey was conducted. A breakdown of the findings by current/future outlook and views of the general economic situation/personal financial circumstances highlights how the March decline in the aggregate index was mainly caused by the deterioration in the outlook for the general state of the economy, while current assessments of personal circumstances were relatively unchanged.

Confidence surveys were conducted in the first half of March, while containment measures were tightened towards the end of the month. It is plausible that March's figure does not fully capture the deterioration in household sentiment and the possibility that consumer assessments worsened further in April cannot be ruled out. However, any such change cannot be observed since the survey was suspended due to the challenges of conducting the study.

Overall, social distancing measures and the closure of non-essential activities have strongly influenced household spending, which in March was mainly concentrated on the food sector, also in substitution of consumption outside the home, and on communication services driven by work and education needs, as well as remote social interaction. As

regards other expenditure items, Confcommercio's most recent estimates point to deep contractions, with demand virtually disappearing, as in the case motor vehicles, air transport and leisure-related services (mainly recreational, hotel and restaurant services).

The extent and timing of the recovery of household consumption depend on the restoration of personal mobility, on the progressive removal of limitations on the opening of retail businesses and on the effectiveness of measures to support income and employment and the easing of financial charges.

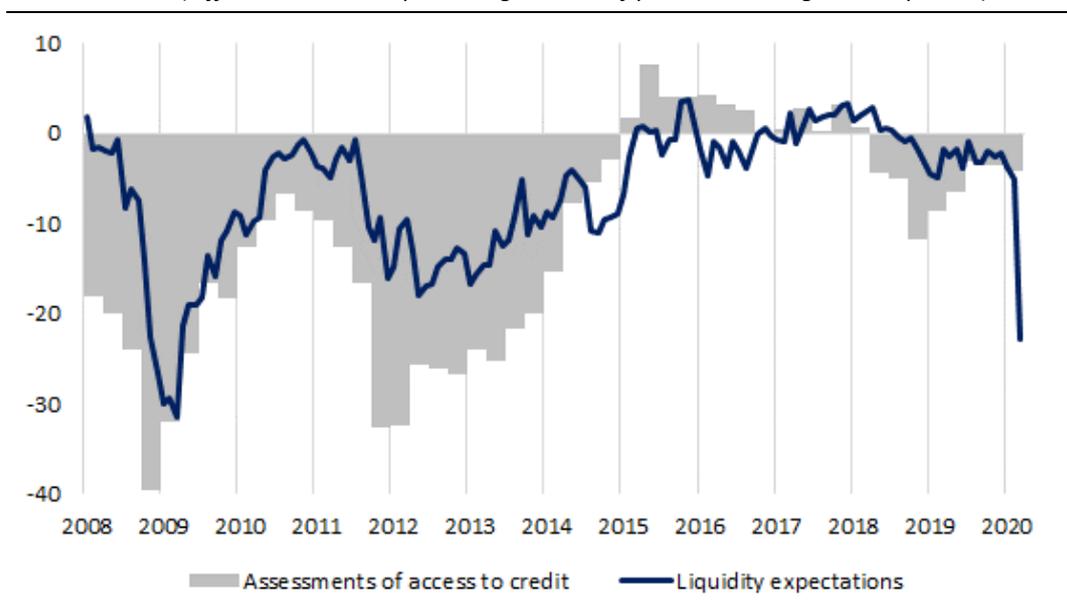
### *... and investment*

The quarterly growth rate of capital accumulation gradually weakened during 2019, coming to a halt in the fourth quarter. The stagnation at the end of the year reflected the contraction in investment in construction, offset by the increase in spending on equipment, machinery and weapons (and transport equipment in particular). The investment rate (the ratio of gross fixed capital formation to value added) was almost unchanged in October-December (at 21.5 per cent), in line with the average of the last two years. Profitability (measured as the ratio of gross operating profit to value added at basic prices for non-financial corporations) increased slightly.

As a result of the spread of the pandemic, global value chains were interrupted as early as the end of January with the closure of Chinese production lines, which impacted investment decisions and implementation. Bottlenecks on the supply side were subsequently compounded by the decline in foreign demand, deriving from the spread of the coronavirus among Italy's main trade partners, as well as the closure (partial or total) of national production activity as a result of measures to contain the pandemic.

Surveys record a sharp deterioration in business sentiment, despite the fact that firms' views were largely measured before the entry into force of the main restrictions on economic activity in the last week of March. The Bank of Italy-Sole 24 Ore Survey on Inflation and Growth Expectations in March reveals a pronounced downward revision of current assessments and expectations for the general economic situation and operating conditions for businesses. Istat's March survey of business confidence showed a deterioration in the balance of domestic orders for capital goods in the first three months of the year compared with the fourth quarter of 2019, due mainly to the decrease registered in the final month of the period. This trend was accompanied by a marked worsening of expectations for liquidity conditions for the entire manufacturing sector (-22.9 in March compared with -5.1 in February; Figure 9), which reached values close to those recorded during the global financial crisis, despite the presence of virtually unchanged lending conditions.

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



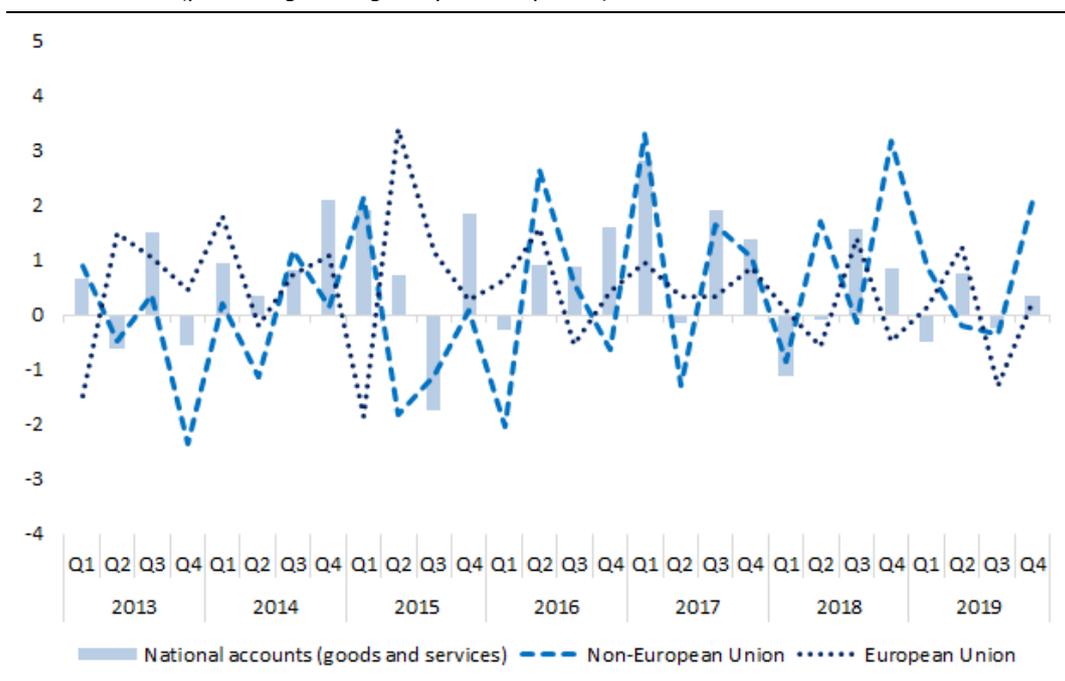
Source: Istat.

The credit market at the end of 2019 had registered new progress in the consolidation of banks' balance sheets, reflecting the financial strengthening of the sector and banks' sounder lending policies. The growth of credit to the private non-financial sector continued in February (both year-on-year and quarter-on-quarter), driven by an increase in loans to households for mortgages and consumer credit, offset by a slight contraction in lending to firms. Since the end of February, the uncertainty generated by the spread of the pandemic, with the consequent tensions on the financial markets, has produced a marked increase in the yields on bonds issued by the banking sector, with an adverse impact on funding costs. However, the monetary policy measures taken by the ECB beginning in mid-March will lower the cost of raising funds for the banking sector, thanks to the possibility of borrowing from the central bank on more advantageous conditions than previously.

### **Exports held up until last year**

Despite the slowdown in international trade, exports in 2019 recorded growth (1.4 per cent) in line with that of the previous year. With regard to export markets (Figure 10), sales on markets outside the European Union continued to post quarter-on-quarter growth, albeit with considerable volatility, while those within the area recouped the decline registered in the summer period by the end of the year.

**Figure 10** – Change in exports (total and by geographical area) (1)  
(percentage change on previous period)



Source: based on Istat data.

(1) The histograms represent changes on the previous period in the chain-linked values of total exports drawn from the national accounts. The lines show changes on the previous period in the volume of exports of internationally traded goods, seasonally adjusted by the PBO.

On average in the first two months of the year, foreign sales to both areas increased, especially in January. However, these data reflect conditions that still do not incorporate the slowdown in trade following the spread of the pandemic.

Although some Italian firms operating in essential industries are continuing to produce even after the imposition of restrictions aimed at containing the pandemic, they are registering sharp contractions in foreign demand. The drop in sales of goods abroad was preceded by a very strong contraction in tourist flows, which contributed to the sharp decline in exports of services.

The latest available surveys would seem to foreshadow a further deterioration in foreign demand in the central months of the year: while the current assessments of orders and foreign turnover in March were substantially stable, short-term expectations turned sharply downwards (from 4.8 to -12.8 in the first quarter, the lowest value since the first quarter of 2009).

Imports decreased slightly on average in 2019 (-0.2 per cent), despite the increase in domestic and foreign demand. The outlook for the volume of imports is highly negative, not only due to the contraction in domestic demand but also due to the effects of the pandemic on domestic supply and the interruption of international value chains.

### *The latest economic indicators point to an unprecedented crisis*

The industrial sector had started the year with a recovery, however the contraction in production in February brought the index back to a level just above the average for the fourth quarter of 2019. The health emergency subsequently led to the closure of non-essential or non-strategic sectors, the effects of which are already evident in qualitative indicators. The PMI for the manufacturing sector reached 40.3 in March (from 48.7 in February), the lowest level since April 2009. Survey respondents indicate that the steep decline is mainly attributable to the collapse in production levels and new orders. In the same month, the Istat index of manufacturing confidence decreased by about ten points, due to the deterioration in assessments of current orders and, above all, the short-term outlook for production. The outlook for the sector remains highly negative.

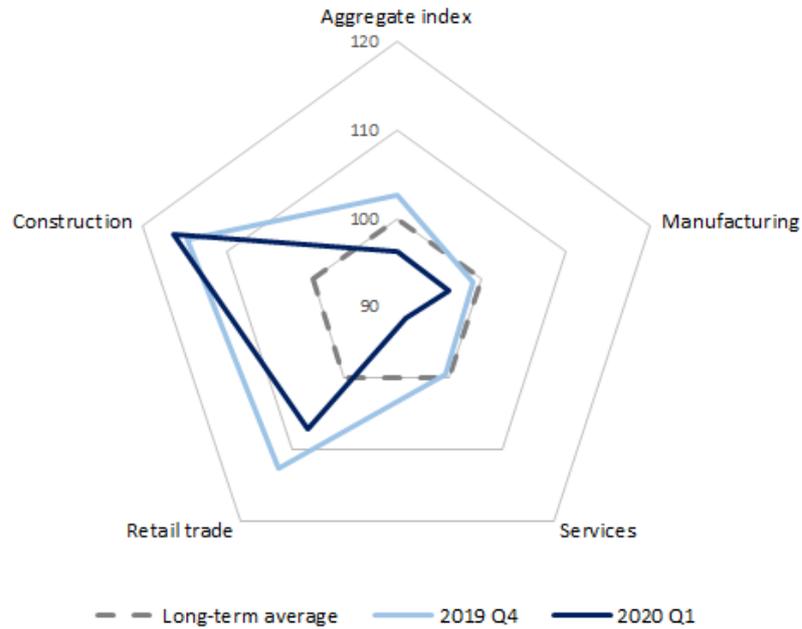
In 2019, output in construction had increased by about two percentage points. In January, the industry continued to expand and the housing market survey conducted in January and February by the Revenue Agency, the Bank of Italy and Tecnoborsa depicted a relatively positive situation. The measures to counter the health emergency were only extended to the construction sector in the final part of last month. The recent Istat surveys report a deterioration in current orders and, above all, employment expectations. The decline in March appears relatively limited by comparison with other sectors.

The service sector is the industry affected most severely by the health emergency. Last year, the value added in the sector increased slightly (0.3 per cent), but there was a sharp deterioration already in the first months of this year. Tourism was the first to suffer the effects of the health emergency. By the end of January, arrivals of visitors from China had decreased and within a few weeks those originating elsewhere, first abroad and subsequently domestically as well, also declined. The impact of the health emergency then spread to other services. The progressive tightening of social distancing measures led to the closure of restaurants, expositions and conferences and then affected air and rail transport, with a heavy impact on the logistics sector. The most recent qualitative indicators reveal the exceptional intensity of the slowdown: the PMI for the sector stood at an all-time low in March (17.4), due to the steep decline in new orders and foreign demand.

For all sectors, the aggregate index of business confidence, obtained as the weighted average of sectoral indices, contracted significantly in the first quarter of this year (Figure 11), especially in services.

The uncertainty of families and firms continues to rise. The PBO index of uncertainty, while remaining below the peak registered in 2013-2014, worsened significantly in the first quarter of the year (Figure 12), above all reflecting the jump in March for the services and retail trade components.

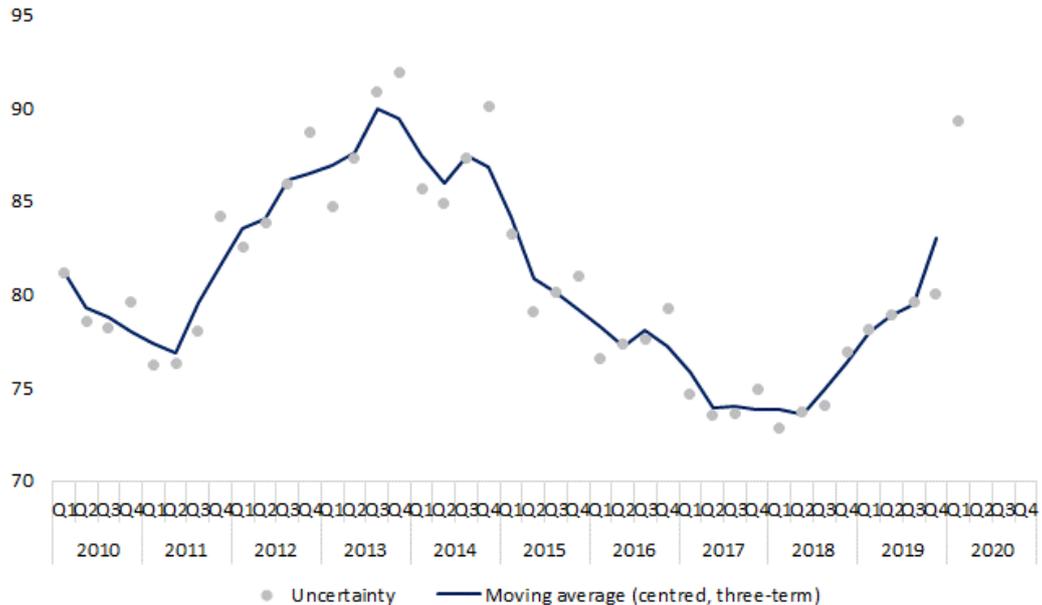
**Figure 11** – Confidence in productive sectors (1)  
(index; average January 1998 – March 2020 =100)



Source: based on European Commission and Istat data.

(1) The aggregate confidence indicator is constructed by applying the weights used by Istat to produce the Istat Economic Sentiment Indicator (IESI) to the time series (standardised) of sectoral confidence indicators of the European Commission.

**Figure 12** – PBO indicator of uncertainty (1)  
(index; 1993 Q1=100)



Source: based on Istat data.

(1) The method used to calculate the uncertainty indicator is based on the procedure discussed in the box “Uncertainty measured on the basis of business and consumer surveys” published in the PBO’s Report on Recent Economic Developments for April 2017.

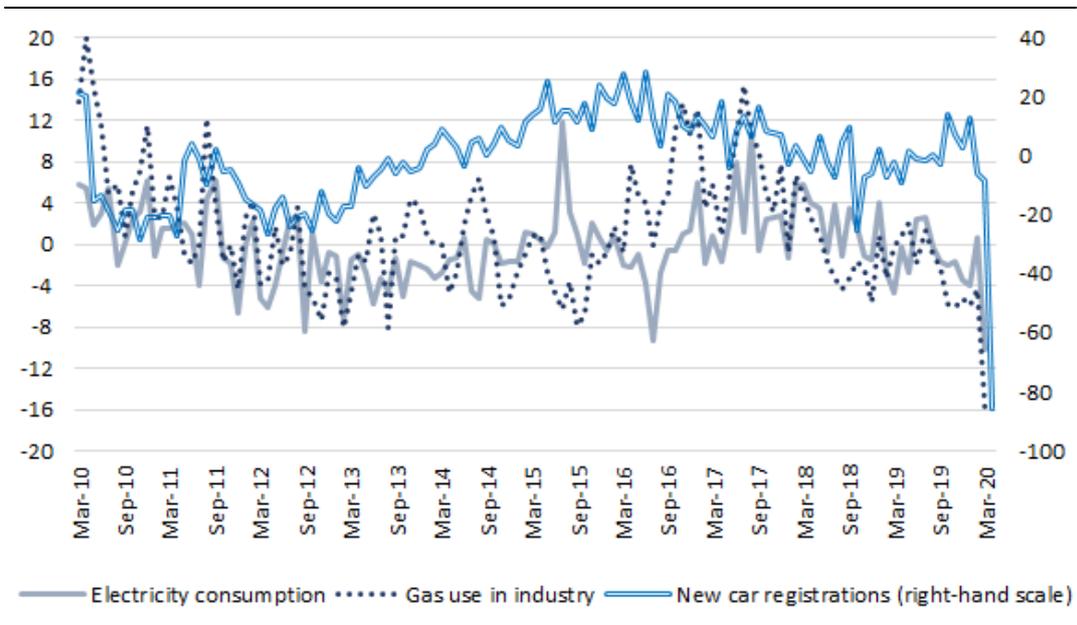
The composite economic indicators developed by various institutions still only capture a partial picture of the effects of the pandemic on real activity, as the databases they use largely regard to the period prior to the emergency. However, some signs of a sharp contraction in economic activity can already be inferred from high frequency variables, such as consumption of electricity and gas for industrial uses, which in March decreased by between ten and fifteen percentage points compared with the same month of 2019. At the same time, the closure of sales outlets essentially eliminated the car market, which registered an unprecedented year-on-year decrease in registrations of over 80 per cent (Figure 13).

### Short-term forecasts

Macroeconomic forecasting exercises are extremely complex in current conditions. Future scenarios are highly dependent not only on macroeconomic variables, but also on the expectations and behaviour of individuals and authorities in response to the health emergency. The situation is evolving very rapidly, making it extremely difficult - it bears repeating - to develop forecasts.

The construction of forward-looking scenarios in these circumstances also requires assumptions about when the pandemic could subside in Italy. We have adopted the statistical approach recently proposed in study by the Einaudi Institute for Economics and

**Figure 13** – Coincident indicators of economic activity  
(percentage year-on-year change)



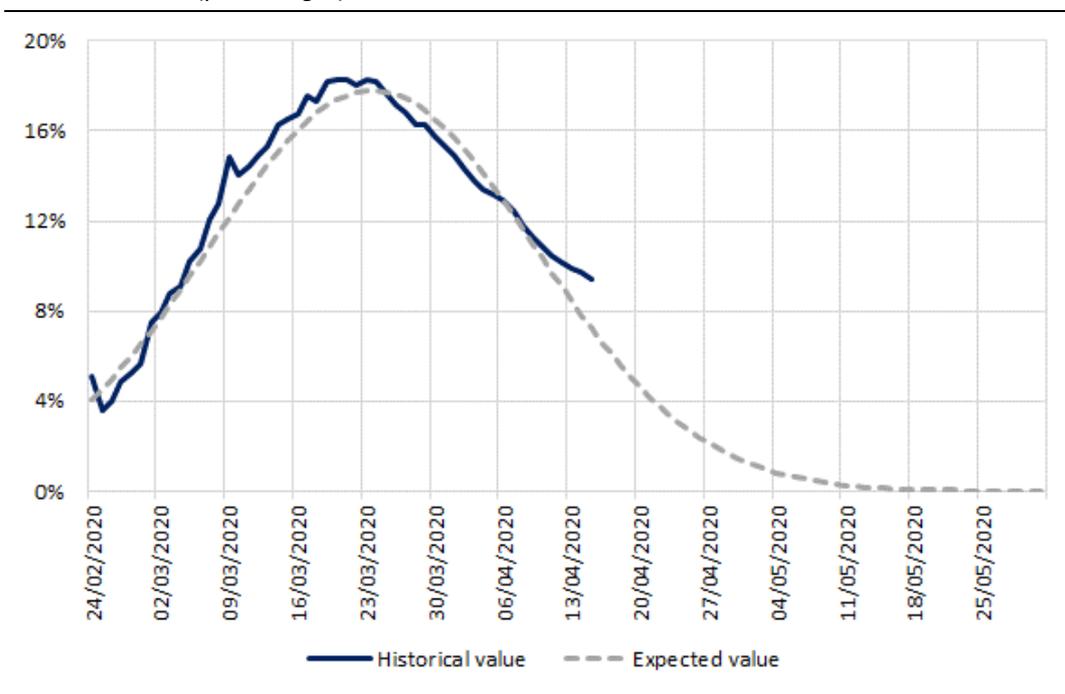
Source: Terna, Snam and ANFIA.

Finance (EIEF)<sup>4</sup> of the relationship between the number of positive cases and swab tests performed. This indicator has the advantage of adjusting positive cases by the number of tests carried out, but it must be interpreted with caution as it is affected by the lags in measurement and communicating the results of testing.

The function estimated (Figure 14) would seem to indicate that, after the peak observed in the last week of March, the ratio between positives and tests should tend to zero around mid-May. This estimate is based on the representation of the historical data observed, so it has predictive validity only if we assume that the regulations issued by authorities and individual behaviour remain constant.

The PBO produces its short-term forecasts for Italian GDP growth using multiple mixed frequency models, which make optimal use of the information drawn from monthly economic indicators.<sup>5</sup> Among these, the most important are so-called hard series, such as industrial production, foreign trade, retail sales, which, however, are currently only available until February, i.e. before the coronavirus emergency had significant effects on the Italian economy. Nevertheless, the models also use more timely indicators based on energy use (electricity and gas), car sales and Google searches, which are already available for March.

**Figure 14** – Cases of COVID-19 as a proportion of the number of swab tests (percentages)



Source: based on data from the Italian Civil Protection Department.

<sup>4</sup> See the paper by Franco Peracchi at: <http://www.eief.it/eief/index.php/forecasts> which analyses data on new positives, defined as the difference between the current day and the previous day in the total number of cases, which is in turn represented by the sum of positive cases, discharged patients and deaths.

<sup>5</sup> See <http://www.upbilancio.it/wp-content/uploads/2018/01/Nota-tecnica-previsione-macro-UPB.pdf>.

Taking these coincident indicators into account, GDP is estimated to have fallen by around five percentage points over the past quarter. The current quarter is more heavily affected by the effects of the lockdown, as it begins at very low levels in April and reflects significant statistical drag from March. Assuming that the restrictions are eased very gradually starting in May, a cyclical contraction for the second quarter GDP on the order of an additional ten percentage points is expected. These forecasts are subject to unprecedented uncertainty attributable not only to the usual economic factors, but also to social and health variables.

Short-term forecasts are normally intended to anticipate the first official estimates of aggregates in which we are interested. In current conditions, there is a risk that the accuracy of the preliminary estimates in the countries most affected by the pandemic may be impacted by an unprecedented shock, such as the current one. An initial issue concerns the collection of data. A range of information for the national accounts is acquired by asking companies to fill in questionnaires, but in certain circumstances it may be difficult to obtain responses or even to identify companies that are actually operating. In the case of Italy, for example, business and household confidence surveys were suspended for April. Official statistics could also be influenced by shifting tax and social security deadlines, especially in countries that rely heavily on administrative data. On the supply side, GDP figures may not fully capture the labour inputs of companies that adopt alternative methods to standard working practices, as in the case of remote working arrangements. Furthermore, the prices with which the nominal aggregates are deflated could be discontinuous in sectors in which trade has been reduced to almost zero. Last but not least, the anomalous data for April will have a significant impact on many monthly and quarterly time series, which will probably be revised retrospectively with the application of models that adjust for seasonal factors.

Overall, the macroeconomic time series to be released in the coming months will have to be interpreted with greater caution than that already normally reserved for preliminary official statistics. A more soundly based assessment of the current cyclical position can only be carried out retrospectively, when statistical institutions have had the opportunity to recover and complete any missing historical information and better characterise the outliers from March and April.

### ***Employment growth slows and recourse to the Wage Supplementation Fund soars***

The job market had already been weakening before the COVID-19 health crisis. Developments in hours worked as measured in the national accounts were discontinuous in 2019, registering a decrease in the fourth quarter (-0.3 per cent on the previous quarter) in line with the dip in GDP. Labour demand, measured by the number of payroll positions, had decelerated in the second half of last year, but the overall increase in 2019 outpaced GDP growth.

The growth in the number of persons in employment in the second half of 2019 had slowed sharply (0.2 per cent, from 0.5 per cent in the previous six months), due to the reduction in self-employment and the slowdown in permanent employment, which offset the gradual expansion in fixed-term positions. In the initial months of this year, before the spread of the health emergency, the number of persons in employment decreased (-0.4 per cent in January-February compared with the fourth quarter of 2019), due to the decline in both the number of employees in permanent jobs (-0.3 per cent, the first decrease since the third quarter of 2018) and the self-employed.

At the moment there is no labour market information for the period of the health emergency, which could hinder the production of official statistics.<sup>6</sup> For example, social distancing measures could affect the collection of data for the Labour Force Survey, whose initial interviews are conducted at the homes of households. The closure of a significant portion of production, which is scheduled to last until 3 May, will be reflected in an exceptional reduction in hours worked in the spring months. According to Istat estimates, the measures to suspend or reduce production activities have affected 51.3 per cent of firms and 42.9 per cent of employees.<sup>7</sup> Companies will have implemented various forms of reduced working hours, both through the use of accumulated holiday entitlement and parental leave and, to a greater extent, through recourse to the Wage Supplementation Fund (CIG), which was expanded with the “Cure Italy” decree to cover all firms, regardless of economic sector or number of employees.

According to the information released by INPS, applications for CIG support due to the COVID-19 emergency received through April 10 involved about 2.9 million workers, while applications for the ordinary allowance involved about 1.7 million beneficiaries. No information is available on applications received for exceptional CIG support due to COVID-19, which is initially collected by the regions and then sent to INPS. Based on the structure of employment in the sectors affected by the suspension or reduction of production, the total number of hours of wage support authorised may be well above the monthly maximum values observed since the financial crisis of 2009.

The use of the CIG mechanism enables firms to hoard labour, preserving their employment base and therefore their production potential, in order to have the resources available to resume operations when the restrictions are removed. The smaller response of employment to the decline in GDP would also reflect institutional effects, connected with the prohibition (for two months from 17 March) on employers initiating collective or individual layoff procedures. On the other hand, employment may also be affected by the large proportion of fixed-term contracts expiring during the months of the health crisis. Based on information on the duration of new fixed-term contracts drawn from mandatory

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<sup>6</sup> See D’Amuri, F. and Viviano, E., “L’impatto di breve periodo del COVID-19 sulla ricerca di lavoro”, Banca d’Italia.

<sup>7</sup> See Istat, “Contributo e posizionamento all’interno del sistema produttivo italiano dei settori di attività economica, secondo la classificazione Ateco a 5 cifre”.

reporting on employment for 2019,<sup>8</sup> the number of contracts expiring in the first half of this year is estimated to be approximately half of those activated on average in the second half of 2019. It is likely that only an extremely small proportion of those will be transformed into permanent positions.

In the absence of updated information for the entire country, data from the mandatory reporting on employment for Veneto<sup>9</sup> show the labour market virtually coming to a halt. Between 1 February and 5 April, new jobs reported slowed sharply (40,000 fewer than in the same period of 2019), especially for fixed-term contracts (which account for about three-quarters of the overall reduction in contracts). This unfavourable evolution has affected the main production sectors, especially in the retail trade and tourism sectors. However, the number of terminations has been small, plausibly held back by the temporary freeze on layoffs.

The unemployment rate, which stood at 9.7 per cent in the fourth quarter of 2019, was essentially unchanged at the start of this year. In the period covered by the health emergency, the drop in labour market participation has been accentuated by the social distancing measures introduced to contain the COVID-19 crisis, since reducing mobility makes active job search more expensive, thereby increasing discouragement.<sup>10</sup>

The growth in the inactive population could moderate the increase in the unemployment rate, although consumer expectations recorded in March (Figure 15) appear to signal a marked increase.

Growth in hourly contractual wages for the entire economy had already weakened last year (1.1 per cent, down from 1.5 per cent in 2018). The deceleration was especially brusque in the public sector beginning in the third quarter. This year began with a large number of contracts awaiting renewal, with negotiations being suspended following the health emergency. According to Istat estimates based on contracts in force at the end of 2019, in the absence of further renewals this year, the index of hourly contractual wages for the entire economy is expected to increase by only 0.3 per cent. Labour costs, reflecting the suspension of certain economic activities, are expected to slow considerably due to the suspension of deadlines for the payment of social contributions (until 31 May). The impact of other labour cost items connected with the production cycle (such as overtime and travel expenses) is also likely to decrease.

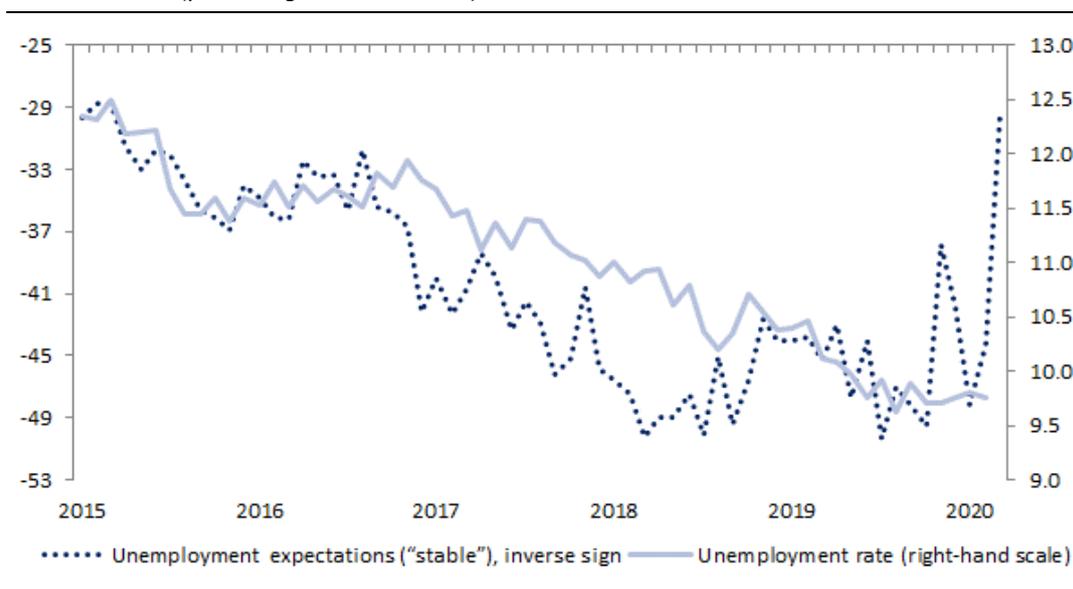
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<sup>8</sup> See the quarterly report on employment trends produced by Istat, the Ministry of Labour, INPS, Inail and Anpal.

<sup>9</sup> See Anastasia, B., Bovini, G., Rasera, M. and Viviano, E., "[Prime indicazioni dal mercato del lavoro: i dati delle Comunicazioni Obbligatorie del Veneto](#)", Banca d'Italia.

<sup>10</sup> See D'Amuri, F. and Viviano, E. (*op. cit.*).

**Figure 15** – Unemployment rate and consumer unemployment expectations  
(percentages and balances)



Source: Istat.

The decrease in hourly productivity in the fourth quarter of 2019 (-0.3 per cent year-on-year) reflected the increase in hours worked while value added stagnated. The need to stem the COVID-19 contagion has significantly expanded firms' use of flexible working arrangements, especially in the banking and insurance sector, in government and in various professional services. By contrast, the use of such practices is low in the primary and secondary sectors of the economy.<sup>11</sup> Overall, the extensive use of remote working could lead to difficulties in measuring the volume of labour, since such work is not necessarily performed in consecutive time intervals. This could be reflected in an overestimation of hours worked per job and therefore in a decrease in hourly productivity. However, according to some studies, productivity measured in per capita terms could instead benefit from the greater flexibility available for workers to organise their time.<sup>12</sup>

### **Consumer price inflation weakens and business expectations are quickly revised**

This year began with the continuation of the price weakness observed last year, reflecting moderate domestic demand and low price pressures in the upstream segment of the production process.

Consumer price inflation (national consumer price index) declined further in March, to 0.1 per cent (from 0.3 per cent in February). The prices of unregulated energy products decreased by 2.7 per cent in annual terms, reflecting lower oil costs; the prices of services

<sup>11</sup> See Basso, G., Barbieri, T. and Schicchitano, S., "I lavoratori a rischio durante l'epidemia da COVID-19", Banca d'Italia.

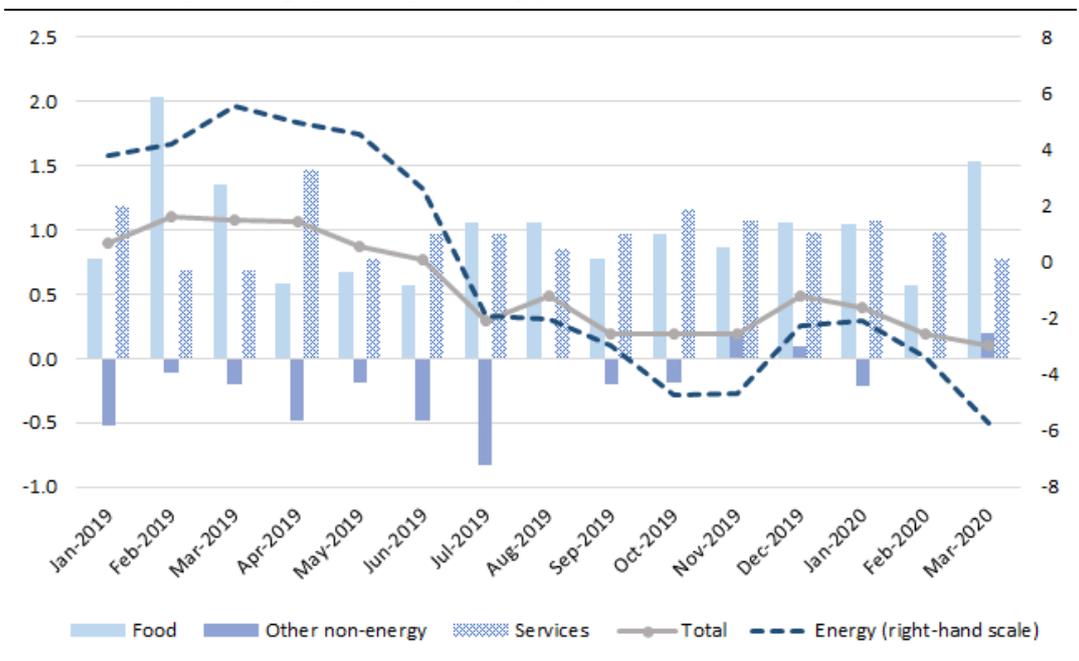
<sup>12</sup> See Boeri, T. and Caiumi, A., "Lavori che possiamo continuare a svolgere", [www.lavoce.info](http://www.lavoce.info).

slowed (to 0.8 per cent). By contrast, the prices of food and tobacco products accelerated appreciably (to 1.1 per cent and 2.5 per cent respectively; Figure 16), probably reflecting demand under lockdown conditions. Core inflation, which excludes the prices of energy and unprocessed food, remained stable at 0.7 per cent.

The inflation figures are also affected by the health emergency. Istat has reported difficulties in acquiring information, so a number of methodological changes have been introduced. The survey of consumer prices is normally based on several sources: data collected by municipal statistical offices, centralised measurement, scanner data, large data suppliers and administrative databases. During the health emergency, the most critical issues concerned the activity of the municipal statistical offices, which initially ran into difficulty in the North and, from 11 March, was suspended throughout the country. For the inflation estimates for March, greater than usual recourse was therefore made to the imputation of missing survey data. Some prices were kept constant compared with the previous month (for example for services whose supply has essentially been eliminated, such as air transport).

Low inflationary pressures from abroad (import prices in February fell by 1.5 per cent in annual terms) and the sharp drop in oil prices have been reflected in producer prices in industry since February (-2.6 per cent year-on-year). However, differences are beginning to emerge among products, which seem to reflect the differential impact of the health emergency on sectors: price developments appear to be running counter to the downward

**Figure 16** – Harmonised consumer price index by product category  
(percentage year-on-year change)

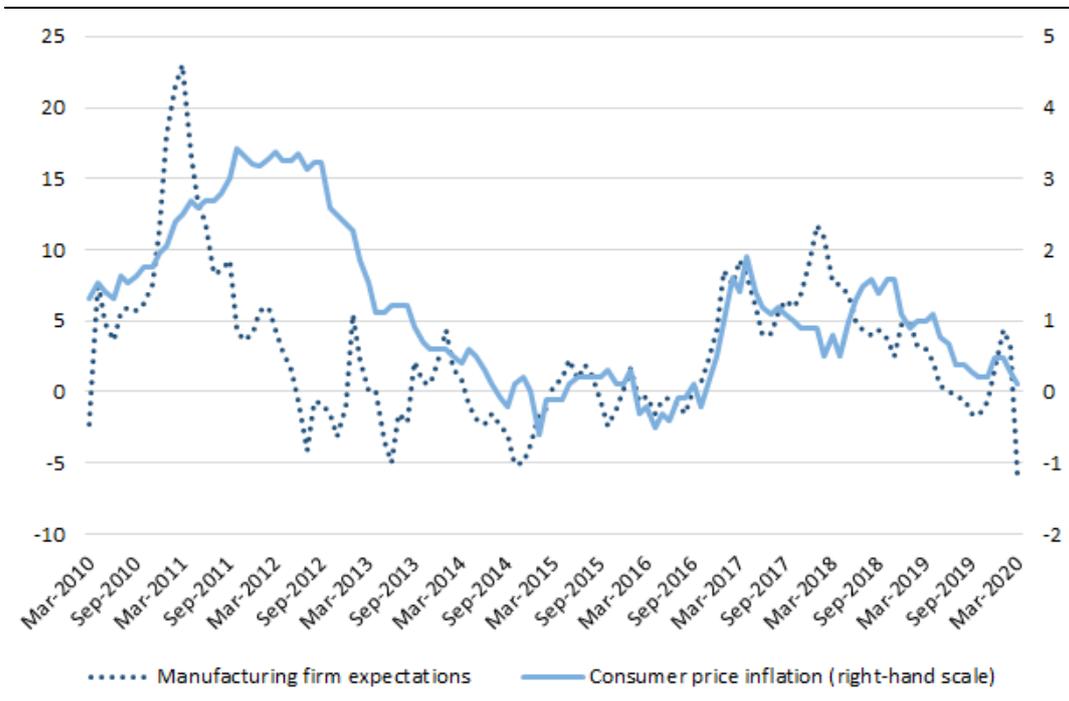


Source: Istat.

trend for food products, beverages and tobacco products (2.0 per cent year-on-year), basic pharmaceuticals and pharmaceutical preparations (1.2 per cent), and computer, electronic and optical products (1.8 per cent).

The inflation expectations of businesses and households reported in Istat's March surveys appear to diverge. Among consumers interviewed in March, 42.1 per cent expected prices to rise or accelerate in the following 12 months (from 38 per cent at the beginning of the year), plausibly connected with the rush to purchase essential goods at the time the lockdown was imposed. By contrast, firms' expectations for sales prices point to a decline (the balance between those who expect prices to increase and those expecting a decrease was -5.9 in March; Figure 17), especially in the intermediate and capital goods sector (balances of -6.6 and -6.1). Firms' expectations are close to the values observed in previous deflationary periods.

**Figure 17** – Consumer price inflation and expectations of manufacturers  
(percentage change and balance)



Source: Istat.

## Box – The COVID-19 pandemic and global economic repercussions

The coronavirus originally emerged in China between the end of 2019 and the early days of 2020, in particular in the province of Huabei. After initially imposing restrictions on the movement of people, the Chinese authorities ordered the lockdown of Wuhan (the capital of Huabei) and other cities on 23 January. Despite the rapid spread of the contagion within China, at the international level the situation appeared under control in the first two months of the year, also in consideration of the fact that neighbouring countries, such as South Korea, had managed to contain the spread of the virus relatively quickly. Since March, however, the picture has changed radically. The pandemic spread rapidly to the west, initially in Italy and other European countries, then also in the United States. On 11 March, the World Health Organization declared the COVID-19 epidemic a pandemic. Numerous countries have implemented containment measures, ranging from the closure of economic activities and limitations on the movement of people to complete lockdowns.

As of 16 April, data published by Johns Hopkins University show that more than 2 million cases of COVID-19 have been reported, with over 138,000 deaths. The seven countries with the largest number of infections are the United States, Spain, Italy, Germany, China, France and the United Kingdom, which in 2018 represented over 50 per cent of world GDP and about 40 per cent of international trade. The population of these seven countries accounts for less than a third of total world population, but positive cases represent around 70 per cent of the world total (Table B1).

The seven countries most affected are also those most integrated with the rest of the world through the global value chain (GVC). Table B2 reports a number of metrics of integration based on trade in terms of value added. The top part of the table shows value added attributable to exports, broken down according to whether it was generated internally or imported from another country (in accordance with the methodology given in Koopman et al. 2014<sup>13</sup>). In particular, exports' share of foreign value added is especially high in the euro-area countries, where between 2000 and 2014 it increased by around 5 percentage points on average. Even more relevant is the second part of the table, which reports a metric of individual countries' participation in the GVC. This measure is obtained as the sum of backward participation, equal to the share of foreign value added of the exports of the individual country, and forward participation, given by the share of value added in the total exports of the individual country and used as inputs for exports of other countries. The overall metric therefore summarises the degree of overall interdependence of the

**Table B1** – GDP, population, imports, exports and COVID-19 cases (1)  
(percentages)

	GDP	Population	Imports	Exports	COVID-19
United States	21.8	4.3	13.2	8.6	28.8
China	13.1	18.7	10.8	12.8	5.1
Germany	4.8	1.1	6.5	8.0	7.3
France	3.6	0.9	3.4	3.0	7.3
United Kingdom	3.5	0.9	3.4	2.5	4.1
Italy	2.6	0.8	2.5	2.8	8.9
Spain	1.9	0.6	2.0	1.8	9.7
Total	51.2	27.3	41.8	39.4	71.3
Rest of the world	48.8	72.7	58.2	60.6	28.7

Source: UNCTAD, Johns Hopkins University.

(1) GDP, population, imports and exports, from UNCTAD data, regard 2018.

<sup>13</sup> Robert Koopman, Zhi Wang, and Shang-Jin Wei (2014) "Tracing Value-Added and Double Counting in Gross Exports", *American Economic Review*, 104(2). From a technical point of view, use was made of the routine given by Federico Belotti, Alessandro Borin and Michele Mancini (2020) "ICIO: Economic Analysis with Inter-Country Input-Output tables in Stata", *Policy Research Working Paper*. no. WPS 9156. Washington, D.C.: World Bank Group.

**Table B2** – Breakdown of exports content and participation in global value chain – 2014)

	United States	China	Germany	France	United Kingdom	Italy	Spain
Domestic content	87.9	84.1	73.3	72.8	81.0	74.0	69.1
Domestic value-added (DVA)	87.2	83.1	71.9	72.3	80.8	73.6	68.9
DVA absorbed abroad	80.8	80.7	69.8	71.1	79.4	72.9	68.4
Reflection (DVA absorbed at home)	6.4	2.4	2.1	1.2	1.4	0.7	0.5
Domestic double counting	0.7	0.9	1.4	0.5	0.3	0.3	0.3
Foreign content	12.1	15.9	26.7	27.2	19.0	26.0	30.9
Foreign value-added	12.0	15.7	26.1	27.0	18.9	25.9	30.7
Foreign double counting	0.1	0.2	0.6	0.2	0.1	0.1	0.2
GVC-related trade	36.5	32.2	46.3	45.9	40.8	44.1	46.0
GVC-backward	12.8	16.9	28.1	27.7	19.2	26.4	31.1
GVC-forward	23.7	15.4	18.1	18.2	21.6	17.8	14.8

Source: based on WIOD 2014 data.

individual country with trade partners. Total participation in the GVC is around 45 per cent for the euro-area countries, around 40 per cent for the United Kingdom, above 35 per cent for the United States and just over 32 per cent for China. Compared with 2000 the increase is not negligible in this case either, standing at around 5 per cent for Germany, France and Spain, and 8 per cent for Italy. The high degree of integration suggests that a shock affecting a single economy already tends to spread quickly to the rest of the world. A symmetrical shock affecting several countries at the same time will be further amplified via the network of trade relations.

The rapid spread of the pandemic made it necessary to impose restrictive measures to limit circulation and, in several cases, the suspension of production activities. Although there are differences between the specific measures adopted by individual countries, it is possible to delineate a framework for many aspects of the impact of the emergency on the economy. In this regard, three main channels of macroeconomic transmission of the shock caused by the pandemic have been identified: the supply channel, the demand channel and the financial channel. We can add an additional channel that amplifies the previous three, namely the confidence channel.

The supply channel is mainly represented by the obligation to close down various economic activities considered non-essential. This channel can be mitigated with the adoption of alternative working methods (remote working) or partially offset by positive effects in particular sectors (online sales, healthcare, manufacture of pharmaceuticals and medical machinery and equipment), but in general the negative factors prevail. Albeit to a lesser extent, the supply effect is also manifested through the temporary reduction of the labour force due to contagion. The direct consequences are accompanied by indirect effects such as, for example, the interruption of global value chains. The case of the automotive sector from the very outset of the pandemic is an example, as the province of Huabei is a hub of automotive component producers that also supply western automotive groups. The above effects, if limited in time, would have a negligible impact on a country's production capacity, but if they persist over time, they could reduce an economy's potential output.

On the demand side, transmission could be objective, due to the impossibility of making a purchase because the supply of a good is precluded or to the contraction in household disposable income. However, it could also be psychological in nature, because consumers and businesses adopt a more prudent attitude to spending. The hotel industry, for example, is suffering from both the restrictions on mobility and the precautionary behaviour of travellers. The occupancy rate of hotels in March fell by almost 50 per cent in Taiwan and over 90 per cent in Italy compared with 12 months earlier.

These impacts on supply and demand have prompted analysts to revise their macroeconomic forecasts by an unprecedented extent (Figure B1). For many countries, expectations now point to

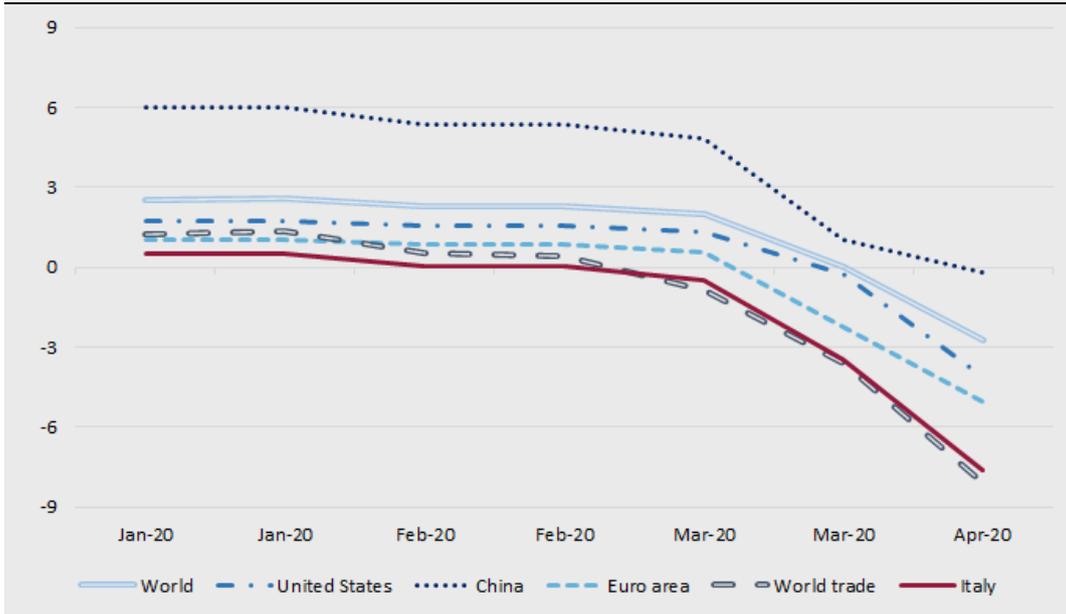
a far worse recession than that recorded during the 2008-2009 financial crisis, the deepest since the Great Depression.

The deterioration in growth expectations due to the health emergency shock has also rapidly affected the financial markets. Following the change in the profit outlook, asset values decreased, adversely impacting households' spending power and financial intermediaries' willingness to grant credit. Between the beginning of the year and the fourth week of March, the world stock markets, responding to the sharp contraction in the economy, lost between 20 and 30 per cent of their capitalisation, before recouping part of the lost ground after the announcement of the economic policy measures adopted by various countries (Figure B2). Oil prices also fell steeply, plunging by more than 50 per cent, due both to expectations of a sharp drop in demand and the failure to reach an agreement within OPEC+ on production cuts (see the section on international economic conditions for more on this).

The shock associated with the three channels discussed above could be amplified if confidence were also to decrease. In this context, expectations may depend considerably not only on the evolution of the pandemic but also on economic agents' assessments of the effectiveness of the measures adopted by government institutions.

The current pandemic crisis has spread through all three of these channels. Fiscal and monetary policies have responded proactively, compatibly with budgets constraints and the market operations of central banks. In various countries, governments have sought to protect employment and support those most exposed to the shock, such as temporary workers, the self-employed and small businesses, deploying income support programmes and alleviating the tax burden.

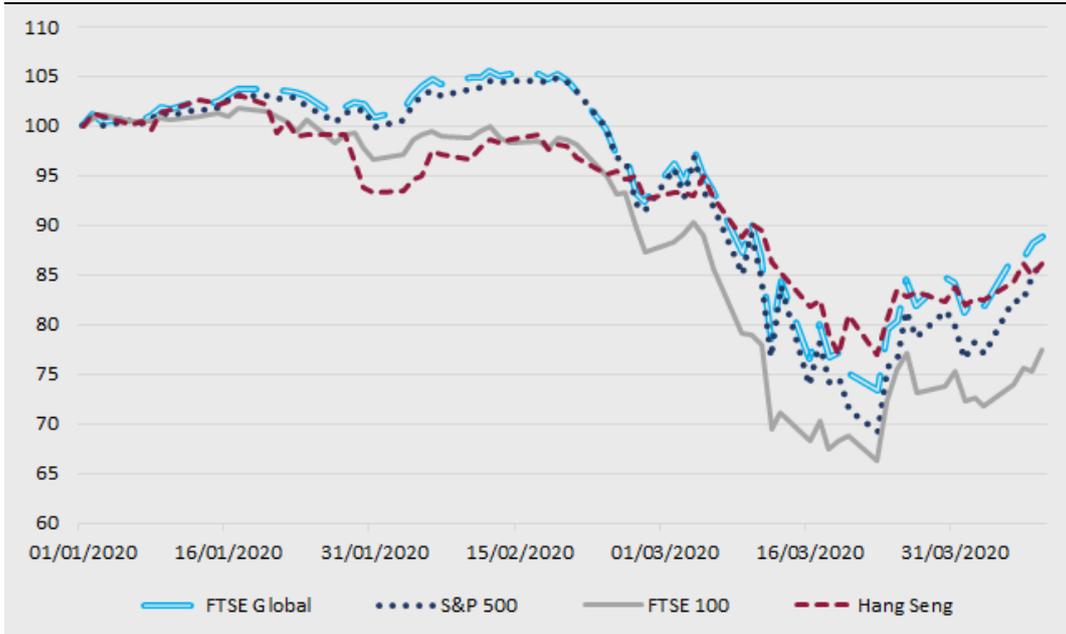
**Figure B1** – Oxford Economics weekly forecasts of global economic activity in 2020 (1)



Source: Oxford Economics.

(1) The lines represent the forecasts since early January for the change in GDP of the various areas and in world trade in 2020.

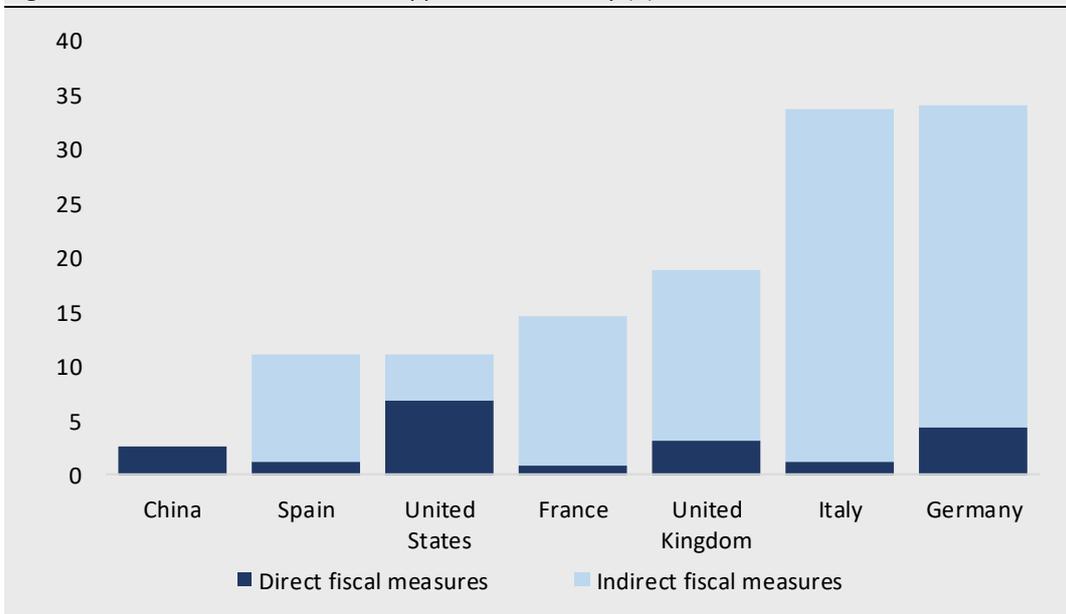
**Figure B2** – Developments in main stock market indices  
(01/01/2020 = 100)



Source: based on Refinitiv data.

Measures have also been introduced to support credit, through moratoriums and guarantees on bank loans, which, while not representing immediate increases in spending or decreases in revenue for the public sector (Figure B3), do improve the financial conditions of households and firms. On the monetary policy front, central banks have announced and launched programmes to ensure the provision of liquidity to the market and encourage lending.

**Figure B3** – Fiscal measures to support the economy (1)



Source: IMF Fiscal Monitor April 2020.

(1) Direct (above-the-line) fiscal measures comprise government spending increases and revenue decreases. Indirect (below-the-line) fiscal measures include loans, equity injections and guarantees.