

Annual Report

Rome, 31 May 2021





Annual Report

2020 – 127th Financial Year

Rome, 31 May 2021

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Address Via Nazionale, 91 00184 Rome - Italy

Telephone +39 0647921

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SYMBOLS AND CONVENTIONS

Unless otherwise specified, Bank of Italy calculations; for Bank of Italy data, the source is omitted.

In the tables:

- the phenomenon does not exist;
- the phenomenon exists but its value is not known;
- .. the value is nil or less than half of the final digit shown;
- :: not statistically significant.

In the figures with different right- and left-hand scales, the right-hand scale is identified in the notes.

For the abbreviations of the names of the European countries used in this publication, please refer to the EU's Interinstitutional Style Guide (*https://publications.europa.eu/code/en/en-000100.htm*).

THE INTERNATIONAL ECONOMY

1. THE GLOBAL ECONOMIC SITUATION, ECONOMIC POLICIES AND WORLD TRADE

The COVID-19 pandemic has had an extremely severe impact at a human, social and economic level. More than 160 million people have been infected and more than 3 million have lost their lives. According to estimates by the International Monetary Fund (IMF), global GDP fell by 3.3 per cent in 2020, the sharpest contraction since the Second World War; trade decreased by 8.9 per cent, also as a result of the restrictions on the movement of goods and people.

The spread of the virus swept through the whole global economy. With the successive epidemic waves, the economic effects played out differently across sectors and geographical areas, reflecting the severity of the pandemic at local level and the economic policy responses.

Monetary policies prevented the pandemic crisis from morphing into a financial crisis by guaranteeing liquidity to the markets and facilitating credit through various measures, including asset purchase programmes, which were also adopted by the central banks of some emerging economies for the first time. Fiscal policies played a key role in supporting the income of households and firms, especially in the advanced economies, thereby preventing the crisis from spiralling.

Financial market conditions eased progressively after the abrupt deterioration observed at the beginning of the pandemic. Since the final months of 2020, the improving growth outlook, fuelled by news about the availability of vaccines, has contributed to the reduction in investors' risk aversion and the rise in long-term interest rates, especially in the United States.

The crisis hit above all the most vulnerable population segments and countries, increasing the risk of a rise in inequality in the coming years. According to the World Bank, the pandemic brought the reduction in the number of people in extreme poverty to a halt for the first time in more than twenty years. In this context, the support of the global financial community to the most fragile economies and progress in the vaccination campaigns will be crucial to laying the foundations for overcoming the crisis, reducing economic uncertainty and accelerating the return to growth.

The economic situation and macroeconomic policies

The main advanced economies. – In 2020 the GDP of advanced countries fell by 4.7 per cent (Table 1.1), with a contraction in investment and private consumption. Conversely, household disposable income fell much less, thanks to substantial government transfers. As a result of the reduced consumption opportunities for certain

goods and services and the heightened health and economic uncertainty, households as a whole increased their savings considerably.¹ After the sharp decline in the first half of the year, due to the spread of the epidemic and the connected containment measures,² global economic activity posted a strong recovery in the third quarter; with the resurgence of infection, it slowed down again in the last quarter of the year, though to a lesser extent than in the second quarter owing to the adoption of more targeted restrictions and an improved ability on the part of individuals and businesses to adapt their behaviour (see the box 'The course of the COVID-19 pandemic and the progress in the vaccination campaign').

				Table 1.1
GDP and inflation in the percent	he main advar tage changes or	nced and emergen previous period)	ging economie	5
	G	DP	Inflati	on (1)
	2019	2020	2019	2020
Advanced countries	1.6	-4.7	1.4	0.7
Japan	0.3	-4.8	0.5	0.0
United Kingdom	1.4	-9.9	1.8	0.9
United States	2.2	-3.5	1.5	1.2
Emerging and developing countries	3.6	-2.2	5.1	5.1
Brazil	1.4	-4.1	3.7	3.2
China	6.0	2.3	2.9	2.5
India	4.8	-6.9	3.7	6.6
Russia	2.0	-3.0	4.5	3.4

Sources: IMF and national data.

(1) For Japan, the consumer price index (CPI); for the United Kingdom, the harmonized index of consumer prices (HICP); and for the United States, the personal consumption expenditure (PCE) deflator.

THE COURSE OF THE COVID-19 PANDEMIC AND THE PROGRESS IN THE VACCINATION CAMPAIGN

The spread of the virus at world level. – According to data from the World Health Organization (WHO), since the first cases were detected in China in December 2019, COVID-19 infections have numbered 164 million worldwide, while deaths have reached 3.4 million.¹

The effects of the pandemic on mortality – which in many countries was much higher than the average for the last five years – were heterogeneous

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Data as at 19 May 2021.

¹ V. Ercolani, 'Covid-induced precautionary saving in the US: the role of the unemployment rate', Banca d'Italia, *Note Covid-19*, 6 July 2020; V. Ercolani, 'Strengthening national health systems and dampening precautionary attitudes', Banca d'Italia, *Note Covid-19*, 5 November 2020; V. Ercolani, E. Guglielminetti and C. Rondinelli, 'Fears for the future: saving dynamics after the Covid-19 outbreak', Banca d'Italia, *Note Covid-19*, forthcoming.

² I. Buono and F.P. Conteduca, 'Mobility before government restrictions in the wake of Covid-19', Banca d'Italia, *Note Covid-19*, 9 November 2020.

between geographical areas (see panel (a) of Figure A), reflecting the different characteristics of the affected populations (e.g. average age and the prevalence of chronic diseases) and of the containment policies adopted. In many European countries, which were reached by the epidemic a few weeks earlier than those on the American continent, governments adopted very restrictive measures, which contributed to a drastic reduction in mobility. The interventions led to a sharp drop in daily deaths as early as at the beginning of the summer, earlier than what was observed in North and Central America. This was followed by a generalized easing of restrictions, which favoured the resumption of economic activity and social interactions (see panel (b) of Figure A). Starting in the autumn, however, a second wave of infection was triggered, which was greater than the first. With the worsening of the health situation, governments imposed new containment measures which, although less stringent than those taken previously, made it possible to reduce gradually the number of deaths in the fourth quarter. While the decline in the United States continued steadily into the early months of 2021, benefiting from the rapid vaccination campaign, in Europe the spread of more contagious variants of the virus reduced the effectiveness of the measures and caused a new resurgence of the epidemic. The spread of new variants is also at the origin of the rapid rise in infections and deaths recorded since late 2020 in South America, particularly in Brazil, and more recently in India.



Sources: Based on data from the Center for Systems Science and Engineering at Johns Hopkins University, the Google COVID-19 Community Mobility Reports, and the Blavatnik School of Government at Oxford University.

(1) Number of deaths per million people. – (2) The reduction in mobility (solid line) is shown as the percentage change in the number of visits to shops, restaurants, bars, malls, museums, libraries, cinemas and theme parks compared with the reference period between 3 January and 6 February 2020. The restrictions on mobility (dashed line; right-hand scale) are shown using the indicator proposed in T. Hale et al., A global panel database of pandemic policies (Oxford COVID-19 Government Response Tracker); *Nature Human Behaviour*, 8 March 2021. A level of 100 (0) identifies the maximum (minimum) degree of restriction of the containment policies.

The vaccination campaigns. — Thanks to the efforts of the entire scientific community, the investments of pharmaceutical companies and the allocation of substantial public and private funds to research, the development of effective

vaccines was achieved with unprecedented speed. In December 2020, with the completion of the trial phases, the major Western medicines agencies recommended that governments authorize the administration of the first vaccines within their national borders. The risk of variants that reduce their effectiveness makes it particularly urgent to accelerate the immunization of the population, which is the way out of the pandemic crisis. In this respect, the COVID-19 Vaccines Global Access (COVAX) facility, co-led by the WHO, is the leading international initiative. Although still at an early stage, the facility aims to distribute 2 billion doses, of which 1.3 billion in low-income countries, by the end of 2021 and to vaccinate at least 20 per cent of the population of the participating countries.

Some 1.5 billion doses have been administered worldwide.² However, progress in the vaccination campaign has been extremely uneven: 41.3 per cent of the doses were administered in North and Central America and in Europe, where 17 per cent of the world's population resides. In EU countries, 200 million doses were administered, with 32 per cent of the population receiving at least one. In the United States and the United Kingdom – where the vaccination campaigns have benefited from the development of effective vaccines by national producers – the share of the population that is vaccinated is 47.2 and 54.1 respectively. Progress has been slower in other advanced countries: less than 8 per cent of the population has received at least one dose in South Korea, Japan and New Zealand. In general, in Asia and Oceania the vaccination campaign is proceeding very slowly, while in Africa vaccinated individuals are a small fraction of the population.

The case of Israel. – In view of the relatively small population (9.3 million) and the large and timely availability of doses, Israel represents an important test case for analysing the effectiveness of vaccination campaigns. Starting on 19 December and accompanied by a lockdown that began on 7 January, vaccinations achieved 80 per cent coverage of the population over the age of 60 in two months. As early as in the second half of January, the number of confirmed cases began showing a rapid decline in all age groups. Among individuals over the age of 60 (those most covered by vaccinations) the fall in infection was significantly higher than for the rest of the population. The difference subsequently disappeared as the vaccination campaign proceeded (Figure B). Since mid-February, the Israeli government has gradually relaxed most of the social distancing measures, without any repercussions on the number of infections so far.

² Data as at 19 May 2021, taken from *Our World in Data*; E. Mathieu et al., 'A global database of COVID-19 vaccinations', *Nature Human Behaviour*, 10 May 2021.



The consequences of the pandemic played out differently across countries and economic sectors. In the United States in 2020 on average, the fall in GDP (-3.5 per cent) was smaller than that observed in the other major advanced countries, partly owing to the fiscal policy measures adopted, which were more sizeable than elsewhere, and to the lower intensity of the containment measures adopted in the second half of the year (Figure 1.1.a). In Japan, although no total



Source: National statistics.

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(1) Seasonally adjusted data. – (2) Year-on-year percentage changes. For the euro area and the United Kingdom, the harmonized index of consumer prices (HICP); for Japan, the consumer price index (CPI); and for the United States, the personal consumption expenditure (PCE) deflator.

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lockdown was implemented, GDP fell by 4.8 per cent, also owing to the sharp drop in exports. In the United Kingdom, the fall in GDP was among the most pronounced (-9.9 per cent), with a generalized decline in all the components of demand. The restrictions on mobility affected the service sector more heavily, in particular tourism and transport, while the decline in activity in manufacturing, though substantial, was more limited and was followed by a faster recovery.

According to the latest IMF forecasts, global GDP will increase by 6.0 per cent in 2021, while that of the advanced countries will grow by 5.1 per cent, mainly thanks to a recovery in household consumption and corporate investment. Economic activity will return to pre-crisis levels as early as in the first half of 2021 in the United States, in the second half of the year in Japan, and over the course of 2022 in the United Kingdom. In the advanced economies as a whole, GDP is forecast to return to the path predicted before the pandemic only starting in 2024.

Inflation, which was already below central banks' objectives, declined further, reverting to negative values in Japan and, temporarily, in the euro area (Figure 1.1.b); the generalized fall in aggregate demand, coupled with the resulting reduction in commodity prices, more than offset the inflationary effects of the tightening in supply.

Labour market conditions, which deteriorated abruptly in the spring of 2020, have since improved gradually. However, employment remains below precrisis levels, especially in the United States, where government interventions have focused on strengthening unemployment benefits, rather than on wage supplementation schemes as in many other countries. After rising to almost 15 per cent in April, unemployment in the United States gradually declined to around 6 per cent in early 2021; it rose by barely 1 percentage point in the United Kingdom, and by an even lesser degree in Japan. However, these developments are affected by the fall in the labour market participation rate in the United States unter the united States and the United Kingdom, as well as by problems with the statistical surveys due to the health emergency.

Following massive interventions at the early stage of the pandemic (see the box 'Central banks' response to the COVID-19 emergency', Chapter 1, Annual Report for 2019, 2020), the central banks of the main advanced countries continued to support aggregate demand and the smooth functioning of financial markets through the continuation of asset purchase programmes and liquidity supply policies and the consequent expansion of their balance sheets (Figure 1.2). In August, the Federal Reserve completed the review of its monetary policy strategy, launched in November 2018, specifying that its decisions will meet the dual objective of countering negative deviations from full employment and of achieving an inflation rate of around 2 per cent on average; therefore, moderately higher inflation can be pursued following periods in which it was below the target. Last March, the Bank of Japan also partially revised its strategy: it announced a scheme to support the profitability of the banking sector in the event of further reductions in the reference interest rate, it specified the margin of fluctuation tolerated in the movement of the ten-year rates, and it increased the upper limit on purchases of securities in the markets.

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Figure 1.2



Sources: ECB and national statistics.

(1) For the euro area, rate on main refinancing operations; for Japan, uncollateralized overnight call rate (up to 15 February 2016, the Bank of Japan's monetary policy was based on a quantitative target alone; since then it has also been based on the official reference rate); for the United Kingdom, rate on commercial banks' reserve deposits with the Bank of England; and for the United States, federal funds target range. – (2) Since 2 October 2014, the Bank of England has only included assets purchased in monetary policy operations (over 90 per cent of the total). – (3) Right-hand scale.

Fiscal policies, even after the interventions made in the first phase of the pandemic (see the box 'The fiscal policy response to the COVID-19 emergency', Chapter 1, *Annual Report for 2019*, 2020) remained expansionary, supporting households and firms. In 2020, the US government approved a series of fiscal policy plans totalling \$3,500 billion, divided between direct payments, labour market subsidies, grants to businesses and funding earmarked for the health care system, which contributed to the rise of the budget deficit to 15.8 per cent of GDP. In Japan and in the United Kingdom, the deficit was slightly lower, while in the euro area it reached 7.6 per cent (Figure 1.3.a). At the beginning of the current year, the new US administration introduced a \$1,900 billion package, which mostly extended existing measures that were scheduled to expire. Discussion is under way on a further stimulus plan focusing on infrastructure.³

In the advanced countries, fiscal interventions and the decline in GDP have led to a sharp increase in public debt, which is set to continue in the current year; the low current and expected interest rate levels are helping to curb interest expense and assuaging fears about its sustainability in the medium and long term.

The EU countries of Central and Eastern Europe. – In 2020, economic activity in the Central and Eastern European countries that are part of the EU but not of the euro area⁴ contracted by 4 per cent. According to the European Commission's

³ V. Ercolani, 'The macroeconomic impact of infrastructure investment: a review of channels', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 613, 2021.

⁴ Bulgaria, Croatia, the Czech Republic, Hungary, Poland and Romania.

forecasts, GDP will grow by 3.4 per cent in 2021. Inflation rose to 3 per cent in 2020, owing above all to currency depreciation and supply constraints. Monetary policy was very accommodative: in the economies with a floating exchange rate vis-à-vis the euro,⁵ the reference rates were cut several times. Furthermore, the central banks of Croatia, Hungary, Poland and Romania adopted asset purchase programmes. In July, Bulgaria and Croatia joined the Exchange Rate Mechanism (ERM II), a necessary step towards the adoption of the euro.

The main emerging economies. — The pandemic has had a very strong impact on the emerging economies, not only in terms of human lives lost due to the limited resources available to local health systems, but also in terms of economic growth, particularly in the countries most dependent on international tourist flows and on commodity exports. According to IMF forecasts, economic activity in the major emerging economies is expected to return to pre-crisis levels over the course of 2023, with the exception of China, where GDP had already fully recovered by the end of 2020. The rise in public indebtedness (Figure 1.3.b) was crucial to counteract the effects of the pandemic; however, it may accentuate the vulnerabilities of some countries – particularly those that have accumulated a higher stock of debt – thereby exposing them to the risk of a tightening of global financial conditions.



Source: IMF, *Fiscal Monitor*, April 2021. (1) Right-hand scale.

The economic repercussions of the pandemic first played out in China, where COVID-19 originally spread most virulently. In the first quarter of 2020, GDP declined sharply (-6.8 per cent), but it started to grow again as early as the second quarter (Figure 1.4.a), thanks to very restrictive measures taken to curb infection, wide-ranging fiscal policies to support the economy and targeted monetary policies. The recovery strengthened over the course of 2020 and, especially, the first quarter of 2021,

⁵ The Czech Republic, Hungary, Poland and Romania.

with GDP growing by 18.3 per cent on the same period of the previous year. In 2020, inflation decreased moderately, to 2.5 per cent (Figure 1.4.b).



Source: National statistics.

Shortcomings in the welfare system and the increase in household indebtedness weigh on the recovery in consumption (Figure 1.5.a). The growth in exports, driven by the demand for medical and IT equipment, led to a widening of the trade surplus (Figure 1.5.b).



Sources: BIS and IMF.

The People's Bank of China took action with liquidity injections and limited interest rate interventions, coupled with measures to facilitate access to credit for small and micro firms. Over the course of 2020, the reserve requirement on forward currency trading and the countercyclical factor in the setting of the exchange rate,

introduced in 2017 to limit downward pressures on the renminbi, were removed. On the fiscal front, the widening in the deficit in 2020 was financed by government bond issues at central and local level. There was an increase in special bond issues (totalling 3.6 trillion renminbi) to finance projects to develop infrastructure and expand the health system.

The health emergency has exacerbated the financial vulnerabilities of Chinese companies, already marked by high levels of indebtedness. Since the end of 2020, the default of some state-owned companies has triggered an increase in spreads on the corporate bond market, with tensions extending to the stock markets in conjunction with some episodes of pandemic resurgence in early 2021.

In the 14th Five-Year Plan, a growth target of at least 6 per cent was set for 2021, which is lower than the latest IMF forecasts (8.4 per cent).

In India, GDP contracted by 6.9 per cent last year, with a sharp drop recorded mainly in the industrial and service sectors (-10.7 and -7 per cent). Informal workers were severely affected by the shutdown of economic activity and transport, and remained stuck in urban areas without any livelihood or the possibility of returning to their villages. Restrictions on internal movement led to significant increases in food prices; inflation rose to 6.6 per cent in 2020 on average, above the central bank's target. The latter continued to support credit by reducing the reference rate and launching an extensive programme for the purchase of public sector securities on the secondary market. For the fiscal year 2021-22, government spending is forecast at 15.6 per cent of GDP, about 2 percentage point below the level predicted for the previous fiscal year. According to IMF estimates, GDP will grow by 12.5 per cent in the fiscal year 2021-22. However, there are still strong downside risks linked to the severe resurgence of the pandemic that occurred in March of this year.

In Brazil, GDP contracted by 4.1 per cent in 2020. In addition to the massive fiscal stimulus measures (totalling an estimated 12 per cent of GDP), the fall was mitigated by the government's decision to limit mobility less than in neighbouring countries. In early 2021, with the spread of a more contagious local variant of coronavirus, the recovery in economic activity lost momentum. Consumer inflation, which has been rising steadily since the minimum recorded in May 2020, has since March of this year been above the upper limit of the target band, reaching 6.8 per cent in April. In order to counter a de-anchoring of expectations, the central bank has increased the reference interest rate by 150 basis points since March 2021, while at the same time starting to wind down the extraordinary stimulus provided during 2020. However, the monetary tightening could curb the recovery and raise interest expense on the public debt, which grew to 88.8 per cent of GDP in 2020.

In Russia, GDP fell by 3 per cent in 2020. After the decline registered in the second quarter, to which the collapse of oil prices contributed, the economy accelerated in the second half of 2020, driven by the recovery of domestic consumption, also thanks to lighter containment measures. Fiscal policy support (estimated at 4.5 per cent of GDP) was significant, favoured by the low level of public debt. Monetary policy has responded to the crisis with large increases in liquidity and reductions in the reference rate. Since last March, the central bank has repeatedly increased official rates

to counter both the rise in inflation above the target level and the weakening of the ruble associated with the resurgence of geopolitical tensions.

In developing countries, the pandemic has led to a sharp deterioration in living conditions; according to the World Bank, the share of people in extreme poverty could increase by up to 4 percentage points in 2020-21. In these economies, the repercussions of the crisis have been amplified by limited fiscal space, the strong contraction in foreign demand, the reduction in remittance flows and, in some cases, pre-existing conflicts.

World trade

In 2020, world trade contracted by 8.9 per cent, the sharpest drop since the end of the Second World War after that recorded in 2009 in conjunction with the global financial crisis (-10.8 per cent). At the time, however, the fall in GDP had been much more limited (-0.1 per cent, compared with -3.3 per cent in 2020).

The pandemic shock affected international trade quite evenly across all the main geographical areas (Figure 1.6.a), though with a different timing linked to the spread of the virus, and an uneven impact across economic sectors, also in connection with the containment measures adopted by national governments. The impact of the health emergency was less marked regarding China's foreign trade, thanks to the rapid resumption of economic activity and the favourable trend in demand in sectors in which the country specializes. Services, which had driven global trade dynamics in recent years, were affected by the restrictions on mobility (-20 per cent, compared with -5.4 per cent in the goods component; Figure 1.6.b). Tourism suffered an unprecedented hit: in 2020, the number of arrivals of international tourists decreased by more than 70 per cent on a global scale.



Source: Based on data from the IMF, World Economic Outlook, April 2021.

After the contraction recorded in the second quarter of 2020, world trade returned to strong growth in the second half of the year. The recovery in the goods segment was faster than could be expected on the basis of aggregate demand dynamics,⁶ surpassing pre-pandemic levels in the fourth quarter. Conversely, trade in services remains well below end-2019 levels, and is expected to recover fully only over the course of 2024.

The stoppage of production in many countries in 2020 highlighted the vulnerabilities in global supply chains.⁷ The potential repercussions of the COVID-19 crisis might include the decision by multinational companies to modify their networks of suppliers and buyers; for example, bringing certain production phases that are currently outsourced abroad back to the home country could reduce the risk of supply chain disruptions. However, the evidence available so far suggests that in Italy, as in other advanced countries, companies have not radically changed their strategies for integration into the international markets following the pandemic shock.⁸

Moreover, the geopolitical tensions and protectionist tendencies that have emerged in recent years could trigger a reorganization of value chains, especially in strategic sectors such as semiconductors and pharmaceuticals. The change in the US administration has not led, so far, to a reconsideration of the protectionist measures introduced by the United States in recent years; relations with China continue to be regulated by the agreement providing for trade barriers on about two thirds of the trade between the two countries ('phase-one deal').

There have been signs of recovery in trade integration processes in other areas. At the beginning of 2021, the Chinese government reached an agreement, still to be ratified, on investment with the European Union (Comprehensive Agreement on Investment) and a free trade agreement with the ten ASEAN countries and with Australia, South Korea, Japan and New Zealand (Regional Comprehensive Economic Partnership) to promote trade regionalization in Asia. On 1 January 2021, the new agreement on trade and cooperation between the United Kingdom and the European Union entered into force (see the box 'The agreement on trade and cooperation between the European Union and the United Kingdom', *Economic Bulletin*, 1, 2021). Although the agreement provides for total exemption from duties, tariffs and quantitative restrictions for goods produced in the two economies, the introduction of customs controls has significantly slowed trade in goods between the EU and the UK in the early months of the year.

Commodity prices and markets

Oil prices. – In 2020, oil prices fluctuated widely (Figure 1.7.a). In the first half of the year, the contraction in production activity in connection with the restrictions on the movements of people and goods led to a sharp drop in the world's demand for oil (Figure 1.7.b). The unprecedented increase in crude oil inventories, which reached

⁶ A. Borin, A.G. Gazzani and M. Mancini, 'Trade and economic activity: non-linear modelling and forecasting', Banca d'Italia, Temi di Discussione (Working Papers), forthcoming.

⁷ E. Di Stefano, 'COVID-19 and global value chains: the ongoing debate', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 618, 2021.

⁸ G. Giovannetti, M. Mancini, E. Marvasi and G. Vannelli, 'Il ruolo delle catene globali del valore nella pandemia: effetti sulle imprese italiane', *Rivista di Politica Economica*, 2, 2020, pp. 77-99.

the limits of global storage capacity, resulted in a collapse in prices, which in April fell to a twenty-year low (\$20 per barrel for Brent) and even became negative for WTI for the first time ever.



Sources: Based on data from EIA, IEA and Refinitiv.

The subsequent rebalancing of the oil market was also due to the agreement reached by the OPEC+ countries in April 2020 to cut production by 9.7 million barrels per day, about 10 per cent of world production. In addition to these cuts, there was a significant reduction in supply in the United States, where the low level of crude oil prices led to the bankruptcy of many companies using unconventional extraction technologies (shale oil), which were already heavily indebted before the pandemic.

With the improvement of the growth prospects for the world economy, especially following the announcement in November of the effectiveness of the first vaccines, oil spot prices recorded sharp rises. At the same time, the slope of the futures curve (i.e. the difference between spot prices and the prices of futures contracts with a one-year maturity) became negative, signalling a gradual rebalancing in the physical crude oil market. According to estimates by the International Energy Agency (IEA), world oil demand contracted by 8.7 million barrels per day in 2020.

In early 2021, the recovery in oil prices intensified, reaching \$70 a barrel in May; the approval of significant fiscal support measures in the United States and progress in the vaccination campaigns contributed to these dynamics. Oil prices also benefited from OPEC+ countries' decision to adopt a more gradual approach in restoring production during 2021 and Saudi Arabia's unilateral decision to reduce its production by 1 million barrels per day between February and April. On the basis of the latest plan agreed by OPEC+ at the beginning of April, production is expected to gradually increase by around 2.1 million barrels per day between May and July.

⁽¹⁾ Dollars per barrel. – (2) Implied volatility of futures (CBOEOVX); percentage points. Right-hand scale. – (3) Millions of barrels per day. Right-hand scale. – (4) Change compared with the average for the previous 5 years; millions of barrels.

Other commodity prices. – Following the decline in global economic activity in the first half of 2020, industrial metal prices staged a significant recovery starting from the second half of the year, mainly driven by increased demand from China. The climate of uncertainty related to the pandemic fuelled gold prices, which for the first time exceeded \$2,000 per ounce during 2020, and then declined in the latter part of the year in connection with the decrease in investors' risk aversion.

International financial markets

The pandemic generated a phase of strong financial market turbulence between February and March of last year, when volatility exceeded the levels recorded during the financial crisis of 2008-09; liquidity in the markets deteriorated and there were sharp drops in the prices of stocks and corporate bonds, even those issued by companies considered less risky. Subsequently, market conditions eased progressively thanks to the support measures introduced by governments and central banks and, in the final part of the year, developments in the vaccination campaigns.

Advanced countries. – In the United States, long-term interest rates, which had reached new historical lows in the spring of last year, rose subsequently, at first slowly, then faster, returning close to pre-crisis levels (Figure 1.8.a). This reflected improved economic prospects, rising inflation expectations (from the very low levels reached at the height of the crisis) and strong fiscal expansion. In Japan, yields remained around zero, in line with the strategy of controlling the yield curve pursued by the central bank.



Sources: Refinitiv, Bank of Italy and ECB.

(1) Units of the first currency per single unit of the second. - (2) Right-hand scale.

Immediately after the outbreak of the pandemic, the US dollar appreciated in effective terms, also thanks also to its role as a safe haven currency. This trend was subsequently reversed, contributing to an easing of the financial conditions of the emerging economies with closer ties to the US dollar. The dollar has started appreciating again since January, in conjunction with the rapid rise in US government bond yields; against the euro, the dollar recorded a cumulative depreciation of 9 per cent between the start of 2020 and the end of May 2021 (Figure 1.8.b). The pound sterling, which had depreciated by around 5 per cent against the euro in 2020, has appreciated since the beginning of this year, supported by the ratification of the Trade and Cooperation Agreement between the United Kingdom and the European Union.

In the United States and Japan, stock market indices have more than recovered the losses accumulated during the most acute phase of the crisis, reaching in May 2021 levels that were one fourth higher than before the outbreak of the pandemic (Figure 1.9.a); volatility has decreased significantly, to levels higher than those of early 2020 but in line with the historical average (Figure 1.9.b). The recovery in stock prices was less rapid in the United Kingdom, where the much more serious economic consequences of the pandemic were compounded, for most of last year, by the ongoing uncertainty about the Brexit agreement.



Source: Refinitiv.

(1) VSTOXX for the euro area and VIX for the United States.

The main emerging economies. – The response of financial markets in the emerging economies to the spread of the pandemic has been exceptional in intensity and speed but, unlike other episodes of international tension, temporary. Investors' diminished appetite for higher-risk assets simultaneously resulted in a fall in stock prices (Figure 1.10.a), an increase in the cost of sovereign debt (Figure 1.10.b) and a weakening of currencies against the dollar (Figure 1.11.a). The rebalancing of portfolios by international investors has resulted in capital outflows (Figure 1.11.b) higher than

those recorded during previous crisis episodes;⁹ this has once again raised the issue of the adequacy of IMF resources when confronting systemic crises.¹⁰



Source: Based on Refinitiv data.

(1) MSCI equity indices in dollars. – (2) The spread measures the difference between the yields on foreign currency-denominated sovereign bonds issued by the main emerging countries and the yields on US sovereign bonds; data given in basis points based on the J.P. Morgan Emerging Market Bond Index Global (EMBIG).



Sources: Based on data from Refinitiv and the Emerging Portfolio Fund Research (EPFR).

(1) Exchange rate against the dollar; an increase in the index signals a depreciation. – (2) Cumulative capital flows towards funds investing in financial assets of emerging countries; billions of dollars. The dates on which the shocks began are: 15 September 2008 (global financial crisis); 22 May 2013 (episodes of financial turbulence known as the 'taper tantrum'); 8 November 2016 (election of US president Donald Trump); 21 February 2020 (COVID-19).

¹⁰ F. Eguren Martin, M. Joy, C. Maurini, A. Moro, V. Nispi Landi, A. Schiavone and C. van Hombeeck, 'Capital flows during the pandemic: lessons for a more resilient international financial architecture', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 589, 2020.

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Figure 1.11

⁹ F. Ferriani, 'From taper tantrum to COVID-19: portfolio flows to emerging markets in periods of stress', Banca d'Italia, Temi di Discussione (Working Papers), forthcoming.

Capital flows to the emerging economies resumed in the second half of 2020, thanks to the exceptionally accommodative stance of monetary policy in the advanced economies. Financial conditions gradually improved, albeit with heterogeneous trends across countries, reflecting the different degree of success in curbing the pandemic and strengthening the economic recovery. In China, capital inflows were particularly intense, also thanks to the inclusion in the main benchmark indices for global investors of Chinese stocks and bonds denominated in renminbi and traded on the national markets.¹¹

The rise in interest rates in the United States since the end of 2020 has not resulted in a widespread tightening of the financial conditions in the emerging countries. However, some economies (Brazil, India and Turkey) remain more greatly exposed than others to a sudden increase in volatility on the international markets.

The crypto-asset market. – In 2020, the market for crypto-assets grew significantly. Total capitalisation rose from around \$190 billion at the beginning of the year to around \$760 billion at the end of December. The increase was concentrated in the last quarter, in a context of a higher risk propensity on the part of market players, and continued at an even higher rate in the early months of 2021, on account of purchases by institutional investors, companies and small investors. Since mid-May, expectations of stricter regulation at international level and the scepticism of some companies about the use of Bitcoin as a means of payment and investment have triggered a strong and widespread drop in prices. In any case, in the first five months of 2021, total market capitalization more than doubled, to values close to \$1,700 billion; that of the stablecoins segment¹² rose to around \$98 billion in mid-May 2021, from \$30 billion in December 2020, also thanks to the listing of a major market player. The total amount of crypto-assets employed on decentralized finance (DeFi) platforms rose by \$48 billion in the first five months of 2021, from \$16 billion at the end of 2020. Developments in capitalization reflected those in the prices of leading crypto-assets (Bitcoin and Ether). Volatility remained high, peaking at more than 100 percentage points in March and in the first quarter of this year.

The support of the international financial community to the most vulnerable countries. – The marked weakening in the growth prospects of low-income countries, which even before the pandemic were characterized by high levels of indebtedness, prompted the international community to offer assistance to these countries via an increase in IMF loans granted on favourable terms and financing from multilateral development banks, as well as through some major initiatives promoted by the G20, in particular the approval of a debt moratorium on loans (Debt Service Suspension Initiative, DSSI) and the adoption of a shared approach for managing future debt restructuring operations (Common Framework for Debt Treatments beyond the DSSI).

¹¹ S. Antonelli, F. Corneli, F. Ferriani and A. Gazzani, 'Benchmark effects from the inclusion of Chinese A-shares in MSCI global indexes', Banca d'Italia, Temi di Discussione (Working Papers), forthcoming.

¹² The segment consists of crypto-assets whose value is stabilized, typically, by anchoring it to the value of other financial assets.

Loans from the Poverty Reduction and Growth Trust (PRGT), the instrument through which the IMF provides concessional loans to low-income countries, increased by more than \$8 billion in 2020. In anticipation of the growing demand for financial assistance in the coming years, the IMF has raised the PRGT's lending capacity by around \$24 billion. The Bank of Italy contributed to the increase by pledging approximately \$1.4 billion.

The leading multilateral development banks intervened by committing \$230 billion to fund investment projects in the health sector and the purchase of vaccines, to strengthen social safety nets, and to support the private sector. The considerable scale of the investment needed to facilitate the recovery and the structural transformation of the developing economies has intensified the debate on the financial capacity of these institutions and the possible measures that could be taken to ensure optimal use of the resources allocated to them.¹³

The DSSI, adopted in May 2020, has allowed 43 low-income countries to obtain a deferment of payments amounting to a total \$5.7 billion over the course of 2020, mitigating liquidity pressures and releasing resources that can be used to respond to the crisis. The debt moratorium was mainly applied by official bilateral lenders; private creditors and multilateral development banks did not participate. The latter considered that their participation would have had a negative impact on their ratings, thus hindering the mechanism on which the functioning of these institutions is based. Last April, the G20 finance ministers and central bank governors agreed to extend the duration of the initiative one last time, until the end of 2021.

The Common Framework for Debt Treatments beyond the DSSI, approved in November 2020, outlines a coordinated approach to ensure that debt restructuring operations concerning low-income countries, where necessary, are timely, centred on IMF adjustment programmes and based on the principle of fair burden sharing among creditors, which envisages the inclusion of private entities in debt restructuring processes.

Italy's G20 Presidency. – On 1 December 2020, Italy took on the presidency of the G20, in a global context characterized by complex challenges, the solution of which requires ever closer international cooperation. The work programme of the Italian G20 develops around three pillars (people, planet and prosperity) and aims to identify long-term strategies to promote the transformation towards more sustainable, digital and inclusive societies, with a special focus on health and the environment. In line with these priorities, the G20 Finance Track has launched several initiatives: in the field of sustainable finance, it reactivated the Sustainable Finance Working Group (SFWG; see Chapter 15, 'Central banks, climate risks and sustainable finance'), with the aim of making it more stable and able to provide policy recommendations; on the health front, it established the High Level Independent Panel on financing the Global Commons for Pandemic Preparedness and Response, which is tasked with drawing up proposals for preparedness and response to pandemic crises.¹⁴

¹³ R. De Marchi and R. Settimo, 'Will multilateral development banks weather the Covid-19 crisis?', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 598, 2021.

¹⁴ Ministry of Economy and Finance and Bank of Italy, 'The G20 establishes a High Level Independent Panel on financing the Global Commons for Pandemic Preparedness and Response', press release, 27 January 2021.

The Italian Presidency is also continuing its cooperation effort in response to the crisis, with special attention being devoted to initiatives in support of the most vulnerable countries. At last April's meeting, the G20 finance ministers and central bank governors, in addition to extending the DSSI, also reached a consensus on a new general allocation of special drawing rights (SDRs) equivalent to \$650 billion. This decision, aimed at addressing the issue of the insufficient foreign exchange reserves of a large number of emerging and developing economies, could generate substantial benefits for low-income countries.

The G20's priorities also include action to make cross-border payments cheaper, faster, more transparent and more inclusive through the implementation of the Cross-Border Payments Roadmap agreed on last October; this includes the setting of quantitative efficiency targets at global level. The Bank of Italy is actively involved in the areas of work tasked with developing the building blocks provided for in the programme and is responsible for one of these building blocks. A related area is financial inclusion, for which the Bank has taken action, in its role of co-chair, since 2021, of the Global Partnership for Financial Inclusion (GPFI). The GPFI's action is focusing on digital financial inclusion, in particular on the gaps that have emerged during the pandemic and on identifying best practices to bridge them, including through regulation and consumer protection.

THE EURO-AREA ECONOMY

2. THE ECONOMY AND FISCAL POLICIES OF THE EURO AREA

Euro-area GDP recorded the sharpest contraction since the inception of the Monetary Union. The dynamics of economic activity during the year reflected the course of the epidemic and the resulting containment measures: the sharp drop in the first two quarters was followed by a marked recovery in the summer months, which came to a halt in the autumn, however.

The reduction in inflation, which declined to 0.3 per cent on average for the year, reflected the fall in global demand, in energy prices, and in domestic economic activity. The increase recorded in early 2021 reflected the recovery of the energy component but also a number of temporary factors, the impact of which is expected to be largely reabsorbed during the year. While pointing to a recovery, the outlook for prices remains weak over the medium term.

The fiscal policy response to the pandemic crisis was incisive and was carried out using multiple instruments, among which the activation of the general escape clause of the Stability and Growth Pact, the increase in flexibility in the use of EU Cohesion Funds and the adoption of a temporary framework concerning the rules on State aid. The agreement reached in July 2020 on the Next Generation EU programme for the common funding of individual countries to support recovery is an innovation of historic importance.

The expansionary fiscal policy stance has been common to all the Member States and has responded to the severity of the crisis. According to the European Commission's latest estimates, the ratio of net borrowing to GDP rose by 6.6 percentage points on average in the euro area; the ratio of public debt to GDP increased by slightly more than 14 points.

Cyclical developments

In 2020, as a result of the pandemic and of contagion control measures, euroarea GDP contracted by 6.6 per cent; the decline spread to all the leading economies (Table 2.1). The fall in manufacturing activity was concentrated in the first half of the year, while the weakness of the services sector increased again in the last part of the year, following the resurgence of infections.

Gross fixed investment fell (-8.2 per cent), slightly more than household expenditure did. The latter was affected both by the measures closing some sectors and by the restrictions on mobility and fears of contagion; the household saving rate rose to 20.0 per cent, also owing to the strengthening of the precautionary motive; the higher

financial saving of households was mostly turned into deposits (see the box 'Financial flows in the euro-area countries during the pandemic'). The fall in exports (-9.3 per cent) was in line with that in exports (-9.0 per cent).

								Table 2.1
GDP in the main euro-area countries (1) (percentage changes on previous period)								
	2018	2019	2020	2020				2021
				Q1	Q2	Q3	Q4	Q1
Euro area (2)	1.9	1.3	-6.6	-3.8	-11.6	12.5	-0.7	-0.6
France	1.8	1.5	-8.1	-5.8	-13.6	18.5	-1.4	0.4
Germany	1.3	0.6	-4.8	-2.0	-9.7	8.7	0.5	-1.7
Italy	0.9	0.3	-8.9	-5.6	-12.9	15.8	-1.8	-0.4
Spain	2.4	2.0	-10.8	-5.4	-17.8	17.1	0.0	-0.5

Sources: Based on national statistics and Eurostat data.

(1) Chain-linked volumes. The quarterly series are adjusted for seasonal and calendar effects. - (2) Reference is to the current euro area, with 19 members.

FINANCIAL FLOWS IN THE EURO-AREA COUNTRIES DURING THE PANDEMIC

In 2020, although the primary incomes of euro-area households recorded the sharpest fall since the launch of the monetary union (-3.1 per cent at current prices), gross disposable income increased slightly (0.2 per cent), thanks to the exceptional expansion in net social transfers. The decline in consumption and in investment in housing and fixed capital (-7.6 and -5.0 per cent respectively at current prices) brought the ratio between households' financial balance to gross disposable income to 11.3 per cent (from 3.9 per cent in 2019), the highest figure since the introduction of the euro. The rise was widespread in the main euroarea economies (see the figure).



Sources: Based on data from the Bank of Italy, the ECB, Eurostat and Istat. (1) 4-quarter cumulative flow for the financial balance of households in relation to the cumulative flow of gross disposable income for the same period.

The increased savings of households were mainly used in bank and postal deposits, which grew by just under 8 per cent in the euro area as a whole. The increase in loans (3.1 per cent) was boosted by the expansionary monetary policy

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stance and by public guarantees, with a shift towards medium and long-term maturities.

The financial balance of companies, which is usually negative, became decidedly positive (equal to 2.2 per cent of value added): this reflected the contraction in gross investment (-12.8 per cent at current prices, the most marked since 2009), which more than offset the fall in value added and profits, although this was significant (-6.7 and -7.7 per cent respectively). The balance for the sector remained negative in France, where the decline in investment was lower.

The financial liabilities of non-financial corporations grew by 1.9 per cent, above all due to the increase in loans, which was fairly homogeneous between countries (to 3.4 per cent). In addition, there was a considerable shift in maturities, with an increase in the share of medium- and long-term ones. Firms' financial debts net of liquid assets instead declined slightly, by 0.3 per cent; (in Italy they fell by 5.1 per cent) following the marked expansion in accumulated precautionary deposits.¹

The expansion in social benefits expenditure and the fall in taxes led to a significant growth in general government net borrowing, which increased to 7.2 per cent of GDP (from 0.6 per cent in 2019). Net issuance of public securities amounted to around \notin 1,000 billion, or 10.6 per cent of the stock of loans at the end of the previous year; the increase was much greater in Germany and France, and more limited in Spain and Italy.²

Purchases of public debt securities by monetary financial institutions (MFIs), which include central banks, were high. For euro-area central banks, the share of public sector securities in total financial assets rose to 29.8 per cent, from 28.2 per cent in 2019; for the other financial intermediaries included among MFIs,³ it increased from 5.1 to 5.7 per cent. The expansion in the assets of the latter was matched, on the liabilities side, by a sharp increase in the collection of deposits, common to all countries.

The support measures launched by national governments (including the extension of wage integration programmes) made it possible to support disposable income and employment; the decline in the latter, given the reduction in hours worked of about 8 per cent on average for the year, was 1.6 per cent.

In the first quarter of 2021, GDP fell by 0.6 per cent. The data for April show prospects for improvement; the Bank of Italy's €-coin indicator, which provides a

¹ L. Infante, F. Lilla, G. Marinelli, M. Marinucci, G. Semeraro and F. Vercelli, 'The economic and financial accounts during the COVID-19 public health crisis', Banca d'Italia, *Note Covid-19*, 14 January 2021.

² In Germany, by 15 per cent (€255 billion), in France by 11.9 per cent (€286 billion), in Spain by 8.1 per cent (€100 billion) and in Italy by 6.4 per cent (€145 billion).

³ In addition to central banks, MFIs include banks, money market funds, electronic money institutions and, for Italy, the Cassa Depositi e Prestiti.

monthly estimate of GDP growth in the euro area, net of short-term volatility, stood at 0.92 (it was 0.32 in February 2020; Figure 2.1.b). The purchasing managers' index (PMI) for manufacturing pointed to prospects for growth in production, while it continued to show a greater weakness for services.



(1) See the section on the €-coin indicator for April 2021 on the Bank of Italy's website, '€-coin: April 2021.

Prices and costs

In 2020, consumer price inflation in the euro area fell to 0.3 per cent. Prices increased slightly more in France and Germany, by 0.5 and 0.4 per cent respectively, while they declined in Italy by 0.1 per cent. The reduction reflects the decrease in energy prices due to the fall in oil prices (Figure 2.2); inflation net of the most volatile components also went down, to 0.7 per cent on average for the year; between September and December, it averaged 0.2 percent (a historical low).

The contraction in demand and the various measures taken by governments helped to curb price growth. The reduction in VAT



Source: Based on Eurostat data. (1) Harmonized index of consumer prices (HICP).

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rates in Germany in the second half of the year contributed to the fall in the prices of industrial goods; inflation in services was also affected by the trend in travel and leisure items, which were more penalized by the measures to contain infection.

Inflation has turned positive since January 2021, reaching 1.6 per cent in April. The increases observed at the start of the year were, however, largely due to temporary factors: the fading out of the effects of cutting VAT rates in Germany; the measures introduced by the German Climate Action Programme 2030 (e.g. carbon tax, incentives for using energy from sustainable sources and increased taxes on new vehicle registrations based on CO_2 emissions); and the delayed start of the winter seasonal sales periods in France and Italy.

It must be added here that the developments in inflation since the beginning of the health crisis have been affected by important statistical effects, which are also of a temporary nature. In 2020, the public health emergency created considerable difficulties in the collection of price data, in many cases making it necessary to impute elementary data, especially for many services whose use was limited by containment measures. The pandemic also led to significant changes in the basket of consumer goods and services which, based on Eurostat's recommendations, altered the structure of the weighting coefficients of the elementary indices in 2021.

Inflation expectations as implied by inflation swap yields over the two-year horizon stood at 1.6 per cent in the first week of May, and those over the five-year horizon at around 1.5 per cent.

The financial markets

In the weeks immediately following the onset of the public health emergency, there were significant tensions in the euro-area financial markets, which peaked around mid-March and gradually abated following the monetary policy interventions. Conditions relaxed firstly with the announcement of the pandemic emergency purchase programme (PEPP), launched on 18 March by the European Central Bank (see Chapter 3, 'Monetary policy in the euro area'), and then with the announcements on fiscal and monetary policy. Expectations becoming more favourable with the start of the production and distribution of vaccines contributed to the improvement in the second half of 2020.

After the marked increases in the first part of the year, government bond yields (Figure 2.3.a) and sovereign credit risk premiums (Figure 2.3.b) declined following the interventions of the monetary and fiscal authorities. Between the beginning and the end of the year, the yield on German ten-year government bonds decreased by 38 basis points and sovereign risk premiums fell in all the leading euro-area countries.

At the end of 2020, the increases in risk premiums of corporate bonds in euros observed during the most acute phase of the crisis subsided completely in the investment grade segment, but only partially in the high-yield segment.



Source: Based on Bloomberg data.

Share prices, which had fallen by 37 per cent around 20 March compared with the peak reached before the outbreak of the pandemic, almost entirely recovered the losses suffered in the early months of 2020. Sectoral trends were affected by the uneven impact of the crisis on different sectors of economic activity. In 2020 as a whole, against a 1 per cent drop in the general stock market index, the banking index fell by 25 per cent, penalized by fears about the recessionary effects on economic activity, by the freeze on dividend distribution to shareholders, and by the impact of lower interest rates on profitability. The volatility in share prices implied in the prices of options returned to levels that were only slightly higher than those prevailing at the beginning of the year.

In the first five months of 2021, the conditions in euro-area financial markets continued to benefit from the ample liquidity guaranteed by the expansionary measures adopted by the ECB. Progress in vaccination campaigns in various countries around the world and the approval of the new stimulus plan in the United States helped to reinforce global growth and inflation expectations. This led to a marked rise in long-term interest rates in the United States, which triggered an increase in euro-area interest rates too, countered by the decisions taken by the ECB Governing Council in March (see Chapter 3, 'Monetary policy in the euro area').

The improvement in the prospects for economic growth favoured the decrease in risk premiums of corporate bonds, in both the investment grade and the high yield sectors, and an increase in equity prices. Prices rose most in the sectors where the recovery in economic activity was more beneficial, including those in the banking sector (by 28 per cent), also boosted by the increase in long-term interest rates and a better than expected performance of earnings.

Fiscal policies

The budget outcomes. – In light of the severe recession caused by the pandemic, on 23 March last year, the Council of the EU judged that the conditions for activating the

general escape clause of the Stability and Growth Pact had been met for the first time since its introduction in 2011.¹ This clause, which allows temporary deviations from the objectives of the Pact, enabled Member States to define broad-ranging expansionary fiscal policies to counter the effects of the public health crisis. The European institutions also extended the flexibility in the use of European Cohesion Funds and temporarily relaxed the restrictions on State aid.²

In 2020, the public deficit as a share of GDP in the euro area amounted to 7.2 per cent of GDP, around 6.6 percentage points higher than in 2019. The increase reflects the deterioration in the primary balance compared with GDP (6.7 points). The fiscal stance was expansionary in all euro-area economies; according to European Commission estimates, the cyclically adjusted primary balance fell by 2.5 percentage points of GDP in the euro area. The considerable stability of interest expense in relation to GDP (-0.1 percentage points of GDP) also reflects the accommodative stance of monetary policy.

The debt-to-GDP ratio rose by just over 14 percentage points to 100 per cent, the highest figure since the introduction of the euro. This growth affected all the main euro-area economies, albeit in a heterogeneous way; the debt-to-GDP ratio increased in Germany and France by just over 10 and 18 percentage points respectively, and in Italy and Spain by 21 and 24 points.

Last autumn, the activation of the general escape clause was also confirmed for the current year. According to the European Commission's latest forecasts, published on 12 May, net borrowing in 2021 stands at 8 per cent of GDP in the euro area; thanks to the economic recovery (nominal GDP growth is estimated at 5.5 per cent), the debt-to-GDP ratio will only increase by around 2 percentage points, to 102.4 per cent.

The Commission underlined that coordination of fiscal policies between Member States is crucial for supporting recovery,³ at a time when uncertainty is still high and the monetary policy stance remains very accommodative; it highlighted the need to maintain support measures, using timely, temporary and targeted interventions that take account of the course of the pandemic. The Commission recommended greater policy differentiation for 2022 (when, according to its preliminary assessments, the general escape clause should remain active), reflecting the different room that Member

¹ Council of the European Union, 'Statement of EU finance ministers on the Stability and Growth Pact in light of the COVID-19 crisis', press release, 23 March 2020.

² In March last year, the European Commission adopted a temporary framework of rules to allow wider public intervention in favour of firms; specifically, for 2020, the framework envisaged the possibility of disbursing direct grants and loans (the latter at zero interest rate) of up to \in 800,000 for firms and guarantees up to full risk coverage (see Chapter 2, 'The economy and fiscal policies of the euro area', *Annual Report for 2019*, 2020). The temporary framework has been amended several times in light of the evolution of the pandemic, most recently on 28 January 2021, when the deadline was extended to 31 December 2021 and the aid ceilings were raised. The temporary framework had already been amended previously to: (a) increase public support for research and development of products to combat the pandemic; (b) safeguard employment; (c) allow recapitalization measures and provide subordinated debt; (d) expand the base of beneficiary firms; (e) extend the application of support measures for the first time (until 30 June; the recapitalization measures until 30 September 2021); and (f) include part of the fixed costs not covered by revenue among the losses that can be offset by aid measures.

³ European Commission, Communication from the Commission to the Council. 'One year since the outbreak of COVID-19: fiscal policy response', COM(2021) 105 final, 3 March 2021.

States have for budgetary manoeuvres, but that nevertheless remains consistent with an overall expansionary budgetary stance.

The European response to the pandemic-related economic crisis

In April last year, the Board of Directors of the European Investment Bank (EIB) approved the establishment of a guarantee fund for corporate financing (with the participation of Member States). The following month, the Council of the EU approved the regulation of the instrument known as 'temporary Support to mitigate Unemployment Risks in an Emergency' (SURE). At the same time, a precautionary credit line to deal with the pandemic emergency (Pandemic Crisis Support) became operative, provided by the European Stability Mechanism (ESM), for financing interventions directly or indirectly linked to countering the pandemic. In mid-May of 2021, 19 countries made use of SURE, while no country requested access to the PCS credit line. In July 2020, the EU heads of State and governments reached an agreement on the introduction of an innovative programme for the common funding of national recovery support plans (Next Generation EU, NGEU).⁴

SURE. – In March 2021, the European Commission published the first six-monthly report on SURE (see Chapter 2, 'The economy and fiscal policies of the euro area' in the *Annual Report for 2019*, 2020).⁵ Since this instrument became available, loans for more than 94 per cent of the total budget ($\in 100$ billion) have been granted. The actual disbursements, financed through the issuance of bonds with an average maturity of about 15 years, have so far amounted to €75.5 billion. For the beneficiary countries, the main advantage of these loans, apart from their long maturities and the reduction in recourse to the market, is the spread between the interest rate applied by the Commission, averaging about -0.2 per cent, and the return on domestic securities. Among the main economies in the area, Italy and Spain have so far received €26.7 billion and €18 billion respectively (compared with €27.4 and €21.3 billion granted in total); Germany and France have not applied for support because they raise funds on the market at rates below or close to those of the Commission.

Next Generation EU. - Under the NGEU programme, the European Union will be able to raise funds on the capital market of up to \notin 750 billion⁶ for the granting of transfers and loans (\notin 390 billion and \notin 360 billion respectively). The allocation among the Member States takes account above all of the pre-pandemic economic situation of each country and the damage suffered. The resources fund measures to support recovery and increase the resilience of economies to address future challenges. The debt will have to be repaid by 2058. In order to finance the programme, the Commission

⁴ European Council, 'European Council conclusions, 17-20 July 2020', press release, 21 July 2020.

⁵ European Commission, 'Report on the European Instrument for Temporary Support to mitigate Unemployment Risks in an Emergency (SURE) following the COVID-19 outbreak pursuant to Article 14 of Council Regulation (EU) 2020/672'. 'SURE: Taking Stock after Six Months', COM(2021) 148 final, 2021.

⁶ The amounts are at 2018 prices. At current prices, the European Commission estimates it will raise about €800 billion on the market between 2021 and 2026.

will adopt a diversified strategy, replacing the approach used so far to transfer funds to the Member State with the same conditions under which the Commission collects them on the capital market (back-to-back). The new strategy includes, as well as the issuance of long-term bonds (with maturities of between 3 and 30 years), that of short-term securities (EU-Bills); traditional placements through syndicated transactions will be accompanied by auctions (the only technique for issuing EU-Bills).⁷

Almost 90 per cent of NGEU's resources are part of the Recovery and Resilience Facility (\notin 312.5 billion in transfers and all 360 loans), the regulation of which was approved last February.⁸ The remainder (\notin 77.5 billion) is for a series of other EU programmes.⁹

To counter the effects of the pandemic, the criteria for allocating the grants disbursed through the Facility are based on GDP per capita, population and the unemployment rate. In nominal terms, Spain and Italy are the main beneficiaries (€69.5 and €68.9 billion respectively), followed by France (€39.4 billion) and Germany (€25.6 billion). Some 70 per cent of grants (€218.75 billion) must be legally committed by 2022, and the remainder by 2023.¹⁰

As regards loans, the maximum amount allowed to each State is normally 6.8 per cent of its gross national income in 2019; it may be possible to exceed this ceiling, if compatible with the availability of resources, and in exceptional circumstances. The financial conditions (amount, average maturity, interest rate and timetable for refunds) will be decided on a case-by-case basis. The reimbursement plan should ensure a constant and predictable reduction in liabilities.

To apply for the Facility's resources, countries must draw up national recovery and resilience plans that set out reforms and investments to be carried out in six areas: (a) the green transition; (b) digital transformation; (c) jobs and smart, sustainable and inclusive growth; (d) social and territorial cohesion; (e) health and resilience; and (f) policies for the next generation, including education and skills. The plans should explain in detail not only how these measures respond to the recommendations made by the Commission as part of the European Semester, but also how they can strengthen growth potential, employment and economic resilience, and lastly, how they can contribute to the green and digital transitions (to which 37 and 20 per cent of resources are allocated, respectively). The plans must also indicate the time line for carrying out

⁷ European Commission, 'Communication from the Commission to the Council on a new funding strategy to finance Next Generation EU', COM(2021) 250 final, 2021.

⁸ Regulation (EU) 2021/241 of the European Parliament and of the Council of 12 February 2021 establishing the Recovery and Resilience Facility.

⁹ Specifically, €47.5 billion are earmarked for interventions to alleviate the short and medium-term consequences of the crisis through the Recovery Assistance for Cohesion and the Territories of Europe (React-EU) programme; €10 billion for measures to compensate for the economic costs of the environmental transition through the Just Transition Fund (JTF); €7.5 billion for assistance for rural areas through the European Agricultural Fund for Rural Development (EAFRD); €5.6 billion through a new EU programme to support investment and access to finance (InvestEU); €5 billion for investment in health and the environment under the EU research and innovation framework programme (Horizon Europe); and €1.9 billion for the EU Civil Protection Mechanism (specifically, RescEu).

¹⁰ The amounts are estimated based on the European Commission's autumn forecasts. The estimates will be updated by 30 June 2022 to take account, among other things, of the final GDP figures for 2020 and 2021.

the reforms and actions, specifying the qualitative and quantitative results expected to be achieved; the disbursement of funds is contingent on compliance with the deadlines and with achievement of the objectives.

In mid-May, 18 countries presented their national plans (see the box 'The National Recovery and Resilience Plan', Chapter 4).¹¹ The European Commission will examine them within two months of their official submission; the evaluation must be approved within one month by the European Council. In the two following months, a sum of up to 13 per cent of the value of each plan will be disbursed, in the form of pre-financing.

The European Union's multiannual financial framework 2021-27. – On 17 December 2020, the Council of the EU approved the European multiannual financial framework for the years 2021-27.¹²

In order to take into account the UK's exit from the European Union, to meet the costs of NGEU-related debt service and to facilitate the achievement of Europe's climate objectives, in December, the Council adopted a new Decision on own resources,¹³ the main source of revenue for the EU budget. Based on this decision, the annual ceiling on own resources is permanently raised to 1.4 per cent of the EU's total gross national income, from the previously established figure of 1.2 per cent. There will also be a temporary increase of a further 0.6 percentage points in the ceiling until the reimbursement of NGEU's liabilities (no later than 31 December 2058). In order for the Commission to be able to find resources on the capital markets to finance NGEU, the own resources decision will have to be approved by all EU Member States. As of 21 May 2021, it had been ratified by 22 countries, including France, Germany, Italy and Spain.

The Decision on own resources includes, among other things, a new contribution from Member States calculated on the basis of non-recycled plastic packaging waste. By June 2021, the Commission will have to submit proposals on the introduction of a digital tax and of a carbon border adjustment mechanism. Both taxes should enter into force by 1 January 2023 at the latest. The European Council invited the Commission to present a proposal to take action on the EU's greenhouse gas emission trading scheme, possibly extending it to the air and sea sectors. The introduction of additional own resources could include a tax on financial transactions.

European economic governance reform. – In February 2020, the European Commission launched a public consultation with the aim of reforming economic

¹¹ While all the countries envisaged the use of grants (accounting for almost 90 per cent of the total resources available), only six countries (Cyprus, Greece, Italy, Poland, Portugal and Slovenia) include measures funded by loans (accounting for almost 40 per cent of the total resources available). According to the regulation for the Facility, loans may be requested even after the submission of the NRRP, but before 31 August 2023.

¹² Council Regulation (EU, Euratom) 2020/2093 of 17 December 2020, laying down the multiannual financial framework for the years 2021 to 2027.

¹³ Council Decision (EU, Euratom) 2020/2053 of 14 December 2020, on the system of own resources of the European Union and repealing Decision 2014/335/EU, Euratom.

governance;¹⁴ the new system of rules should simplify the current one and overcome its main weaknesses, specifically by facilitating countercyclical fiscal policies and promoting a more growth-friendly composition of public budgets. The consultation was suspended because of the pandemic but should be resumed in the coming months.

The debate on the reform of European economic governance, launched before the Commission's initiative, is very broad and complex.¹⁵ The need to simplify the system of European rules, the complexity of which has increased considerably in recent years, and make them more transparent, is generally shared. Ensuring the medium-term sustainability of public finances is a priority in the debate. To this end, some proposals suggest moving from a number of targets that are equal for all countries¹⁶ (currently relating to nominal and structural deficits and to public debt) to a single target for government debt, defined specifically for each country. At operational level, the flow variable most suited to being used as an intermediate target is generally indicated in the growth of nominal primary expenditure (excluding cyclical effects and discretionary revenue-related measures), assessed over a multiannual period. The drafting of the proposals is not yet at an advanced stage; the use of stochastic analysis techniques for assessing the sustainability of public finances, to which reference is made in some cases, has both theoretical (the empirical regularities observed in the past cannot always provide an adequate basis for predicting future dynamics) and practical difficulties (misunderstandings of the interpretation of the results of these analyses could cause tensions on the financial markets). The expenditure indicator - essentially a structural balance net of certain components – might not be easy to use in practice.

Especially after the pandemic crisis, and following the initiatives at European level to support the emergency and relaunch policies of individual countries, the idea that the reform of the common rules – which impose limits on national fiscal policies – should be accompanied by the introduction of permanent instruments at EU level, which can support Member States' policies in the face of particularly intense and long lasting adverse macroeconomic shocks, has returned to the forefront of the debate. The advantages of a joint budgetary capacity have long been underlined in the debate on the completion of European economic governance.

¹⁴ European Commission, 'Communication from the Commission to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions. Economic governance review', COM(2020) 55 final, 2020.

¹⁵ Among the most recent contributions, see the European Fiscal Board, *Annual Report*, 2020; O. Blanchard, A. Leandro and J. Zettelmeyer, 'Redesigning EU fiscal rules: from rules to standards', Peterson Institute for International Economics, Working Paper, 21-1, February 2021; P. Martin, J. Pisani-Ferry and X. Ragot, 'Pour une refonte du cadre budgétaire européen', *Les notes du conseil d'analyse économique*, 63, 2021.

¹⁶ Only the medium-term objective for the structural balance is differentiated by country, based, among other things, on the level of public debt and the expected impact of demography on the public accounts.

3. MONETARY POLICY IN THE EURO AREA

In response to the risks to economic activity, price stability and monetary policy transmission arising from the pandemic, the ECB was decisive in adopting expansionary measures. In March 2020, its intervention countered the very strong turbulence in the financial markets and enabled them to stabilize; this subsequently made it possible to maintain accommodative financing conditions for households, firms and governments, which are crucial to deal with the contraction of the economy.

The terms of targeted longer-term refinancing operations were made more favourable; The asset purchase programme was strengthened; the new pandemic emergency purchase programme (PEPP), covering public and private sector securities, was launched and expanded on several occasions. Its flexible purchase approach distinguishes it from previous programmes; it has made it possible to intervene quickly when and where necessary, playing a vital role in countering tensions in the financial markets.

In December, the ECB Governing Council expanded the PEPP and decided that its purchases will aim at maintaining favourable financing conditions for a prolonged period of time, adjusting the amount of monthly purchases flexibly to take account of developments in sovereign yields and in other financial indicators as well as of the inflation outlook. In March 2021, the Governing Council decided to increase the volume of monthly purchases under the PEPP significantly, until June. Large and persistent increases in yields do not appear to be justified by the current economic outlook, and will be countered.

The Governing Council remains committed, even once the crisis is over, to intervening with all the instruments at its disposal to support growth and ensure a sustained return of inflation, which is still too low, to levels consistent with the price stability objective.

At the beginning of 2020, the ECB launched its monetary policy strategy review. Work resumed last summer after being put on hold to address the pandemic emergency, and is scheduled to end in the second half of this year. The review will take account of the changes observed in the economy over the last two decades and will re-examine the main aspects of monetary policy conduct, including the quantitative definition of price stability, how to ensure that the objective is perceived as symmetric, and how to strengthen the capacity of monetary policy to stabilize the economy, countering the risks of deflation in a low interest rate environment and through the use of unconventional instruments.

Monetary policy action

In March and April 2020, in view of the rapid spread of the epidemic, the sudden worsening of the outlook for growth and inflation, and the severe turmoil on the financial markets (Figure 3.1), the Governing Council of the ECB took decisive action to avert a liquidity crisis, ensure funding to the economy and preserve the transmission of monetary policy in all the euro-area countries. Its refinancing operations were strengthened, interventions in the public and private securities market were increased, and the new PEPP programme was introduced, with an initial envelope of \notin 750 billion (see Chapter 3, 'Monetary policy in the euro area', *Annual Report for 2019*, 2020).



Sources: Based on Bloomberg and Refinitiv data.

(1) Average yields on the benchmark 10-year government bonds of Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, and Spain, weighted by GDP at constant 2020 prices. – (2) Fixed rate on 10-year interest rate swaps in euros. – (3) Fixed rate on 10-year euro-area inflation swaps. – (4) Fixed rate on 10-year interest rate swaps deflated by the fixed rate on 10-year inflation swaps. – (5) Expected inflation rates implied by 2-year, 5-year and 5-year, 5 years forward inflation swap contracts.

In June, with the continuation of the pandemic and its impact on growth and inflation prospects, the Council strengthened the PEPP by increasing its envelope to $\in 1,350$ billion and extending the purchasing period by six months compared with what was originally planned, to at least mid-2021. It also announced that the capital repaid on maturing securities will be reinvested until at least the end of 2022.

The Council's resolute action was essential to stabilize the financial markets, helping to preserve very favourable financing conditions throughout the euro area. The flexibility of the PEPP programme has made it possible to concentrate purchases at the times of greatest tension and on the markets most affected by the pandemic (see the box 'The PEPP and the stabilization of financial markets'). Together with the measures taken by governments and the supervisory authorities, the highly expansive stance of monetary policy has ensured that the conditions of access to bank credit for households and businesses remain accommodative.

THE PEPP AND THE STABILIZATION OF FINANCIAL MARKETS

In March 2020, the spread of the COVID-19 pandemic and the ensuing deterioration in the growth outlook sparked strong tensions on financial markets. There was a sudden increase in public sector bond yields in the euro area, which affected even the strongest economies (see panel (a) of the figure) and there was a significant fall in market liquidity for government securities. According to an index for the four leading euro-area countries,¹ the deterioration in liquidity conditions was comparable to that observed in the most acute phases of the sovereign debt crisis (see panel (b) of the figure). Tensions also affected equity markets, where risk premiums rose considerably.



Sources: Based on data from Bloomberg, Refinitiv and TradeWeb.

(1) Issued by the countries listed. – (2) Weighted average of the illiquidity indices for France, Germany, Italy and Spain. The weights are proportional to the government bond stocks of each country in mid-2020. For the calculation methodology, see R. Poli and M. Taboga, A composite indicator of sovereign bond market liquidity in the euro area' Banca d'Italia, Temi di Discussione (Working Papers), forthcoming.

In order to counter the risks to the monetary policy transmission mechanism and to prevent the health emergency from turning into a severe financial crisis, with serious consequences for the supply of credit to the real economy, the Governing Council of the ECB, as part of a wider set of measures, strengthened its interventions in the public and private debt securities markets. On 12 March 2020, it strengthened the existing asset purchase programme (APP) with a budget increase of €120 billion. On 18 March, it introduced the new pandemic emergency purchase programme (PEPP), with an initial envelope of €750 billion, which was increased to €1,350 billion on 4 June and to €1,850 billion on 10 December. In addition to easing the monetary policy stance, the PEPP helps to stabilize financial markets and

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R. Poli and M. Taboga, 'A composite indicator of sovereign bond market liquidity in the euro area', Banca d'Italia, Temi di Discussione (Working Papers), forthcoming.

reduce their fragmentation, ensuring the smooth transmission of monetary policy throughout all euro-area countries. This function is pursued by managing purchases flexibly over time, across asset classes and among jurisdictions.

The PEPP had a rapid and marked effect on financial markets: in the days following its announcement, long-term government bond yields and risk premiums declined significantly throughout the euro area, particularly in the economies most affected by the turmoil, and market liquidity improved significantly (see the figure). Conditions on the equity and private debt markets also began to progressively ease. The positive impact of the PEPP on securities prices was reinforced by the easing in April of the eligibility criteria applied to assets that can be used as collateral for Eurosystem refinancing operations. This was helped, in particular, by the decision to continue accepting even those securities that had been downgraded to high yield as a result of the pandemic, provided that their rating did not fall below a predetermined threshold.

The subsequent implementation of purchases under the PEPP consolidated the stabilization of the financial markets. An econometric analysis² conducted with high-frequency data for the Italian market shows that the Eurosystem's purchases exert a downward pressure on government bond yields on the day they are made, resulting in a compression of sovereign risk premiums along the yield curve and helping to improve market liquidity. These effects – in addition to those resulting from the announcements of the programme's start-up and subsequent expansions – are more marked in phases of high tension, particularly when liquidity levels are low. This suggests that the effectiveness of the asset purchases is enhanced by their flexible nature, which increases the volume both when and where market conditions so require.

In the first phase of the pandemic crisis, the PEPP played a key role in addressing the heightened tensions on financial markets, restoring stability and ensuring accommodative financing conditions across the entire euro area. In the current context, the primary role of the PEPP is to ensure that these conditions remain favourable in order to counteract the adverse effects of the pandemic on economic activity and inflation. In this way, the programme reduces uncertainty and increases the confidence of economic operators, thereby supporting the recovery and the achievement of the price stability objective.

In the autumn, the resurgence of infection and the adoption of new containment measures in all countries were reflected in the outlook of a more persistent weakness in economic activity and inflation. At its December meeting, the Governing Council recalibrated its monetary stimulus, with the primary objective of maintaining favourable financial conditions for longer. The PEPP envelope was further increased to $\notin 1,850$ billion and the horizon for net purchases and for the reinvestment of capital repaid on maturing securities was extended, respectively, until at least the end of March 2022 and the end of 2023. The terms

BANCA D'ITALIA

² M. Bernardini and A. De Nicola, 'The market stabilization role of central bank asset purchases: high frequency evidence from the COVID-19 crisis', Banca d'Italia, Temi di Discussione (Working Papers), 1310, 2020.

and conditions of the third series of targeted longer-term refinancing operations (TLTRO III) were made more accommodative by reducing the cost, expanding the availability of funds and introducing three new auctions in the course of 2021. Four additional operations under the new series of pandemic emergency longer-term refinancing operations (PELTRO) were launched and the easing of the eligibility criteria applied to the collateral banks to guarantee Eurosystem operations was extended by nine months up to June 2022.

The Governing Council also decided that, in a context still characterized by high uncertainty as to the timing and intensity of the economic recovery, the strengthening of purchases and the flexible use of the PEPP will aim at maintaining favourable financing conditions and preventing any premature tightening. If this is possible with purchases below the total amount allocated by the programme, the endowment need not be used in full, although it can be increased if this proves necessary.

In assessing the financing conditions, the Governing Council will take into account both the inflation outlook and a set of indicators that includes sovereign yields and conditions for access to bank credit, along the entire monetary policy transmission chain, considering large and persistent yield increases inappropriate.

In early 2021, the improvement in the global situation led to a marked increase in long-term interest rates in the United States, which has in part been transmitted to the other leading economies. At its March meeting, the Governing Council decided to significantly increase the volume of monthly purchases under the PEPP until the end of June, considering that a premature tightening of financing conditions in the euro area was not justified by the current economic outlook.

The Governing Council confirmed its commitment to intervene, even once the pandemic emergency is over, with all the instruments at its disposal to support the economy and ensure that inflation remains stably at a level consistent with the price stability objective.

The revision of monetary policy strategy

At the beginning of 2020, the Governing Council launched a review of the monetary policy strategy to take into account the changes observed in the economy since 2003, when the previous review was completed.¹ The ongoing debate within Eurosystem and Governing Council committees analyses the main aspects of the conduct of monetary policy, in particular: the quantitative definition of price stability; how to ensure that the objective is perceived as symmetrical; the behaviour needed to ensure that the objective is reached when interest rates are close to zero; the monetary policy transmission mechanism and the effectiveness of the instruments (including those of an unconventional nature introduced over the last decade); the role to be given to defending employment, safeguarding financial stability, and the new challenges posed by climate change.

For more details, see the Bank of Italy's website: 'The review of the Eurosystem's monetary policy strategy' and the ECB's website: 'Strategy review'.

The review is likely to be completed in the second half of 2021. As part of the review, the Bank of Italy held meetings with the world of business, labour, social engagement, academia and the media, as did the other Eurosystem central banks, in order to understand their expectations and concerns, and to gather insights to best fulfil its mandate.²

Monetary policy operations

The refinancing operations continued to be conducted as fixed rate tenders with full allotment of the amounts requested. In the euro area as a whole, their volume exceeded $\notin 2,100$ billion by the end of April of this year, more than three times that observed at the end of 2019 (Table 3.1). In Italy, the amount increased to close to $\notin 450$ billion. The strong expansion of the amount of funds disbursed is almost entirely attributable to TLTRO III operations, which account for almost all of the refinancing operations.

Table 3.1										
Refinancing operations (1) (billions of euros)										
	Euro area				Italy					
	31 Dec. 2019	31 Dec. 2020	31 Dec. 2019	1 Dec. 2019 31 Dec. 2020 30						
Total (2)	624	1,793	2,107	220	374	448				
of which:TLTRO III	101	1,749	2,080	33	350	427				
PELTRO	-	27	27	-	21	21				

Sources: Bank of Italy and ECB.

(1) Total volumes disbursed as at the dates indicated in the table. Latest auctions: 24 March 2021 for TLTRO III and 25 March 2021 for PELTRO. – (2) Includes total main and longer-term refinancing operations: 3-month LTRO, TLTRO II, TLTRO III and PELTRO.

Since the beginning of 2020, the total assets held by the Eurosystem for monetary policy purposes have increased by almost \notin 1,500 billion, to just over \notin 4,000 billion in mid-May this year (Table 3.2), as a result of purchases under the APP (approximately \notin 420 billion, to reach a total of 3,000 billion) and above all under the PEPP (approximately \notin 1,050 billion). The balance sheet value of Italian government bonds held in total by the Eurosystem had grown, at the end of March, by \notin 215 billion, to \notin 579 billion (by \notin 192 billion to \notin 519 billion as regards those held by the Bank of Italy).³

Monetary policy operations have led to a strong expansion of the Eurosystem's consolidated balance sheet, which exceeded \notin 7,600 billion, up by more than 60 per cent compared with the end of 2019 (Figure 3.2.a). The excess liquidity held by the banking system in the euro area has risen to more than \notin 4,100 billion (about \notin 400 billion in Italy).

For more details, see the Bank of Italy's website: 'The Bank of Italy in conversation with academics', 9 February 2021; 'The Bank of Italy in conversation with communication experts', 22 February 2021; 'The Bank of Italy in conversation with civil society', 3 March 2021.

³ The detailed items relating to the PEPP are published on a bi-monthly basis and the latest observation refers to March 2021.

Table 3.2

Securities held for monetary policy purposes (1) (billions of euros)								
Securities	Total (2)	of which: Public sector securities (2)	<i>of which:</i> Italian public sector securities (3)	of which: Italian public sector securities purchase by the Bank of Italy (3)				
Asset purchase programme (APP)								
December 2019	2,579	2,103	364	327				
December 2020	2,909	2,342	411	370				
March 2021	2,963	2,379	422	378				
April 2021	2,982	2,393	425	381				
May 2021 (4)	3,000	2,404						
Pandemic emergency purchase programme (PEPP)								
November 2020	698	650	118	107				
March 2021	938	894	157	141				
May 2021 (4)	1,053							

Sources: Bank of Italy and ECB.

(1) The data refer to the last day of the month, unless otherwise indicated. PEPP data are published on a bi-monthly basis; the latest observation available refers to March 2021. – (2) Balance-sheet values at amortized cost. – (3) Difference between the purchase price and the nominal amounts redeemed. – (4) Data at 14 May.



Sources: ECB and Refinitiv.

(1) The first and second covered bond purchase programmes (CBPP and CBPP2) and the securities markets programme (SMP). – (2) The APP, which includes the third covered bond purchase programme (CBPP3), the asset-backed securities purchase programme (ABSPP), the public sector purchase programme, (PSPP), the corporate sector purchase programme (CSPP) and, since 26 March 2020, the pandemic emergency purchase programme (PEPP). – (3) Marginal lending facility, gold and other assets denominated in euros and foreign currency. – (4) As of 1 October 2019, the €STR is a new overnight benchmark rate for the euro-area money market. For the period prior to 1 October, the figure shows the pre-€STR rate. From that date and until the end of 2021, the Eonia rate is calculated as the €STR plus 8.5 basis points.

Interest rates and the euro exchange rate

Since the beginning of last year, short-term interest rates have remained stable at values close to the yield of the deposit facility (-0.50 per cent; Figure 3.2.b). Thanks to the Eurosystem's interventions, money market conditions have only been affected to a limited extent by the turmoil recorded on the other markets at the start of the pandemic.

After rising rapidly in the first quarter of 2020, the yields on ten-year government bonds in the main euro-area countries progressively declined to -0.2 per cent by the end of the year, that is lower than at the end of 2019 (see Figure 3.1.a and Chapter 2, 'The economy and fiscal policies of the euro area'). In the first months of this year, long-term rates showed a upward trend, countered since March by the increase in net monthly purchases under the PEPP. By mid-May, the nominal ten-year yield was equal to 0.2 per cent, while the real yield stood at -1.4 per cent, a very low value by historical standards.

The inflation expectations implied by euro-area inflation-linked swap contracts fell sharply in the spring of last year, reaching values close to or below zero on horizons up to five years (Figure 3.1.b), after which they gradually recovered. The five-year, five years forward expectations currently stand at 1.6 per cent, a value that is still lower than that consistent with the price stability objective.

In 2020 the exchange rate of the euro appreciated against the dollar by about 10 per cent, reflecting both the reduction in risk aversion, which had led to capital flows towards the dollar in the first few months of the year, and the expectations of a relatively more expansionary monetary policy in the United States (Figure 3.3). Since the beginning of 2021, the exchange rate has remained broadly unchanged.



Source: Refinitiv.

(1) Index: Q1 1999=100. A rise in the index corresponds to an appreciation of the euro. Right-hand scale.

Money and credit

In 2020, M3 growth strengthened considerably (Figure 3.4.a); in March of this year the expansion was equal to 10.1 per cent. The increase was driven by investors' strong preference for liquidity, induced by the pandemic crisis and reinforced by the low opportunity cost of holding money. From the counterpart side, M3 growth was fuelled by purchases of financial assets for monetary policy purposes and by the large flows of credit granted by banks to the private sector.



Source: ECB

(1) Changes calculated on data adjusted for seasonal and calendar effects. – (2) Loans in euros and other currencies granted by MFIs, adjusted for the accounting effects of securitizations. – (3) The private sector consists of households, non-profit institutions serving households, non-financial corporations, insurance companies and pension funds, non-money market investment funds and other financial institutions.

The demand for bank loans on the part of companies increased significantly at the beginning of 2020 due to high liquidity needs, which were largely met by the use of state-guaranteed loans and moratoriums (see Chapter 7: 'The financial situation of households and firms'). The supply of credit was supported by the Eurosystem's refinancing operations, which provided banks with an ample availability of funds at extremely favourable interest rates. Demand for credit has lost momentum since mid-2020 in all euro-area countries, although in Italy, it has remained more robust (see the box: 'Lending to firms in Italy and in the main euro-area countries during the pandemic', *Financial Stability Report*, 1, 2021).

In 2020 overall, the growth in lending to non-financial corporations equalled 7.1 per cent in the euro area, compared with 3.2 per cent in 2019 (Figure 3.4.b); among the main countries, it was relatively more robust in France at 13.5 per cent (Figure 3.5.a), weaker in Germany at 3.9 per cent, and 8.3 per cent in Italy. The latest data available, relating to last March, suggest lower growth both in the euro area as a whole (5.2 per cent) and in the leading economies.

Loans to households in the euro area continued to expand (by a twelve-month rate of 3.3 per cent last March, from 3.6 per cent in 2019), reflecting growth in financing

for house purchase. Consumer credit, which had increased at a very fast pace in recent years, instead declined in 2020, affected by the contraction in household spending caused by the pandemic.

Interest rates on loans remained at historically low levels; at the end of last March, on average the rate was 1.3 per cent for new loans to households for house purchase, and 1.4 per cent for loans to non-financial corporations (Figure 3.5.b).



Source: ECB.

(1) Loans in euros and other currencies granted by MFIs to resident non-financial corporations, adjusted for the accounting effects of securitizations. – (2) Weighted average of interest rates on new short-term, medium and long-term loans, with weights equal to the 24-month moving average of new disbursement flows; includes overdrafts on current accounts.

According to the results of the Eurosystem's quarterly bank lending survey, the credit standards applied to new loans to enterprises remained accommodative in the first half of last year, mainly thanks to the high demand for funding backed by state guarantees. In the second half of 2020 and in the first few months of this year, banks reported a slight tightening of their lending criteria, mainly due to concerns regarding customers' creditworthiness going forward and the risks associated with uncertainty about the economic recovery. In Italy, credit supply conditions were favourable in the most acute phase of the health emergency and have continued to be favourable in recent months.

THE ITALIAN ECONOMY

4. OVERVIEW

2020. – Last year, Italy's GDP recorded its largest decline since the Second World War (-8.9 per cent; Table 4.1). The effects of the COVID-19 pandemic were transmitted through a number of partly interconnected channels: the contraction in global activity, exports and tourism flows; the reduction in mobility and consumption, owing both to the restrictions that had to be adopted on several occasions and to fears of contagion, which affected household behaviour; and the impact of uncertainty on firms' investment, which trickled to a halt (see the box 'The transmission of the pandemic to the Italian economy').

							Table 4.	1
Source	es and u	ses of ind	come in	Italy				
	% of	2019			2020			
	in 2020 (1)	(1) Changes		Contri- bution	Changes		Contri- bution	
		Volumes (2)	Defla- tors	growth (3)	Volumes (2)	Defla- tors	growth (3)	
Sources								
GDP	-	0.3	0.8	-	-8.9	1.2	-	
Imports of goods FOB and services (4)	27.3	-0.7	-0.1	0.2	-12.6	-4.1	3.6	
of which: goods	22.3	-0.8	-0.9	0.2	-8.9	-5.0	2.0	
Uses								
National demand	97.3	-0.4	0.6	-0.4	-8.4	0.2	-8.1	
Spending of resident households (5)	58.8	0.3	0.5	0.2	-10.7	-0.2	-6.4	
General government expenditure	20.8	-0.8	1.0	-0.2	1.6	1.4	0.3	
Gross fixed investment	17.9	1.1	0.6	0.2	-9.1	0.4	-1.6	
Plant, machinery, armaments and cultivated biological resources	6.4	0.3	0.6		-15.1	0.7	-1.0	
Intellectual property products	3.3	0.3	0.6		-2.9	0.2	-0.1	
Construction	8.3	2.2	0.6	0.2	-6.3	0.2	-0.5	
Change in stocks (6)	-	-	-	-0.6	-	-	-0.3	
Exports of goods FOB and services (7)	30.0	1.6	0.6	0.5	-13.8	-0.5	-4.4	
of which: goods	25.4	1.1	0.5	0.3	-9.8	-0.5	-2.5	
Net foreign demand	_	_	_	0.7	_	_	-0.8	

Source: Istat, national accounts.

(1) At previous year's prices. – (2) Chain-linked volumes. – (3) Chain-linked volumes; percentage points. – (4) Includes residents' expenditure abroad. – (5) Includes non-profit institutions serving households. – (6) Includes valuables. – (7) Includes non-residents' expenditure in Italy.

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Table 4 1

THE TRANSMISSION OF THE PANDEMIC TO THE ITALIAN ECONOMY

The recession triggered by the COVID-19 pandemic has a number of traits that sets it apart from all the previous episodes that have struck the Italian economy, including the global financial crisis and the sovereign debt crisis. The spread of infection, the measures needed to curb new cases, and heightened uncertainty affected both demand and supply, productive sectors were impacted very unevenly, and there were rapid and persistent changes in the behaviour of households and firms.

Taking a counterfactual approach based on simulations conducted using the Bank of Italy's econometric model,¹ it is possible to assess the main channels of transmission of the pandemic to the Italian economy. Following this approach, a hypothetical scenario of 'no pandemic crisis' is taken as a reference point, corresponding to the forecasting scenario published in the *Economic Bulletin* released in January 2020. Based on the relations incorporated in the model, the determinants of the differences compared with the macroeconomic trends actually observed in 2020 are assessed.

The main channels of transmission of the pandemic to the Italian economy considered are: (a) the international environment; (b) tourism flows; (c) containment measures; (d) uncertainty and the confidence of households and firms; and (e) economic policies.

The international environment. – The pandemic led to an abrupt drop in world trade, with interruptions in global supply chains and a steep fall in international tourism flows. In 2020, based on the dynamics of outlet markets, potential foreign demand for Italian exports contracted by around 10 per cent compared with the previous year.

Tourism flows. – In 2020, foreign tourist visits to Italy were down by 60 per cent compared with the same period in 2019, reflecting both the reduction in global flows and the drop in tourism demand following the restrictions imposed on economic activity.

Containment measures. – From the end of February 2020, measures of varying severity were introduced in Italy to curb the pandemic. The most restrictive of these were adopted in March and April, with the suspension of productive activities deemed 'non-essential', to which almost one third of the country's value added was directly ascribable. In May, as the number of new cases fell, the restrictions were eased. During the autumn, following the second wave of the pandemic, the measures were applied at regional level and to differing degrees, in accordance with local epidemiological risk profiles. In the simulations, the impact through this channel was quantified with an indicator of the share of value added attributable to the

Preliminary results. A more comprehensive and detailed account, also in light of the new projections for 2021, which will be published on 11 June, will be given in G. Bulligan, M. Caivano and L. Rodano, 'The transmission of the pandemic crisis to the Italian economy: a counterfactual analysis', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), forthcoming.



productive activities subject to restrictions, which displays a similar trend to that of the mobility indices (see panel (a) of the figure).²

Sources: Based on data from Istat and Google Covid-19 Community Mobility Reports.

(1) Qualitative indicator based on the imposition of daily restrictions, at local level, on scholastic, productive and commercial activities, restaurant services, outdoor and indoor gatherings, public events, transport, domestic and international travel, and information campaigns. A level of 100 signals a context of maximum restrictions (see F.P. Conteduca, 'Measuring Covid-19 restrictions in Italy during the second wave', Banca d'Italia, *Note Covid-19*, 24 March 2021). – (2) Variations in visits to retail outlets. Inverted sign: an increase indicates a reduction of mobility compared with the period 3 January-6 February 2020. Weekly average of daily data. – (3) Index of intensity of the restrictions based on the loss of notional value added (VA) for activities that were closed or suspended (G. Bulligan, M. Caivano and L. Rodano, 2021, op. cit.); right-hand scale. – (4) Monthly data; 3-term moving averages, index: January 2021 (m1)=100. – (5) Monthly data; 3-term moving averages, index: June 2011 (m1)=100.

Uncertainty and the confidence of households and firms. – The spread of the pandemic translated into a marked deterioration in the confidence of households and firms, and into a generalized increase in the degree of uncertainty about the economic outlook (see Chapter 5, 'Households'). Between March and May of 2020, the fall in the confidence indicators of firms was unprecedented by historical standards; household indicators also fell markedly (see panel (b) of the figure).³ The historical patterns incorporated in

² For the most severe restrictions regime, losses were hypothesized equal to the share of value added produced by the economic activities defined as 'non essential' under the measures adopted during March 2020. This share was equal to around 30 per cent according to the estimates reported in the *Economic Bulletin* of April 2020; in sectoral terms, the main contributions came from the industrial sector (including construction), in which around half the value added was ascribable to the activities that were suspended, and the service sector, where almost one fourth of value added was produced by suspended activities. Similar estimates were made in that period by Istat. For the remaining regimes, hypotheses formulated in an analogous manner were used, taking account of the more limited extension of the business suspension measures. For the transport sector, whose activity was never formally suspended, losses were hypothesized owing to lower demand for transport services due to the restrictions on mobility. For the accommodation and food service sectors, the theoretical losses attributable to the closure measures are amplified by the effects of the restrictions on mobility.

³ The contraction of consumption owing to fears of infection is not explicitly quantified. It is nonetheless probable that, while not expressly measured in Istat's survey, these fears were reflected in the opinions of households and their effects may be at least partially comprised in those attributable to this channel.

the quarterly model can help us to assess to what extent these trends contributed to changes in consumption and investment decisions.

Economic policies. – The effects of the support measures and budget increases adopted during the crisis⁴ are assessed based on traditional multipliers; the effects of the expansionary monetary policy take account of the contribution resulting from the difference between the short- and long-term interest rate trends compared with those implied by market expectations immediately before the pandemic crisis.⁵

The table summarizes the estimated contribution to growth of the various factors in 2020. The fall in GDP compared with the counterfactual scenario was substantial, exceeding 9 percentage points. The contraction in economic activity attributable to recessionary factors amounts to more than 11 points, in part offset by the expansionary measures.

	Table					
Contributions to trends in GDP in 2020 (1)						
(A) Counterfactual scenario of 'no pandemic crisis' (2)	0.5					
(B) Effects of the recessionary factors	-11.5					
International environment	-1.4					
Tourism flows	-1.5					
Containment measures	-6.5					
Uncertainty and confidence	-2.1					
(C) Effects of the fiscal and monetary policies	2.1					
Overall impact of the pandemic (B+C)	-9.4					
Actual data (A+B+C)	-8.9					

(1) Rounding of decimal points may cause discrepancies in totals. - (2) Projections published in *Economic Bulletin*, 1, 2020.

Sizeable repercussions are attributable to the international environment: the consequences of the pandemic crisis on global trade were reflected in a sharp drop in exports, which compressed GDP by 1.4 percentage points,⁶ net of the effect of the drop in tourism.

The macroeconomic impact of the virtual halt in international tourism flows can be estimated at 1.5 percentage points, determined both by the international environment and by the restrictions (see the box 'International tourism in Italy during the pandemic', Chapter 10).

In this scenario, the direct effect of the measures to curb the spread of COVID-19, which was principally seen in a contraction of household consumption, can be estimated at more than 6 percentage points. It should, however, be noted

2020

A. Borin, G. Ilardi and S. Marchetti, 'Tracking epidemic outcomes and restrictions with endogenous mitigation strategies', Banca d'Italia, *Note Covid-19*, forthcoming.

that the various channels analysed here are not mutually independent: the restrictive measures prevented a much more serious explosion of the epidemic⁶ which, if left to run its course, could have translated into more significant curtailments in confidence and consumption, as is also shown by the link between spending patterns and trends in the spread of infection documented by the surveys of households conducted by the Bank of Italy (see the box 'Italian households during the epidemic: the Bank of Italy's survey', *Economic Bulletin*, 1, 2021).

The deterioration of confidence among households and firms and the greater uncertainty led to a drop in investment and an increase in precautionary saving by households, with repercussions on GDP that can be estimated at more than 2 percentage points.

Economic policy action helped to mitigate the impact of the crisis: in the exercise, monetary expansion and fiscal measures contribute more than 2 percentage points to GDP. It must, however, be emphasized that the role of economic policies was likely much more significant than what emerges from a comparison of the two scenarios considered here, which is unable to capture the contribution of support measures in avoiding more adverse non-linear effects than those that actually occurred. The measures to support liquidity and to guarantee loans played a key role in averting much graver financial and economic consequences; the exceptionally expansionary tone of monetary policy was crucial to avoiding a strong tightening of credit supply, a liquidity crisis, and an increase in business insolvencies.

Detailed and updated projections for this year will be provided in the forecasting scenario for Italy, which the Bank of Italy is preparing as part of the coordinated Eurosystem macroeconomic projection exercise and which will be published on 11 June. Based on the latest available data, according to the international organizations, GDP in Italy will expand by more than 4 per cent this year, with a significant recovery in the second half of the year. An automatic update of the projections published in the *Economic Bulletin* issued last January indicates that developments in line with these figures are plausible, though still subject to sizeable risks linked to the course of the pandemic and to the effectiveness of economic policy measures (see *Economic Bulletin*, 2, 2021).

The recovery currently anticipated for 2021 by the main observers requires the virtual elimination of the effects of the recessionary factors, which presupposes the success of the vaccination campaigns, including against the spread of new variants of the virus. This requires, in particular, a robust recovery in world trade, a gradual easing of the containment measures and an improvement in firms' and consumer confidence. However, to achieve a marked strengthening of economic activity, the contribution of the expansionary economic policies must continue this year as well.

Developments during the year reflected the course of the pandemic and fears of contagion. Following the exceptional decline in activity in the first two quarters (-5.6 and -12.9 per cent respectively), the recovery in the third, against a backdrop of growing optimism about the outlook for the pandemic, was much more pronounced and rapid than expected (15.8 per cent), in industry especially. GDP began to fall again in the autumn, though to a lesser extent (-1.8 per cent), as the second wave of the

pandemic struck. Overall, these trends underscored the economy's resilience, but also the lasting brake exerted by the spread of contagion; ensuring a stable reduction in new cases is a precondition for the recovery.

The contraction in GDP was uneven, with industry recovering more quickly and services weakening again in the final months of the year. No part of the country was left unaffected, but the fall in GDP was more marked in the North, where the first wave of the pandemic hit hardest (see the box 'Regional trends').

REGIONAL TRENDS

Based on the Bank of Italy's quarterly indicator of regional economic activity in Italy (ITER),¹ last year GDP is estimated to have declined by 9.3 and 9.1 per cent in the North-West and North-East respectively, by 8.7 per cent in the Centre, and by 8.2 per cent in the South and Islands (see panel (a) of the figure). The difference mostly reflects the higher concentration of cases and stricter restrictive measures in the northern regions in the early part of last year.

Based on our calculations, in 2020, the level of economic activity was around 11 per cent below what it was in 2007 in the Centre and North and more than 17 per cent lower in the South; the gap between the two areas appears less marked in per capita terms. Last year, per capita GDP in the South was around 55 per cent that of the Centre and North (57 per cent in 2007).

Valued at current prices, exports declined nationwide, primarily reflecting developments in global trade (see panel (b) of the figure). The contraction was especially marked in the North-West, where the fall in exports of machinery and traditional 'made in Italy' products weighed most heavily. In Southern Italy, the decline in exports was mostly ascribable to refined oil products, whose production is concentrated in the Islands; excluding this component, exports from the South and Islands decreased less than in the other macro areas.

According to Istat's labour force survey, last year employment declined to a similar extent throughout Italy, falling by 1.9 per cent in the Centre and North and by 2.0 per cent in the South and Islands. In both areas, there was a reduction in both employees and autonomous workers, affecting a greater number of the former in the Mezzogiorno and of the latter in the Centre and North. The fall in employment was concentrated in the 15-34 age group, characterized by greater recourse to fixed-term contracts, especially in the South and Islands. Despite the drop in employment, the unemployment rate declined (by 0.4 and 1.7 percentage points respectively, in the Centre and North and in the South and Islands). This reflected lower labour market participation rates, especially among young people, workers in Southern Italy and tourism workers, who are more likely to abandon the labour market if they lose their jobs (see Chapter 8, 'The labour market'). In the South and Islands, unemployment remains more than double the level recorded in the rest of the country.

2020

V. Di Giacinto, L. Monteforte, A. Filippone, F. Montaruli and T. Ropele, 'ITER: a quarterly indicator of regional economic activity in Italy', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 489, 2019.



Sources: For panel (a), calculations based on data from Istat's regional accounts up to 2019 and ITER estimates for 2020; for panel (b), calculations based on Istat data.

(1) Difference between GDP growth in the Centre and North and in the South and Islands. The growth rate is calculated between 2007 and the year indicated on the horizontal axis. Right-hand scale, percentage points. – (2) Based on data for 2018 and 2019. Right-hand scale; per cent.

Based on estimates by Prometeia, last year household consumption expenditure contracted by 11.8 per cent in the Centre and North and by 11.4 per cent in the South and Islands. The health emergency also changed household consumption patterns, to a greater or lesser degree depending on infection rates and the severity of containment measures in the different areas. The third edition of the Special Survey of Italian Households, conducted at the end of November last year,² shows that the frequency of outlays on personal care services, clothing, hotels, and bars and restaurants, decreased more in the regions most exposed to the health emergency.³ In the latter, the share of households planning to reduce expenditure on food, clothing and footwear, as well as on goods and services for the home, was also higher in early 2021.

In the first three months of 2021, the ITER indicator shows a contraction in economic activity throughout Italy. The cyclical downturn in the indicator appears very modest overall in the Centre and North, while there is a slightly larger contraction in the South and Islands.

² C. Rondinelli and F. Zanichelli, 'The main results of the third wave of the Special Survey of Italian Households in 2020', Banca d'Italia, *Note Covid-19*, 30 March 2021 (only in Italian).

³ Regions that when the survey began were red zones (Calabria, Campania, Lombardy, Piedmont, Tuscany, Valle d'Aosta and the Autonomous Province of Bolzano) or orange zones (Abruzzo, Basilicata, Emilia-Romagna, Friuli Venezia Giulia, Liguria, Marche, Puglia, Sicily and Umbria). The other regions and the Autonomous Province of Trento were designated yellow zones (Prime Minister's Decree (DPCM) of 3 November 2020 and subsequent ordinances).

Consumption (-10.7 per cent; Table 4.1) was impacted by the restrictions on economic activity. These were stricter in the spring, when 'non-essential' activities accounted for around 28 per cent of value added, and more closely targeted during the second wave in the autumn, when this share amounted to only around 4 per cent (see *Economic Bulletin*, 2, 2021). However, the drop in expenditure, especially for some services, was also fuelled by fears of contagion, lower income and – for the households least affected financially – the deep uncertainty that drove increased precautionary saving. Firms suspended investment plans, leading to a decrease in gross fixed investment of 9.1 per cent, especially in the capital goods component.

The pandemic had a considerable, though temporary, impact on exports: after falling sharply in the first half, they picked up pace, returning to pre-pandemic levels in the closing months of the year; unlike during other episodes of global recession, Italy's share of world goods trade remained virtually unchanged. The sharp reduction in tourism revenue was accompanied by an improvement in the energy balance, leading to an expansion of the current account surplus.

There was a decisive fiscal policy response to the pandemic, with the introduction of mostly temporary expansionary measures: net borrowing rose to 9.5 per cent of GDP, from 1.6 per cent in 2019. Transfers and social benefits made it possible to support household disposable income, which fell by much less than GDP (-2.6 per cent).

The consequences of the pandemic led to extensive changes in saving and investment flows between sectors of the economy. Relative to gross national disposable income, the saving rate remained unchanged at 21.2 per cent. The reduction of 6 percentage points in the general government current account balance, which had turned sharply negative following the adoption of broad-based economic support measures (Table 4.2), coincided with a rise in private sector saving. The latter partly reflected the accumulation of liquidity for precautionary motives by non-financial corporations, but above all the contraction in consumption also reported by

							Та	ble 4.2		
Saving and gross investment in Italy (per cent of gross national disposable income)										
	Average 1981-1990	Average 1991-2000	Average 2001-2010	2016	2017	2018	2019	2020		
(A) General government saving (1)	-6.6	-3.3	0.7	0.5	1.0	0.9	1.7	-4.3		
(B) Private sector saving	28.8	24.6	19.5	19.8	19.6	20.1	19.6	25.5		
of which: consumer households (2)	20.0	14.0	7.8	5.5	5.2	5.2	5.3	10.7		
Gross national saving (C=A+B)	22.3	21.3	20.2	20.3	20.7	21.0	21.2	21.2		
(D) Gross investment	23.2	20.5	21.4	17.7	18.1	18.5	18.0	17.5		
Memorandum item:										
Balance on current transactions with the rest of the world (E=C-D)	-0.9	0.9	-1.3	2.6	2.5	2.5	3.2	3.7		

Source: Based on Istat data.

(1) The general government current account balance; this differs to net borrowing since it does not include either capital account revenue or investments and other capital expenditure. – (2) Includes non-profit institutions serving households.

households that did not record a decline in disposable income. Substantial and necessary government redistributive interventions were therefore accompanied by an accumulation of private wealth which, however, has been very unequal (see Chapter 5, 'Households').

The repercussions for the labour market were considerable, but recourse to existing social safety nets and special ones introduced during the crisis helped to blunt them considerably. The sharp decline in the number of hours worked (-11.0 per cent) corresponded to a much smaller decrease in the number of the employed (-2.1 per cent). Job losses were concentrated among self-employed workers and those on fixed-term contracts, especially in the service sector, penalizing in particular young people and women.

Price developments reflected above all the weakness in global and domestic demand. The decrease in consumer price inflation (down to -0.1 per cent) was due to both the rapid drop in energy prices and to the impact on domestic prices of the recession and wage stagnation sparked by the health emergency.

The pandemic crisis has altered the structure of the economy, but it is not yet possible to assess fully how permanent these effects will be. The number of new firms contracted sharply, above all in the most acute phase of the epidemic; the exit of firms from the market also declined, thanks in part to the moratoriums on bankruptcies in force from March to June 2020 and to the numerous support measures still in place. The health emergency could also have an impact on the demographic trends of the population in the decades to come, affecting both birth rates and migration flows (see the box 'The possible long-term demographic effects of the pandemic'). However, the new economic scenario has accelerated the use of agile work by Italian firms and the adoption of innovative digital technologies, which could raise the growth potential of the economy.

THE POSSIBLE LONG-TERM DEMOGRAPHIC EFFECTS OF THE PANDEMIC

By historical comparison with other pandemics, the demographic impact of the spread of COVID-19 appears modest at present. In Italy, the number of deaths per inhabitant following the Spanish Flu of 1918-19 was about eight times that officially attributed to coronavirus to date. While a century ago, the mortality rate was particularly high among population cohorts under 40 years of age, in the current crisis, deaths have been concentrated among those aged over 64. The dramatic number of lives lost in 2020 has therefore had a limited impact on the size of the working age population and on the age-class composition.¹

However, the deterioration in economic conditions and increased uncertainty about the future could lead to a fall in the number of births. In Italy, as in the other advanced economies, recent decades have highlighted a negative relationship

¹ The analysis presented here is based on data from Istat; see also the Italian National Institute of Health, "The COVID-19 epidemic: National update 28 April 2021', 30 April 2021 (only in Italian), and E. Tognotti, *La "Spagnola" in Italia. Storia dell'influenza che fece temere la fine del mondo*, Milano, Franco Angeli, Second Edition, 2015 (only in Italian).

between the fertility rate, which measures the average number of children per woman of childbearing age, and the unemployment rate (Figure A); in particular, the recession of 2008 interrupted the partial recovery in the birth rate that had been under way since the mid-90s. In 2019, the fertility rate was equal to 1.3, a value well below the threshold needed to reach the generational replacement rate (2.1). Following the pandemic, in December 2020 and January 2021, monthly births were 10.3 and 16.7 per cent lower, respectively, than in the corresponding year-earlier period.



Source: Based on Istat data.

The worsening economic outlook could also trigger a decline in the net migration rate which, over the past twenty years, has mitigated the downward trend in the working age population due to Italy's low birth rate.²

A study assesses possible future developments in the demographic structure as a result of the COVID-19 crisis.³ Trends in new births and the net migration rate were estimated in relation to the anticipated increase in the unemployment rate between 2021 and 2023.⁴ Starting in 2024, given the uncertainty about long-term economic and social trends, demographic patterns were studied using scenario-based analyses. Scenario A posited the gradual convergence (by 2030) of the birth rate to the forecasts formulated by Istat before the pandemic; a less favourable Scenario B instead hypothesized the return of the birth rate to the average rate recorded over the

⁽¹⁾ Balance of immigrants and emigrants in Italy as a percentage of 1,000 residents. - (2) Right-hand scale.

² F. Barbiellini Amidei, M. Gomellini and P. Piselli, 'The contribution of demography to Italy's economic growth: a two-hundred-year-long story', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 431, 2018.

³ G. Caracciolo, S. Lo Bello and D. Pellegrino, 'Some initial assessments of the likely demographic impact of the COVID-19 crisis', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), forthcoming.

⁴ The expected unemployment rate, inferred by adding to the macroeconomic projections outlined in *Economic Bulletin*, 1, 2021, recourse to wage supplementation and the number of discouraged workers, would peak at 13.1 per cent in 2021, more than 3 percentage points higher than in 2019.



last 40 years.⁵ Based on these two scenarios, it was possible to track how the working age population (from 15-64) would evolve in the decades to come and the elderly dependency rate (Figure B).

Source: Based on Istat data.

(1) Ratio of the population aged at least 65 to the working age population.

The results suggest that, compared with Istat's pre-pandemic scenario, in 2065 the population aged 15-64 will have shrunk by between 1.6 and 2.9 million. The reduction in net migration associated with the epidemic is estimated to account for about half of this greater-than-forecast decline and to have immediate consequences for the size of the active population. The effect of the lower birth rate should instead be apparent from 2035 onwards.

Government economic and social policies could change the demographic trends outlined in these two scenarios. On the one hand, effective action to support growth, including the rapid implementation of the National Recovery and Resilience Plan, can reduce the unemployment rate, improve the economic conditions of households and reduce uncertainty. On the other hand, both birth support measures and policies for the orderly management of migratory flows and integration of immigrants could have a direct effect on the parameters underlying demographic scenarios.

Istat's forecasts prior to the pandemic were for a progressive rise in the birth rate over the coming decades, reaching 53 births per 1,000 women of childbearing age in 2065 (compared with 40 in 2019). In both scenarios, the net migration balance is assumed to converge with the Istat forecasts by 2035.

The early months of 2021. – New waves of infection led to continued weak economic activity in the first quarter of 2021; GDP declined by 0.4 per cent, rising in industry and falling in services. The high frequency data, summarized in the weekly

BANCA D'ITALIA

GDP indicators prepared by the Bank of Italy, point to signs of a recovery (Figure 4.1). Higher vaccination rates and the marked improvement in the global economy bolstered expectations of a robust recovery in the second half of the year. The outlook is, however, subject to risks: it depends on the success of the vaccination campaign in containing the epidemic, on monetary policies remaining expansionary and on the launch of the National Recovery and Resilience Plan (NRRP).



Sources: Bank of Italy and Istat.

(1) The Italian weekly economic index (Itwei) reports the average change in the last 13 weeks (equal to about one quarter) compared with the average for the previous 13 weeks; for further details, see D. Delle Monache, S. Emiliozzi and A. Nobili, 'Tracking economic growth during COVID-19: a weekly indicator for Italy', Banca d'Italia, *Note Covid-19*, 27 January 2021. – (2) Quarterly data; changes on previous quarter.

Fiscal policy has remained expansionary in 2021, to address the health emergency and to prolong support measures for the production system. Progress in the vaccination campaign and the gradual reduction of uncertainty can help facilitate a greater selectivity of interventions, while continuing to support the sectors and workers that are still struggling.

Under the Government 2021 budget, the general government deficit will amount to 11.8 per cent of GDP; the debt-to-GDP ratio will reach 159.8 per cent, and then start to fall from 2022 onwards, thanks to a robust expansion of GDP. The speed of convergence towards pre-crisis levels will also depend on whether the reforms and the investments set out in the NRRP translate into actual productivity and growth gains.

The NRRP envisages a wide variety of interventions, which pursue an overall strategy of modernization for the country. In particular, it provides a strong stimulus to the digital and environmental transition of firms and general government and sets out a detailed programme of reforms to address some of Italy's structural weaknesses. Gender equality, support for young people and the rebalancing of regional gaps are the three priorities that cut across all the measures proposed. Looking ahead, the full achievement of the objectives of the NRRP should provide a lasting boost to innovation and output (see the box 'The National Recovery and Resilience Plan').

THE NATIONAL RECOVERY AND RESILIENCE PLAN

The Next Generation EU programme (NGEU) is the European Union's main response to the pandemic crisis (see Chapter 2, 'The economy and fiscal policies of the euro area'). It envisages measures totalling up to \notin 750 billion,¹ of which \notin 360 billion in loans and \notin 390 billion in grants, and comprises several instruments, above all the Recovery and Resilience Facility (RRF), which accounts for most of the funding and mobilizes \notin 672.5 billion. To apply for the resources of the RRF, the Member States must draw up national recovery and resilience plans (NRRPs), setting out a coherent package of reforms and investments to be carried out between 2021 and 2026.²

Italy has recently submitted its National Recovery and Resilience Plan (NRRP) to the European Commission. Measures totalling €191.5 billion are envisaged under the RRF (see the table), and further funding will come from React-EU (another NGEU programme) and national resources.³ Overall, the measures planned under the NRRP amount to €235.6 billion. Of these, in the Government's assessments, around €166 billion will fund new projects, with almost half of this amount coming from EU grants.⁴ The remaining amount will fund projects that were already planned.

							Table		
Financial breakdown of the National Recovery and Resilience Plan (1) (billions of euros)									
	Recovery	and Resilienc	e Facility	React-EU	Total NGEU (1)	Comple- mentary national fund	Total		
	Grants	Loans	Total						
Sources	68.9	122.6	191.5	13.5	205.0	30.6	235.6		
Uses			191.5	13.5	205.0	30.6	235.6		
New projects (2)			122.4	13.0		30.6	166.0		
Existing projects			69.1				69.1		
Technical assistance				0.5			0.5		

(1) On prudential grounds, the Government does not include the resources relating to the minor programmes established under NGEU (estimated at a total of \notin 2 billion in the Update to the 2020 Economic and Financial Document). – (2) The new projects funded through the RRF correspond to the resources provided in the form of grants (\notin 68.9 billion) and to a share of those provided in the form of loans (\notin 53.5 billion).

¹ Figure at 2018 prices. At current prices, the European Commission estimates that it will raise about €800 billion in the market between 2021 and 2026.

- ² In mid-May, 18 countries (among which France, Germany and Spain, in addition to Italy) submitted their NRRPs to the European Commission, which will assess them within two months of their official submission. Only six plans include measures funded by loans (accounting for almost 40 per cent of the total resources available). According to the regulation establishing the RRF, which was approved by the Council on 11 February, loan support may be requested even after the submission of the NRRP (but no later than 31 August 2023).
- ³ Grants to Italy under React-EU amount to €13.5 billion. The domestic resources were allocated in the complementary national fund established by Decree Law 59/2021, using part of the budgetary deviation requested to Parliament on 15 April 2021. According to the technical report accompanying the decree, the complementary fund's resources (totalling €30.6 billion) that will actually be spent between 2021 and 2026 amount to about €21 billion.

⁴ In order to quantify the economic impact of the NRRP, the Government has also considered the advance of part of the sums allocated to the Development and Cohesion Fund 2021-27, increasing the resources allocated for additional measures to almost €183 billion.

The NRRP identifies four broad areas of reform: enhancing the efficiency of the public administration, expediting judicial proceedings, simplifying and streamlining legislation, and promoting competition. Alongside these interventions, numerous reform measures are planned at sectoral level to speed up the execution of the projects, among other things. Changes to the tax system and to the social safety nets play a part in achieving the general goals of the NRRP, though they are not an integral part of it.

The NRRP is built on three strategic axes (digitization and innovation, ecological transition, and social inclusion) and three cross-cutting priorities (gender equality, young people, and the rebalancing of regional gaps). The first and second axes are allocated, respectively, 27 and 40 per cent of RRF funding, i.e. more than the minimum shares provided for in the regulation establishing the RRF (20 and 37 per cent). The Government is allocating to the South and Islands no less than 40 per cent of the resources that may be assigned on a regional basis (around \in 82 billion out of \in 206 billion).

The NRRP is divided into six missions: (a) digitization, innovation, competitiveness, and culture and tourism (\notin 49.9 billion); (b) green revolution and ecological transition (\notin 69.9 billion); (c) infrastructures for sustainable mobility (\notin 31.5 billion); (d) education and research (\notin 33.8 billion); (e) inclusion and cohesion (\notin 29.8 billion); and (f) healthcare (\notin 20.2 billion).

The implementation of the NRRP will be coordinated and monitored by the Ministry of Economy and Finance. The competent central or local government authorities will instead be in charge of the execution of the individual projects.

Assessments based on the Bank of Italy's econometric model indicate that the demand-side effects of the additional measures envisaged by the NRRP could raise Italy's GDP by somewhat less than 2.5 per cent in 2024.⁵ The average multiplier associated with these simulations, slightly above one, is consistent with measures that are strongly concentrated in increases in public investment. However, it reflects the assumption that they will be implemented promptly and effectively.

A greater effect could be achieved if the investments raised the profitability of private capital, incentivizing its accumulation and leading to a higher multiplier. Based on a model that also makes it possible to consider the supply-side effects due to the complementarity between greater public investment and private capital, the impact on GDP could increase to about 3.5 per cent in 2026. However, achieving this result requires high levels of efficiency for public capital.⁶

Long-term growth effects, in addition to those included in these estimates, may be obtained through the reforms laid out in the NRRP and incentive plans for

⁵ The figure is in line with the estimates included in the text submitted to the European Commission (see on the Italian Government's website, 'National Recovery and Resilience Plan' (only in Italian), 5 May 2021).

⁶ This is also in line with what was reported in the official estimates (assuming that the efficiency of public investment is 'high'), based on simulations carried out using a model of the same type as that utilized by the Bank of Italy.

research and innovation. By applying the methodology proposed in a recent paper estimating the effects of previous reform measures in Italy (see the box 'The impact of the reforms on productivity and growth: the evidence for Italy', Chapter 12), it can be inferred that, over a ten-year horizon, the measures contained in the NRRP concerning competition and judicial proceedings could lead to an increase in total factor productivity (TFP) ranging between approximately 1 and 2 per cent, while the incentives to foster research and innovation included in Italy's Transition 4.0 plan (more than $\in 13$ billion of which funded by the RRF)⁷ could raise TFP by between about 2 and 3 per cent. This could translate into an impact on GDP ranging from around 3 to 6 percentage points over a ten-year horizon.



Additional resources have been allocated through the complementary national fund.

5. HOUSEHOLDS

The reduction in disposable income caused by the public health emergency was widespread and varied greatly among households. However, the decline was much smaller overall than that in GDP, thanks to the support measures, most of which are one-off and temporary; they also helped to counter the rise in the inequality of labour income distribution, which would otherwise have been significantly greater than that observed over the entire span of the two previous recessions, between 2009 and 2014. Despite the piecemeal nature of the various support measures, the temporary social safety net created during the pandemic performed a significant redistributive function; however, the ordinary social safety net must be extensively redesigned for the future in order to make it more coherent.

The decline in consumption reflected the fall in disposable income, but also a very significant increase in the propensity to save, to which the cutback in spending by households contributed, prompted by fears of contracting the virus and by the restrictions on commerce imposed to combat the spread of COVID-19, together with economic precautionary motives in a context of considerable uncertainty about the outlook for income and employment. The propensity to save reached a 20-year high on average in 2020. Only one third of households expect to spend in 2021 the savings they set aside in 2020.

Based on the Bank of Italy's most recent surveys, households' expectations have become slightly more optimistic. Most expect that their income will not fall in 2021 as a whole, but households that even prior to the pandemic found themselves in financial difficulty were more pessimistic.

According to the available indicators, consumption stabilized in the first few months of 2021 at levels still below those observed prior to the pandemic, with a marked recovery in goods, while the demand for services was still weak, especially in the hotels and catering segment.

Income and income distribution

In 2020, the disposable income of consumer households declined by 2.8 per cent, measured at current prices (-2.6 per cent in real terms; Table 5.1), much less than GDP; the sharp increase in transfers (10.8 per cent), which supported income to an extent estimated at around 4 percentage points (see *Economic Bulletin*, 2, 2021), helped to alleviate the decline. There was a more marked decrease in income from payroll employment (-6.9 per cent) and from self-employment (-12.2 per cent).

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Table 5.1

(at current prices, unless otherwise indicated)								
	% of households' gross disposable income in 2020	2018	2019	2020				
		Perc	entage cha	nges				
Payroll employment income	60.3	3.3	2.0	-6.9				
Self-employment income (2)	22.9	1.5	0.3	-12.2				
Net property income (3)	21.6	-0.4	-1.3	-2.9				
Social benefits and other net transfers	37.5	1.8	3.6	10.8				
of which: net social benefits	-	2.1	3.5	9.6				
Net social security contributions (-)	23.4	4.1	2.9	-5.4				
of which: paid by employers	-	4.9	2.7	-5.4				
Current taxes on income and wealth (-)	18.9	0.6	3.3	-2.2				
Gross disposable income	100.0	1.9	0.9	-2.8				
In real terms (4)	-	0.9	0.4	-2.6				
In real terms, adjusted for expected inflation (4) (5)	-	0.4	1.6	-1.8				
In real terms, adjusted for past inflation (4) (6)	-	0.7	1.1	-2.1				
	Percentage ratios							
Average propensity to save (7)	-	7.5	7.6	15.3				
Calculated on income adjusted for expected inflation	-	5.8	7.0	15.4				
Calculated on income adjusted for past inflation	_	6.6	7.4	15.5				

Sources: Calculations and estimates based on Istat and Bank of Italy data.

 (1) Data for consumer households. – (2) Mixed income and income drawn by members of quasi-corporations. – (3) Gross operating profit (mainly rental income), net rents from land and intangible assets, actual net interest dividends and other profits distributed by companies. –
 (4) Deflated using the consumer household consumption deflator. – (5) Gross disposable income net of expected losses on net financial assets due to inflation (estimated on the basis of the Consensus Economics survey). – (6) Gross disposable income net of losses on net financial assets due to inflation, calculated ex post. – (7) Ratio of saving (gross of depreciation and net of changes in pension fund reserves) to gross disposable income.

Based on data from the Special Survey of Italian Households (ISF),¹ conducted by the Bank of Italy last November, about one third of households suffered a reduction in income in 2020 (see the box 'Italian households during the epidemic: the Bank of Italy's survey', *Economic Bulletin*, 1, 2021). The share was higher for households with minors and for those with a head of household with at least one of the following characteristics: of foreign origin, not more than 64 years old and education qualification lower than tertiary level (Figure 5.1).

Since March 2020, the use of social shock absorbers has been intensive (see *Annual Report for 2019*, 2020). The income support measures for workers, which have been strengthened and extended to previously uncovered categories (see Chapter 8, 'The labour market'), have been essential in limiting the potentially very large impact of the crisis on the inequality in the distribution of labour income (see the box 'The impact on inequality of the COVID-19 crisis and of the income support measures in the first half of 2020').

¹ The five editions of the survey were conducted between April and May 2020, between August and September 2020, at the end of November 2020, between February and March 2021 and in April 2021 respectively; see the Bank of Italy's website, Special Survey of Italian Households (ISF).





Source: Based on data from the Bank of Italy's Special Survey on Italian Households (ISF), 3rd edition.

(1) Income includes any support measures. Age bracket, country of birth and academic qualifications are characteristics of the head of the household.

The measures in favour of households suffering economic hardship, which had been reinforced in 2019 with the establishment of the new minimum income scheme (*Reddito di cittadinanza*, or RdC) and the minimum pensions scheme (*Pensione di cittadinanza*, or PdC),² were temporarily expanded by the introduction of the emergency income (*Reddito di emergenza*, or REM), which was paid monthly for a maximum of eight months in the period between May 2020 and May 2021.³ As at December 2020, just over 1.2 million households had received either the RdC or the PdC, over 200,000 more than in the same month of the previous year; the average monthly amount disbursed was around €530. According to our estimates, more than 400,000 households received at least one of the five emergency income monthly payments envisaged for 2020, with an average monthly benefit of around €550;⁴ according to ISF data, most of the households benefiting from emergency incomes were already in economic difficulty before the pandemic.

Overall, our estimates suggest that between March 2020 and April 2021, more than 40 per cent of households had access to at least one form of income support for workers (wage integration, benefits for the unemployed and self-employed or freelancers, and other bonuses) or for households (RdC, REM, baby-sitting vouchers); of these, about one third state that they have benefited from two or more measures.

2020

For further details, see the box 'An analysis of the redistributive effects of recent anti-poverty measures', Chapter 5, *Annual Report for 2018*, 2019.

³ The emergency income (REM) was set up by Decree Law 34/2020 and renewed by Decree Laws 104/2020, 137/2020 and 41/2021. Access to this measure is conditional upon the possession of certain income and capital requirements. The monthly sum varies from €400 to €840, depending on the number of members in a household, its composition and the presence of individuals with severe disabilities or who are not self-sufficient.

⁴ P. Venditti and I. Salvati, 'L'emergenza sanitaria: il sostegno a lavoratori, famiglie e imprese erogato attraverso la Tesoreria dello Stato', Banca d'Italia, *Note Covid-19*, 25 February 2021 (only in Italian).

THE IMPACT ON INEQUALITY OF THE COVID-19 CRISIS AND OF THE INCOME SUPPORT MEASURES IN THE FIRST HALF OF 2020

The economic crisis triggered by the pandemic has had a considerable impact on employment income and on its distribution. Using labour force survey data can help in assessing the short-term efficacy of the social safety nets in place before the pandemic and of the extraordinary ones introduced to cope with the emergency, both at individual and at the household level.¹ The analysis focuses on households for which work generates almost all the disposable income, represented by those in which the household head is between 15 and 64 years of age and there are no pensioners.

The average losses in labour income in the first half of 2020 compared with the fourth quarter of 2019^2 are estimated for three scenarios.

The first (without social safety nets) simulates the decrease when there are no income support or job protection measures.

The second (with ordinary social safety nets) estimates the losses that would be observed if there were only the social safety nets in place before the extraordinary measures introduced in 2020. Specifically, it assumes that: (a) workers in sectors covered by wage supplementation (Cassa integrazione guadagni - CIG) would have access to it in proportion to the average reduction in the hours worked in their own employment sector; (b) in the other sectors, the decrease in hours worked would be entirely reflected in the loss of employment for those more likely to become non-employed;³ and (c) those who lose their jobs would receive unemployment benefit, under the unemployment insurance scheme currently in place (nuova assicurazione sociale per l'impiego - NASpI).

As well as the ordinary social safety nets, the third scenario (with ordinary and extraordinary COVID-19 social safety nets) also considers three measures introduced by the 'Cure Italy' and 'Relaunch' decrees: (a) the ban on dismissals and the extension of wage supplementation (CIG) to all employees; (b) the $\notin 100$ bonus for employees in sectors where activities were not suspended and who were unable to work remotely in the first months of lockdown; and (c) the $\notin 600$ bonus paid out in March and April and the additional grant disbursed in May for



¹ F. Carta and M. De Philippis, 'The impact of the COVID-19 shock on labour income inequality: evidence from Italy', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 606, 2021.

² The labour income measurement referring to the fourth quarter of 2019 is obtained according to the methodology described in F. Carta, 'Timely indicators for labour income inequality and poverty using the Italian labour force survey', *Social Indicators Research*, 149, 2019, also published by Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 503, 2019. Specifically, the estimate uses the information available in the labour force survey on net monthly wages for employees and on the hours worked by employed persons; the figure for self-employed workers is instead obtained by imputation.

³ It is assumed that those who lose their jobs have an estimated likelihood of becoming non-employed greater than a threshold defined at sectoral level (the threshold is such that the share of those who lose their jobs is equal to the decrease in the percentage of hours worked, adjusted for the average number of full-time equivalent units).

self-employed workers.⁴ The analysis focuses on the social safety nets that are more closely linked to labour and does not take account of the two measures chiefly designed to alleviate poverty (the minimum income scheme (RdC), introduced in 2019, and the emergency income scheme (REM), set up under the 'Relaunch Decree', since the data used do not provide information on whether households have the requirements to access these measures.

The results of the simulations (see panel (a) of the figure) indicate that in the scenario with no social safety nets, the fall in average labour income in the first half of 2020 would be about 10 per cent compared with the fourth quarter of 2019 and would above all affect fixed-term employees and self-employed workers. In the scenario that only considers ordinary social safety nets, the loss for employees would be significantly lower, mainly thanks to the availability of unemployment benefits, while it would remain unchanged for self-employed workers, most of whom are not covered by these social safety nets. Lastly, in the third scenario, the extraordinary measures of the 'Cure Italy' and 'Relaunch' decrees significantly reduced the fall in income, estimated at around 4 per cent on average; the effect of the new instruments is particularly noticeable for self-employed workers, who have received ad hoc benefits. The simulation shows, however, that in all the scenarios, some categories of employed persons, such as fixed-term employees with discontinuous careers or freelancers, have suffered marked losses in income.

These differing trends in individual losses influence the distribution of labour income among households, adjusted to take account of economies of scale in consumption⁵ (see panel (b) of the figure).

In the scenario without social safety nets, household labour income would be markedly reduced for households that were in the lowest fifths of the distribution prior to the pandemic, since the crisis hit hardest in the sectors employing most of the lowest paid workers. In the absence of income support or job-protection measures, the inequality in equivalized labour income, measured by the Gini index, rises in the first half of 2020 to 38.8 per cent, from 34.8 per cent on average in 2019 (above all because the share of individuals in households with no labour income rises by almost 4 percentage points). The increase in inequality is significantly greater than that actually observed, with the same definition of income and the same population of households, throughout the entire timespan of the two previous recessions (3.1 percentage points between 2009 and 2014).

⁴ It should be noted that income losses are simulated in the third scenario too, because in the available data there is no detailed information on who received the various benefits or on the amount received. Specifically, the analysis assumes that all those who meet the requirements for requesting a given social benefit do actually apply for the said benefit and receive it. The take-up rate for the subsidy for self-employed workers, provided for by the 'Cure Italy' and 'Relaunch' decrees, is instead estimated at around 70 per cent, in line with the information available. See G. Bovini, D. Checchi, F. Di Nicola, E. Di Porto, P. Naticchioni and E. Viviano, 'Prime evidenze sui pagamenti connessi al DL Cura Italia n. 18/2020', INPS and Banca d'Italia, 27 April 2020 (only in Italian).

⁵ This adjusted or 'equivalized' labour income is a better indicator of standards of living, and is obtained by dividing the total labour income of a household by a coefficient that takes account of the number of its members. It assigns a value of 1 to the head of household, 0.5 to each member aged 14 and over, and 0.3 to those under the age of 14.



Source: Based on Istat's labour force survey.

(1) The figure shows the estimated average percentage loss of labour income for individuals who were employed in the fourth quarter of 2019; individuals are distinguished based on the type of pre-pandemic employment contract they had (fourth quarter of 2019). – (2) The figure shows the estimated average percentage loss of labour income for households with at least one person employed in the fourth quarter of 2019; households are distinguished by fifths of equivalized pre-pandemic labour income (fourth quarter of 2019).

According to the estimates, the ordinary social safety nets would mitigate most of the distributive effects of the pandemic, but the impact of the crisis would remain greater for the poorest households (the Gini index would be 35.7 per cent).

Lastly, panel (b) of the figure shows that the extraordinary benefits introduced with the 'Cure Italy' and 'Relaunch' decrees completely offset this residual increase in inequality, predominantly favouring people in the first fifth of the distribution of equivalized labour income in 2019. Once the change in the relative positions of households along the pre- and post-pandemic distribution has been taken into account, in the scenario that also considers the extraordinary COVID-19 social safety nets, the Gini index remains essentially the same as that observed in 2019. The share of individuals living in households with no income also remains at similar levels to pre-pandemic ones in the first half of 2020.

Overall, the results confirm the fundamental effectiveness of the measures adopted to support households' labour income in the short term, but at the same time bring to light the fragmented nature of the social safety net system in place in Italy. Some categories of employed persons would remain largely uncovered by employment income support in the absence of extraordinary interventions.

Data taken from the ISF indicate that for almost one third of the households surveyed in the second half of April 2021, monthly income is still significantly lower than it was before the onset of the pandemic. Around one sixth of households expect a drop in income for the year as a whole; this figure rises to 22 per cent for those who said they experienced economic difficulties even before the public health emergency.

When assessing the economic and social effects of the crisis in the medium and long term, particular attention must be paid to the conditions in which children and young people have found themselves. In 2020, the number of children belonging to households in which no member was employed rose to more than 900,000, almost 100,000 more than in 2019.⁵ In addition to the negative repercussions on the prospects for adult life because of living in conditions of economic hardship as young people, the pandemic has had a significant impact on education, heightening the importance of the family environment due to the protracted use of distance learning.⁶ Our estimates for upper secondary school, where the suspension of classroom teaching has lasted longer, suggest that parents with a higher level of education have increased the support given to their children more than others have.⁷ These disparities could have lasting effects on the acquisition of skills and on future opportunities for children and young people, as the existing gaps may widen.

Consumption

The public health emergency caused a sharp reduction in consumption in 2020 (-11.7 per cent), bringing it back to the levels of the end of the 1990s. Spending on services, which are more affected by social distancing and fear of infection, contracted by 16.4 per cent (-40.5 per cent for hotel and catering costs alone; Table 5.2). Purchases of goods decreased by 6.4 percent, with a fall for semi-durable and durable goods in particular; however, the decrease in the component of non-durable goods was less steep.

The easing over the summer of the restrictions on businesses introduced in March encouraged a partial recovery in spending in the second half of the year. Nevertheless, concerns about the development of the personal and general economic situation held back the improvement in household confidence, which was very low (Figure 5.2). The propensity to save, which rose abruptly in the spring, reached a 20-year high on average in 2020 (15.3 per cent; Figure 5.3). It largely reflected both precautionary reasons, in line with the negative outlook for income, and the evolution of the epidemiological situation, which has limited and discouraged certain types of purchases (see the box 'Consumption and saving behaviour during the pandemic').

⁵ This estimate refers to minors living in households where the household head is under 65 years of age and there are no pensioners.

⁶ According to Istat data, in the two years 2018-19, about 12 per cent of children aged 6 to 17 did not have a computer or a tablet at home; in 2018, more than four out of ten children were living in overcrowded conditions.

G. Bovini and M. De Philippis, 'Alcune evidenze sulla modalità di svolgimento della didattica a distanza e sugli effetti per le famiglie italiane', Banca d'Italia, *Note Covid-19*, 21 May 2021 (only in Italian). The estimates are taken from the fourth edition of the ISF. The data on academic qualifications refer to the head of the household. Some 37 per cent of those who have at least one high school diploma declare that the adults in the household have increased their support for their children at times when classroom teaching has been suspended; the share falls to 22 per cent for households whose head has at most a middle school diploma.

Table 5.2

Household expenditure (chain-linked values and percentage changes)								
	% in 2020 (volumes at previous year's prices)	2017	2018	2019	2020			
Goods	50.1	1.8	1.3	0.0	-6.4			
Non-durable goods	33.6	0.5	0.2	0.1	-2.6			
of which: food and non-alcoholic								
beverages	16.5	1.0	0.2	0.5	1.9			
Semi-durable goods	8.0	1.8	2.2	-3.0	-17.8			
of which: clothing and footwear	5.3	1.4	3.2	-3.8	-20.9			
Durable goods	8.5	7.0	4.7	3.2	-8.7			
Services	49.9	1.3	0.7	0.8	-16.4			
of which: hotels and restaurants	7.0	2.9	0.8	0.7	-40.5			
education	0.9	1.0	1.8	0.7	-8.9			
Total domestic expenditure	100.0	1.5	1.0	0.4	-11.7			
Spending abroad by Italian residents (1)		10.0	4.8	3.6	-63.8			
Spending in Italy by non-residents (1)		6.4	5.3	5.6	-60.3			
Total national expenditure		1.5	0.9	0.3	-10.7			
Memorandum item:								
National consumption deflator		1.1	1.0	0.5	-0.2			

Source: Istat's national accounts. (1) In 2020, spending abroad by Italian residents and in Italy by non-residents came to 0.8 and 1.8 per cent of national expenditure, respectively.



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Source: Based on Istat data.

(1) Spending of consumer households and non-profit institutions serving households; chain-linked values; percentage changes on the previous year. – (2) Disposable income of consumer households and non-profit institutions serving households, deflated using the consumption expenditure deflator for resident households. – (3) Indices: 2010=100; seasonally adjusted data; moving averages for the 3 months ending in the reference month. – (4) Obtained by calculating the average of the balances between the percentages of replies indicating a situation that is improving or worsening in response to questions on: the general economic situation in (a) the past 12 months and (b) over the next 12 months; the personal economic situation in (c) the past 12 months and (d) over the next 12 months; (e) the advisability of durable goods purchases; (f) expected developments in unemployment; (g) the possibility and (h) advisability of saving; and (i) their household's financial situation. - (5) Average of the balances between the percentages of replies to (c), (d), (e), (g), (h) and (i).

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Sources: Based on Eurostat and Istat data.

(1) In addition to consumer households, includes producer households (sole proprietorships, informal partnerships and de facto companies employing up to five workers, producer households producing market goods and non-financial services, and institutional units producing services auxiliary to financial intermediation and employing no workers) and non-profit institutions serving households. – (2) Savings are calculated gross of amortization and net of changes in pension fund reserves. – (3) Calculated on income adjusted for past inflation. Right-hand scale.

CONSUMPTION AND SAVING BEHAVIOUR DURING THE PANDEMIC

The recession induced by the COVID-19 pandemic has led to a fall in consumption and an increase in the saving rate of households in all the main economies, particularly so in Italy (see panel (a) of Figure A).



Sources: Based on data from Eurostat, FRED (Federal Reserve Economic Data), Istat, ECB, and the Bank of Italy. (1) For consumption, changes are calculated as the percentage difference in household consumption between 2019 and 2020. Propensity to save is the difference, in percentage points, between the average saving rate for all households in 2019 and in 2020. – (2) Changes in consumption are calculated in relation to the year-earlier period; contributions are calculated based on an econometric estimate of household consumption. The difference between the dashed black line and the unbroken line indicates the unexplained component of the model.

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An empirical analysis¹ at macro- and micro-economic level studied the consumption and saving behaviour of Italian households during the pandemic. The fall in aggregate consumption in 2020 was much greater than had been forecast on the basis of trends in the traditional drivers,² such as permanent income, hours worked, wealth, financing conditions and labour market expectations (see panel (b) of Figure A). The fall can be attributed to the measures adopted to contain the virus and to the fear of contagion, in addition to greater uncertainty about the future. These factors are particularly relevant in the case of spending more directly affected by the restrictive measures and where the risk of contagion is perceived to be higher (hotels, restaurants and bars, and sporting, recreational and cultural activities). Conversely, spending on food items does not seem to have been affected.

The macroeconomic estimates mask the uneven behaviour of households according to their different economic conditions. Using data from the third wave of the Special Survey of Italian Households, carried out by the Bank of Italy at the end of November 2020, indicators can be constructed, at individual level, of the different determinants of expenditure: economic factors linked to income and employment, uncertainty about the future, fear of infection, and the restrictive measures.³ For households as a whole, economic factors explain just over half of the estimated probability of a drop in expected consumption; fear of infection and uncertainty about the future also play a significant role. Economic reasons predominate for households whose head is unemployed or retired, while the other two factors are more important for the self-employed (see panel (a) of Figure B).

In the fourth wave of the survey,⁴ about 40 per cent of households reported they had accumulated savings in 2020⁵ and of these, almost one third said they had saved more than in 2019. The increase in savings is concentrated among households indicating that they met their monthly expenses with little or no difficulty.

¹ E. Guglielminetti and C. Rondinelli, 'Consumption and saving patterns in Italy during COVID-19', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), forthcoming.

² R. De Bonis, D. Liberati, J. Muellbauer and C. Rondinelli, 'Consumption and wealth: new evidence from Italy', Banca d'Italia, Temi di Discussione (Working Papers), 1304, 2020.

³ Since April 2020, the Bank of Italy has conducted its Special Survey of Italian Households (SSIH) every three months. The survey gathers information on developments in the financial situation of households and their expectations. The main results of the third wave, conducted at the end of November 2020, are described in the box 'Italian households during the epidemic: the Bank of Italy's survey', in *Economic Bulletin*, 1, 2021, and in C. Rondinelli and F. Zanichelli, 'The main results of the third wave of the special survey of Italian households in 2020', Banca d'Italia, *Note Covid-19*, 30 March 2021 (only in Italian).

⁴ The main results of the fourth wave of the survey, conducted in late February and early March 2021, are described in the box 'Italian households during the epidemic: the Bank of Italy's survey', *Economic Bulletin*, 2, 2021.

⁵ The share was one third in 2016, which is the most recent year for which data are available prior to the outbreak of the pandemic; see 'Survey on Household Income and Wealth', Banca d'Italia, Statistics Series, 12 March 2018.



Based on household expectations, one third of the savings accumulated are likely to be spent in 2021 (see panel (b) of Figure B), while just over half will be kept on deposit or in some other kind of investment.

Sources: Based on data from the Bank of Italy, Special Survey of Italian Households (SSIH), 3rd and 4th waves.

A further study⁶ based on data from this survey confirms that holding savings appears, on the one hand, to be curbed by the financial difficulties of some households but, on the other, it may be driven by precautionary motives, linked not only to employment uncertainty but also to the belief that the end of the health emergency may not be close at hand and that a new pandemic may arise in the next few years. Even when the current emergency comes to an end, households could therefore still have a more prudent attitude, keeping higher levels of accumulated savings than before the pandemic.

In spring 2021, households' pessimism regarding their own situation abated. According to the results of the fifth edition of the ISF, conducted in April, expected consumption intentions are still influenced by the health emergency and by the success of the vaccination campaign, which is proceeding more slowly than expected for about 44 per cent of respondents. The share of families stating that they have cut spending on hotel, bar and restaurant services and personal care is still prevalent. The success of the vaccination campaign is one of the main factors that would encourage a recovery in consumption. Households expect that their propensity to save will in any case remain high in 2021.

⁶ V. Ercolani, E. Guglielminetti and C. Rondinelli, Fears for the future: saving dynamics after the Covid-19 outbreak', Banca d'Italia, *Note Covid-19*, forthcoming.



Source: Based on Confcommercio data.

(1) Difference between the current level and the average recorded in 2019 by Confcommercio's consumption indicator; seasonally adjusted data. – (2) Goods and services for communication, personal care and households, clothing and footwear, food, drink and tobacco products.

In the first quarter of 2021, the volume of retail sales estimated by Istat remained broadly stable compared with the previous quarter. Confcommercio's consumption indicator stood at levels just below those prior to the pandemic on average for the four months between January and April, (Figures 5.4 and 5.5). However, the gap between current and pre-pandemic spending levels is still significant, principally because of expenditure on tourism and leisure and the purchase of clothing and footwear. The gradual recovery in consumption in recent months is also shown by the dynamics of ATM withdrawals and of transactions made at POS terminals (Figure 5.5), the latter being more widespread as a result of the pandemic (see the box 'The impact of the pandemic on households payment habits').



Sources: Based on data from the Bank of Italy, Istat and Confcommercio. (1) Data obtained from the BI-COMP multilateral clearing system and adjusted for seasonal effects. Right-hand scale. For more details, see the Bank of Italy's website, 'BI-Comp and CABI: retail payment systems'. – (2) Data seasonally adjusted. The figure for May 2021 is not yet available. Right-hand scale. – (3) Final consumption expenditure of resident and nonresident households on the economic territory; current prices; the series are calendar adjusted.

THE IMPACT OF THE PANDEMIC ON HOUSEHOLDS' PAYMENT HABITS

The pandemic has greatly accelerated the spread of digital payment technologies in Italy, where there had already been a steady growth in the use

of cashless payment instruments in previous years. One study analyses the relationship between some indicators of payment card use – which are the main substitute for cash for retail purchases – and the number of new official cases of COVID-19. This relationship makes it possible to measure how much the pandemic has affected payment habits, owing to both fears of infection and to the measures adopted by the Government to limit mobility and production and commercial activities.¹

The results suggest that the pandemic has led to a significant and persistent reduction in the ratio of the amount of cash withdrawn from ATMs to the amount spent at points of sale using debit cards (cash-card ratio). The exceptional fall in private consumption in 2020 was reflected in a sharper drop in cash withdrawals than that in card transactions (see panel (a) of Figure A). Moreover, the use of digital technologies, which create greater distance between the consumer and the merchant, has increased considerably, as indicated by the persistent increase in the share – of total purchases with cards – of both transactions using contactless cards at the point of sale and those via e-commerce (see panel (b) of Figure A).



Source: Based on Bank of Italy data.

(1) The figures show the response of the payment indicators, given a 10-per cent increase in the official number of new coronavirus cases, on the various time horizons shown on the horizontal axis. The coloured areas represent the confidence intervals of 95 per cent. – (2) The cash-card ratio is the ratio of the value of ATM debit card withdrawals to the value of debit card payments made at points of sale. Right-hand scale.

G. Ardizzi, A. Nobili and G. Rocco, 'A game changer in payment habits: evidence from daily data during a pandemic', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 591, 2020. The empirical relationship between indicators for payment card use and the number of new official cases of COVID-19 has been studied by applying simple linear regressions to daily data at different time horizons, which allows both the intensity and the persistence of the effects over time to be measured.

Similar evidence also emerges from the results of an ECB survey conducted in July 2020 on euro-area consumers to assess the impact of the pandemic on the use of retail payment instruments.² The field of analysis included purchases made at points of sale. With reference to Italy, a comparison of the results with those of surveys in previous years shows that cash is still the instrument most used for payments, but the COVID-19 epidemic seems to have accelerated its replacement with alternative payment instruments (see panel (a) of Figure B). About one third of respondents said they had used cash less frequently since the onset of the pandemic;³ among these, 94 per cent reported that they will continue to prefer alternative payment instruments even when the health emergency is over (60 per cent definitely and 34 per cent probably; see panel (b) of Figure B). Among the factors that led to the lower use of cash, respondents indicated the ease of use of electronic payments, particularly contactless technology (48 per cent), and the risk of infection from banknotes (27 per cent) or from physical proximity to the merchant (21 per cent).



Source: Based on ECB data.

(1) The July 2020 Impact survey supplements that of 2019; it was carried out to discover the effects of the COVID-19 pandemic on payment habits. Estimates refer to the last payment made by each respondent. - (2) The estimates are based on the perception of the respondents, who were asked how often they used the various instruments compared with before the outbreak of the pandemic, and also after the removal of some restrictions; the frequency of purchases was not taken into consideration.

² For the results of the Impact of the Pandemic on Cash Trends (Impact) Survey, see ECB, *Study on the payment attitudes of consumers in the euro area (SPACE)*, December 2020.

³ The lower use of cash can also be inferred from an analysis of the determinants of banknote circulation in Italy. This analysis shows that much of the strong growth observed in 2020 reflected the precautionary motive linked to both uncertainty and reduced mobility, which led the private sector to hold greater cash stocks. See L. Baldo, E. Bonifacio, M. Brandi, M. Lo Russo, G. Maddaloni, A. Nobili, G. Rocco, G. Sene and M. Valentini, Inside the black box: tools for understanding cash circulation', Banca d'Italia, Mercati, Infrastrutture, Sistemi di Pagamento (Markets, Infrastructures, Payment Systems), forthcoming.

Property wealth and the housing market

According to our estimates, the wealth held by consumer households in the form of real assets (almost entirely accounted for by houses) declined by about 1 per cent in 2020; the decrease reflected the loss in the value of real estate assets, according to estimates from the Revenue Agency's Property Market Observatory (OMI). The marked increase in savings contributed to the increase in total net wealth, which also includes financial assets and refers to all consumer and producer households (see Chapter 7, 'The financial situation of households and firms').

The property market was significantly affected by the effects of the pandemic. According to IMO data, sales fell by 7.6 per cent in 2020 (Figure 5.6.a), following the sharp drop of more than 22 per cent recorded in the first half of the year, in part due to restrictions on mobility and on the activity of real estate agencies. The recovery in sales in the last two quarters of 2020 mainly involved detached and larger dwellings, chiefly located in areas with low population density (see the box 'The pandemic and households' preferences: indications from the real estate market'). This shift in demand was partly reflected in an increase in the prices of the houses up for sale (Figure 5.6.a).

The surveys conducted by the Bank of Italy in the first two quarters of this year have revealed a gradual improvement in the outlook for the property market, although on average just over one third of estate agents expect that the negative effects of the pandemic on the sector will last until mid-2022 (Figure 5.6.b). Our calculations based on data from the Immobiliare.it online platform indicate that, between January and April, the demand for residential properties was high, especially in small municipalities.



Sources: Based on data from the Revenue Agency, the Bank of Italy (Italian Household Market Survey), Istat and the Immobiliare.it website. (1) Quarterly data. – (2) The figures are adjusted for seasonal and calendar effects. – (3) House prices deflated by the consumer price index.

THE PANDEMIC AND HOUSEHOLDS' PREFERENCES: INDICATIONS FROM THE REAL ESTATE MARKET

The COVID-19 pandemic has affected households' behaviour in many ways. Some of the changes – concerning social relationships, working and studying practices, how purchases are made or how leisure time is used – may be, at least in part, non-temporary and may also influence preferences for different housing solutions and consequently the dynamics of the real estate market.

In 2020, the demand for housing had already undergone significant changes, as shown by the analysis of the data from the Italian Housing Market Survey, conducted by the Bank of Italy in collaboration with Tecnoborsa and OMI, and from the advertisements for houses on the Immobiliare.it website.¹

After a general decline in the spring, partly caused by the restrictions on the activity of real estate agencies, demand recovered in the summer and then consolidated in the following quarter. According to the statistical evidence derived from online research and confirmed by the indications of the estate agents interviewed for the survey, in the second half of the year, demand was increasingly directed towards properties that were larger, detached and with outdoor spaces such as terraces or gardens. It was also more marked in areas with lower population density, where the presence of houses with these features is more common (Figure A).



Source: Based on data from Immobiliare.it.

(1) Demand is measured by the number of daily contacts per advert (namely the messages sent to sellers via the Immobiliare.it portal), comparing the monthly figures with those for the same period in the previous year. – (2) Population density è calculated at census section level, namely the smallest geographical survey unit into which Italian territory is divided.

^{E. Guglielminetti, M. Loberto, G. Zevi and R. Zizza, 'Living on my own: the impact of the COVID-19 pandemic on housing preferences', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 627, 2021. Detailed descriptions of the data cited are available in the 'Italian Housing Market Survey', Banca d'Italia, Statistics Series, 4 December 2019 (only in Italian) and in M. Loberto, A. Luciani and M. Pangallo, 'The potential of big housing data: an application to the Italian real-estate market', Banca d'Italia, Temi di Discussione (Working Papers), 1171, 2018.}

For example, the likelihood that adverts for properties with gardens receive contact requests from potential buyers (generally a good forward-looking indicator that the sale will actually take place) is greater even in normal times than that for properties with no outdoor spaces. Since May of last year, econometric estimates have indicated that the gap between these two probabilities has more than doubled.

The likelihood of a contact request is estimated by taking account of a broad set of characteristics of the property, intrinsic or relating to its location, and isolating the effect due to each of them. In the second part of 2020, the distribution of demand in the geographical context of local labour systems recorded a clear shift from the most central areas to peripheral ones (Figure B shows the trends for Milan and Rome; those observed for other large cities are similar). These developments, which are in line with the sales figures published by OMI, show a reversal of the trend compared with previous years.²



Source: Based on data from Immobiliare.it.

(1) The areas illustrated in the figures correspond to the local labour systems in Milan and Rome respectively. Demand is measured by the number of daily contacts per advert, comparing the monthly figures with those for the same period in the previous year; the shades of colour are determined by the distribution quintiles of the ratios.

The trends in housing demand that emerged last year could persist in the future, especially if changes in work organization were to become or were considered permanent, for example a far more extensive use of remote working practices than before the pandemic (see the box 'Agile work in the private sector', Chapter 8). Since the purchase of a dwelling is one of the most important (and less frequent) economic choices made by households, and therefore also reflects long-term considerations, the variations in preferences already observed suggest that at least some households have judged that the new ways of working are not transitory.

² Specifically, the OMI data indicate that in the second half of 2020, growth in house sales was less sustained in provincial capitals than in smaller towns.

6. FIRMS

In 2020, firms' activity contracted significantly: industry staged a rapid recovery, while services were more severely affected by fears of infection and restrictions, with a high degree of variability between segments. Overall, the trends this year have demonstrated the economy's considerable ability to recover, but developments in the number of cases have continued to be the main obstacle to growth.

As occurred during the global financial crisis and the sovereign debt crisis, firms made substantial cuts in their investments owing to the uncertainty created by the pandemic. However, according to the surveys conducted by the Bank of Italy, unlike in the previous recessions, a large swathe of firms appears to be ready to resume investing once the health situation has improved solidly, thanks in part to very favourable financing conditions.

In the most recent surveys, firms' opinions on the demand for their own products is less pessimistic; however, most report a level of activity that is still lower than that prior to the health emergency and expect recovery times of more than one year on average.

The epidemiological situation weighed on firm demographics, translating into a sharp drop in the birth of new firms, associated with a significant decline in job creation, as well as in the number of exits from the market, limited by public support measures and the freeze on liquidation proceedings.

Nevertheless, the pandemic also accelerated the digital transformation of the production system: recourse to smart working and the use of new digital technologies increased considerably; half of the firms expect to continue to use them in the future.

Our surveys indicate that the interruption or the postponement of changes to some production processes, caused by the health crisis, delayed firms' ecological transition plans. Looking ahead, the full implementation of the investments envisaged in the National Recovery and Resilience Plan (NRRP) and the related reforms should, however, provide a boost to the process of transitioning towards a digitalized, more sustainable, economy (see the box 'The National Recovery and Resilience Plan', Chapter 4).

Sectoral developments and the structure of the production system

Value added and production. – Last year, value added in the Italian economy experienced its sharpest contraction since the Second World War (-8.6 per cent, against 0.2 per cent in 2019). Industrial production fell even more markedly (-10.9

per cent), affected by the restrictions imposed to contain the pandemic, which in the second quarter forced a shutdown of a large portion of manufacturing (see Chapter 6, 'Firms', *Annual Report for 2019*, 2020). During the summer, with the gradual relaxation of restrictions, production recovered, returning to pre-health crisis levels; a new, but more moderate, drop coincided in autumn with the second wave of infection.

The contraction in activity affected the entire production system: only 13 per cent of the sectors recorded an expansion, a share comparable to that observed during the global financial crisis (Figure 6.1). The decline was smaller in the food processing and pharmaceutical production sectors (-2.3 per cent and -4.4 per cent, respectively), which were exempt from the restrictions on activity. The biggest decreases were in the textile and petrochemical sectors (-28.2 per cent and -15.6 per cent respectively); the latter was not directly affected by measures limiting its production, but rather by the sharp drop in demand connected with the restrictions on mobility.



Source: Based on Istat data.

The reduction in value added in services (-8.1 per cent) was overall less than that in manufacturing (-11.4 per cent), but is analogous if imputed rents and sectors in which there is a dominant public presence, neither of which were affected by the crisis, are excluded. The differences between the various private service sectors were greater than between those in manufacturing: the sharp drop in hotels and catering (-40.1 per cent) stands in contrast with the expansion in telecommunications and IT-related services.

The loss of value added was more limited in agriculture and in construction (-6.0 and -6.3 per cent, respectively). In the latter sector, business recovered in the second half of the year, exceeding end-2019 levels. The good performance of civil engineering works contributed to the recovery in construction, while the introduction of new tax incentives in the residential segment led to the postponement of planned maintenance works pending updated regulations.¹

As a proportion of the total (based on the ATECO classification); sectors posting growth are those that have expanded since the previous year. –
 Right-hand scale.

In May of last year, Decree Law 34/2020 (the 'Relaunch Decree') introduced tax deductions amounting to 110 per cent for specific types of expenditure, made as from July 2020, on the energy enhancement and seismic retrofitting of buildings; in August of that same year, the first implementing circulars were issued after the decree was converted into law.

Profitability. – Based on national accounts data, in 2020 the gross operating profit fell significantly (See Chapter 7, 'The financial situation of households and firms') although to a lesser extent than did value added, thanks to the sharp contraction in labour costs, which benefited from the exceptional use of wage supplementation (see Chapter 8, 'The labour market').

According to the Survey of Industrial and Service Firms – conducted by the Bank of Italy's branches in spring of this year of around 4,000 firms with at least 20 employees in industry excluding construction and in private non-financial services – the deterioration in economic results was widespread. The share of firms posting a profit fell by around 12 percentage points, to 61 per cent. The decline was less in industry excluding construction compared to services, due in part to the better performance of medium-sized firms and of those that earn more than two thirds of their revenues abroad.

The firms, whose assessments had worsened in the autumn, expressed less pessimistic views in the first few months of 2021 on the general economic situation and on the demand for their products. Most thought that their level of activity was still lower than in the period preceding the public health crisis. The time needed to return to pre-pandemic production standards was estimated at 16 months on average (see the box 'Italian firms' assessments according to the Survey on Inflation and Growth Expectations', *Economic Bulletin*, 2, 2021).

Labour demand. – Last year, the reduction in total hours worked by payroll employees in the non-farm private sector (-11.6 per cent) reflected the sharp contraction in hours worked per employee and the less marked decrease in the number of persons in employment (see Chapter 8, 'The labour market'). The decline was widespread across sectors, but more pronounced in private services

(-13 per cent). It was more limited in construction (-6.2 percent) where, unlike the other sectors, the number of employees increased (1.7 percent).

Firm demographics. – The net birth rate of firms stood at 0.4 per cent (or almost 19,000 more firms), down only slightly compared with 2019 (Figure 6.2). This trend is, however, the result of a steep drop in the birth of new firms and in market exits (see the box 'Firm demographics during the pandemic'). The reduction in the birth rate was concentrated in the second quarter, affected by measures to suspend activity; market exits were restrained by support measures.



Sources: Istat, national accounts and based on infocamere data. (1) The net birth rate of firms is calculated as the difference between the birth and death rates. – (2) GDP at chain-linked volumes, reference year 2015. Right-hand scale.



FIRM DEMOGRAPHICS DURING THE PANDEMIC

Firm demographics were affected by the pandemic. The Government's measures to counter the spread of COVID-19 cases were reflected in the reduction in the number of shutdowns of activity, but the registration of new businesses also fell significantly.

Based on Infocamere's data on partnerships and limited companies, in 2020 about 13,800 fewer firms closed their doors permanently than in 2019 (-16.0 per cent; see panel (a) of Figure A). Liquidity support measures, grants and moratoriums on bankruptcies contributed to this, with bankruptcies dropping by around one third (see Chapter 12, 'Business activity regulation and the institutional environment').



Source: Based on Infocamere data.

(1) The data refer to partnerships and limited companies only; winding ups are calculated net of forced liquidations. – (2) The figure is calculated as the monthly cumulative sum of the difference between the number of winding ups in 2020 compared with 2019. – (3) Right-hand scale. – (4) The figure is calculated as the monthly cumulative sum of the difference between the number of registrations in 2020 compared with 2019.

Looking ahead, with the easing of support measures, the increase in the number of firms exiting the market will depend on the speed of the recovery and the regaining of profitability. Our analysis shows that, in December 2020, the share of limited companies with shareholders' equity below the minimum legal requirements, a condition that frequently precedes the winding up of the business, was more than 2 percentage points higher (11.3 per cent, equal to 82,200 firms) compared with what would have occurred under a pandemic-free scenario.¹

T. Orlando and G. Rodano, 'Firm undercapitalization in Italy: business crisis and survival before and after Covid-19', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 590, 2020.

The registration of new businesses also fell sharply: the decrease was concentrated in the first three months of the emergency; the absence of a full recovery in the second half of the year resulted in 21,500 fewer new firms in 2020 than in 2019 (-16.7 per cent; see panel (b) of Figure A).

The lower firm birth rate for 2020 significantly reduced job creation: new firms generated new jobs equal to 2.5 per cent of total persons in employment, more than one percentage point below the average registered between 2010 and 2019² (3.8 per cent). In their early years new firms grow faster than other firms and the growth in size of those that succeed offset, in part, the loss of jobs due to the high overall mortality rate for new businesses. Employment in firms born between 2010 and 2010 and 2015 and still in business after five years is around 80 per cent of that originally created by their cohort.

Birth rate dynamics are inconsistent among sectors. Based on the data available from January to July 2020, tourism, among the sectors hit the hardest by the effects of the pandemic, suffered the greatest loss of new businesses compared with the same period of the previous year (-46.6 per cent, compared with -34.1 per cent for all private services and -36.1 per cent for manufacturing).

For companies that operate sectors with high-intensity in digital technologies³ the decline in registrations was less marked, particularly thanks to the recovery in the summer months (Figure B). This trend is partly attributable to the greater possibilities offered by digital technologies to manage activities where there is reduced physical proximity inside and outside the firm. The fact that, based on Istat data, 80 per cent of active firms classified as being digital intensive belong to sectors defined as 'essential', and therefore exempt from the shutdown measures taken to contain the pandemic, may have also contributed.



Source: Based on Infocamere data.

The restrictions have also had an impact on the sectoral composition of firms already active in the market. An analysis conducted on the daily data⁴

² Based on INPS data.

³ Digital intensity is measured based on the classification proposed by F. Calvino, C. Criscuolo, L. Marcolin and M. Squicciarini, 'A taxonomy of digital intensive sectors', OECD Science, Technology and Industry Working Papers, 14, 2018.

⁴ A. Mistretta, 'La demografia d'impresa ai tempi del Covid-19: un approfondimento sui cambi di codice dell'attività', Banca d'Italia, *Note Covid-19*, 16 December 2020 (only in Italian).

shows that, during the period between 11 March and 17 May 2020, following the temporary shutdown of productive activities deemed 'non essential', the rate of requests to change ATECO code, which indicates the sector of economic activity, was higher than that observed between 2015 and 2019 (Figure C). The phenomenon, which was more widespread in manufacturing and in the northern regions, is shown to be even worse if only those requests to switch from 'non essential' to 'essential', which would have allowed the firms to continue production, are taken into account.⁵



Source: Based on Infocamere data.

 7-term moving average; percentage out of total notifications presented to the companies register; the vertical lines correspond to the main government measures adopted to contain the spread of the epidemic. – (2) Based on data from 2015 to 2019.

Investment

In 2020 capital accumulation fell by 9.1 per cent (Table 6.1), a decline that was little less than those of 2009 and 2012 following the global financial crisis and of the sovereign debt crisis (-9.7 per cent for both years).

After six years of robust growth, spending on capital goods fell sharply, more so than had occurred during the two previous crises. The decrease was particularly large for the purchase of transport equipment, where the contraction was slightly less than 30 per cent.

Investment in construction fell less significantly (-6.3 per cent, from 2.2 per cent in 2019): the marked reduction in the residential component, which was more affected by the restrictions, was accompanied by a smaller decrease in expenditure on non-residential construction (-3.9 per cent, from 2.8 per cent), likely supported by the public works component. The survey conducted by the Bank of Italy on a sample of around 550 construction companies confirms that there was an increase in public works construction last year that is expected to continue into 2021.

Total investment as a share of GDP equaled 17.9 per cent, essentially unchanged compared with the previous year; it is still, however, more than 3 percentage points lower than it was before the global financial crisis.

⁵ The results are confirmed when the analysis is limited to just firms that had already changed their ATECO codes in recent months, suggesting that the new notifications were not simply prompted by previous omissions or or input errors.

Table 6.1

Fixed investment in Italy (chain-linked values; per cent)								
	% composition in		Changes		% of GDP (1)			
	2020 (1) -	2018	2019	2020	2007	2020		
Construction	46.1	2.0	2.2	-6.3	11.4	8.3		
Costs of change of ownership	4.2	5.2	2.7	-11.2	1.1	0.8		
Housing (2)	23.2	1.1	1.7	-8.5	5.7	4.2		
Other (2)	22.9	3.0	2.8	-3.9	5.7	4.1		
Plant, machinery, armaments and cultivated biological resources of which: transport equipment Intellectual property	35.7 5.8 18.2	4.5 0.0 2.9	0.3 1.1 0.3	-15.1 -28.1 -2.9	7.6 1.5 2.5	6.4 1.0 3.3		
Total gross fixed investment	100.0	3.1	1.1	-9.1	21.6	17.9		
Total excluding housing	-	3.7	1.0	-9.3	15.9	13.8		
Total excluding construction	-	4.0	0.3	-11.4	10.1	9.7		
Source: Istat, national accounts. (1) At previous year's prices. Rounding may cause discrepancies in totals. – (2) Includes costs of change of ownership.								

Investment in the Survey of Industrial and Service Firms. – This survey conducted by the Bank of Italy confirms the sharp reduction in investment in 2020, enabling an assessment of the composition of and outlook for investment. The contraction was more pronounced among firms with fewer than 200 employees (Table 6.2). On average, actual spending is in line with the planned spending indicated in the spring 2020 survey, which had already taken into account the spread of the pandemic; compared to then, smaller-scale industrial firms cut their expenditure much less than they had initially planned.

Unlike in the previous two recessions of 2009 and 2012 – when a marked drop in investment was followed by a further downward revision of plans for the future or a merely partial recovery² – our survey suggests that most firms appear ready to revive investment plans that had been suspended, if the improvement in the health situation is confirmed, making up for delays.

The plans formulated by the firms for 2021 envisage a robust increase in accumulation, in the order of 9 per cent, albeit with differences: according to the survey, investment expenditure is expected to exceed 2019 levels for firms with more than 500 workers, while small firms' plans continue to be more modest.

In industry excluding construction these trends reflect changes in capacity utilization which, in 2020, fell on average from 78 per cent to just over 72 per cent.

² According to the Survey of Industrial and Service Firms, the firms curtailed their investment by 14.5 per cent in 2009, expecting a partial recovery to occur the following year (3.8 per cent; see Chapter 8, 'Demand, supply and prices', *Annual Report for 2009*, 2010). The contraction was much less in 2012 (-8.7 per cent) followed by, according to the firms' expectations, a further drop in investment (-5.0 per cent; see Chapter 8, 'Demand, supply and prices', *Annual Report for 2012*, 2013).

The firms expect there to be a strong rebound this year, reaching levels higher than those reported in 2019.

Gross fixed investment of firms according to Bank of Italy surveys by class size, capacity utilization and change in turnover (1) (percentage change at 2020 prices unless otherwise indicated)									
	Total	N	Number of employees Capacity ut (2) (3					Cha in turno	ange over (2)
		20 to 49	50 to 199	200 to 499	500 & over	Low	High	Low	High
Industry excluding construction	n								
Outturn for 2020	-8.6	-14.8	-13.4	-13.8	-1.2	-14.3	-6.2	-13.3	-5.9
Realization rate (4)	101.1	109.3	103.3	98.4	98.2	97.6	102.4	98.4	102.4
Planned investment for 2021	8.6	6.1	11.2	8.2	8.4	9.1	8.0	3.4	16.8
of which: manufacturing									
outturn for 2020	-12.2	-15.5	-14.8	-19.0	-4.1	-15.8	-10.2	-15.8	-9.5
realization rate (4)	102.6	110.0	106.0	101.4	96.8	96.5	106.1	98.0	106.1
planned investment	44.0	0.4	40.4	0.0	44.0		0 4	10	47.0
for 2021	11.3	6.1	12.4	8.0	14.9	14.1	9.1	4.9	17.3
Services (5)									
Outturn for 2020	-9.1	-12.5	-12.9	0.8	-9.2			-14.6	-2.5
Realization rate (4)	100.3	102.2	99.2	113.9	96.3			96.5	104.7
Planned investment for 2021	9.4	6.0	3.0	5.0	14.5			6.7	13.6
Total									
Outturn for 2020	-8.8	-13.7	-13.1	-6.7	-5.5			-14.1	-4.5
Planned investment for 2021	9.0	6.1	7.6	6.4	11.5			5.1	15.2

Source: Banca d'Italia, Survey of Industrial and Service Firms.

(1) Robust means (winsorized) of the distribution of annual changes in investment. Investment is deflated using the individual deflators provided by the firms. – (2) Firms are divided according to whether they fall below (low) or above (high) the median, calculated separately for industry and services. For the outturns and realization rates, the median is calculated with reference to 2020 data; for investment plans, with reference to 2021 data. – (3) Industrial firms only. – (4) Percentage ratio, at current prices, of realized investment to planned investment (as recorded in last year's survey) for 2020. – (5) Non-financial private services.

Innovation and productivity

Innovation. – In Italy, investments in intellectual property fell by around 3 per cent, a larger drop than in France and Germany (-0.6 and -1.1 per cent, respectively); this was due mainly to the reduction in research and development spending (-4 per cent).

According to data from the European Patent Office (EPO), in 2020 the number of Italian patents filed however rose significantly (2.9 per cent, from 1.5 per cent the previous year), while there was a contraction (-1.3 per cent) on average in other EPO member countries. The increase in Italian patents was driven by patents issued in the pharmaceutical and biotechnology sectors (up 22 and 45 per cent, respectively), in line with what was observed on average for the other EPO member countries, but also by some traditional sectors in the Italian manufacturing sector, such as furniture production. Although the number of patents filed in proportion to the population has continued to rise since 2015, it is still modest by international standards (74 patents per million inhabitants, compared with 324 in Germany and 156 in France).

The digital transition. – Italy continues to lag behind in the spread of digital technologies: according to the Digital Economy and Society Index (DESI) drawn up

Table 6.2

by the European Commission, in 2020 Italy ranked 21st (22nd in 2019) among the 27 EU Member States for the adoption of these technologies by enterprises.

The health emergency has accelerated the digital transformation process for the production system. In 2020, firms stepped up their recourse to agile working, helping to maintain business continuity. According to the Survey of Industrial and Service Firms, the share of companies that used agile working rose sharply (to 58 per cent, from 10 per cent in 2019); among these, the percentage of employees who, on average each day, worked in this manner was 26 per cent (see the box 'Agile work in the private sector', Chapter 8). The use has risen mainly among companies that, in the three years prior to the pandemic, were more productive and had invested in cloud technologies (for the same geographical area, sector and class size factors). Around one firm in two plans to continue to use agile work even after the health emergency ends, although to a lesser extent.

According to Istat's survey on firms' situation and outlook during the COVID-19 health emergency, one firm out of ten has introduced or has increased the marketing of their products over the internet or the use of digital platforms in order to cope with the emergency. A non-negligible share expect to roll them out in the future. These solutions are more likely to be adopted in services rather than industry, especially in retail trade and in the accommodation and catering sectors. Overall the use of these sales methods is still rather modest, especially among firms with fewer than ten employees: around 65 per cent of these firms report that they do not use them and do not plan to use them, compared with 59 per cent of larger firms.

Ecological transition. – In the Bank of Italy's Business Outlook Survey of Industrial and Service Firms, conducted between September and October 2019 on a sample of industrial and service firms with 20 or more employees, around one third of the companies reported that they had worked directly on the issues of climate change and the need to protect the environment in the previous three years, or that they would over the next three years; of these, 82 per cent have undertaken or have planned actions to this effect (Figure 6.3).

The health emergency has slowed initiatives in this area. In the 2020 survey, half of the firms that had begun or had planned actions reported that they had suspended or postponed them, much more so than they had stated regarding investments. The enormous



Sources: Banca d'Italia, Business Outlook Survey of Industrial and Service Firms; based on data from Eurostat, air emission accounts.

(1) Share of firms that, in 2019, declared to have been affected by climate change, including regulatory changes, reputational risk and risk of extreme atmospheric events, and to have undertaken or planned actions to address these changes. – (2) Share of firms that, in 2020, declared to have suspended or postponed these actions. – (3) The share of greenhouse gas emissions of the ATECO sector out of total emissions of economic activities in 2018 (last year for which figures are available). The emissions include carbon dioxide, methane and nitrous oxide. Right-hand scale.



resources and the reforms set out in the NRRP should reverse these trends in the coming years. The investment and research programmes for renewable energies and the simplification of authorization procedures should facilitate the transition in the energy sector. Infrastructure projects involving the rail network designed to shift the transport of people and goods from the roads to the railways should help to reduce greenhouse gas emissions in the transport industry. The water supply and waste management sectors would also benefit from investments planned for the water infrastructure and for the circular economy.

Productivity. – The pandemic crisis hit Italy after a long period of stagnation in labour productivity. This latter, for the period 1995-2019 as a whole, rose by 0.3 per cent on average per year in Italy, compared with 0.7 per cent in Spain and 1.2 per cent in each of Germany and France (Figure 6.4).

In 2020, hourly productivity increased by 2.3 per cent. The assessment of the effects of the health emergency on productivity is, however, highly uncertain. The short-term dynamic is not very indicative of the underlying trends because it reflects the broad cyclical



fluctuation and the exceptional recourse to wage supplementation, which has been accompanied by a sharp drop in hours worked (see Chapter 8, 'The labour market').

In the long term, the impact of the pandemic on productivity will inevitably depend on the processes for transforming the production system. At firm level, a greater use of advanced technologies, encouraged by the incentives under the NRRP's National Transition 4.0 Plan, could offer firms opportunities in terms of greater efficiency and growth. Improvement in productivity could also benefit from the reallocation of resources to sectors and firms with greater potential for expansion. Signs pointing in this direction have already been seen over the last decade.

BANCA D'ITALIA

7. THE FINANCIAL SITUATION OF HOUSEHOLDS AND FIRMS

The impact of the pandemic on households' financial wealth was highly diversified: those most affected by the measures introduced to curtail contagion had to dip into their savings to cope with the drop in income; those least affected instead increased their portfolio holdings, in part owing to the reduction in non-essential consumption. After declining markedly at the onset of the pandemic in connection with the fall in securities prices, financial wealth increased overall during the year, following the return to normality of the financial markets and the sharp increase in savings.

The effects of the crisis on the financial conditions of households were mitigated by the Government's income support measures, accommodative monetary policy and debt moratoriums. According to the data for December 2020, repayment of instalments has returned to normal for the majority of mortgages for which moratoriums have ended.

The decline in economic activity had a profound impact on firms' profitability, but the public interventions alleviated the repercussions on liquidity. The increase in financial leverage was very uneven; while it was offset by the rise in liquid assets for firms as a whole, it was especially marked in the sectors hit hardest by the pandemic.

Looking forward, public support for the corporate sector must aim to promote the revival of investment, facilitate recourse to debt restructuring instruments and incentivize the resumption of the process to rebalance finances, especially through capital strengthening.¹

Households' financial wealth and investment

According to our estimates, net household wealth in 2020,² which is the value of financial and real assets net of liabilities, increased to 8.6 times disposable income (8.3 in 2019), owing mainly to the reduction in income. In the face of a moderate decrease in

¹ 'Hearing on matters relating to imbalances in the financial structure of Italian firms that risk being determined by the COVID-19 pandemic', testimony by the Head of the Financial Stability Directorate of the Bank of Italy, A. De Vincenzo, before the Chamber of Deputies, Rome, 18 March 2021 (only in Italian).

² These are consumer and producer households and non-profit institutions serving households, in line with the information available from the Financial Accounts.

the real component (see Chapter 5, 'Households'), gross wealth rose as a result of the increase in financial assets (equal to 2.2 per cent), driven by the strong growth in savings which more than offset the fall in securities prices.

In 2020 the ratio between gross financial wealth and Italian households' disposable income first fell, then substantially recovered, consistent with what was observed for the average of the euro area (Figure 7.1). The initial decline was slightly more marked than that which occurred in the other main countries, in part due to the steeper drop in asset value. In the second half of year, the ratio rose compared to where it was at the end of 2019, due both to the partial recovery of prices and the increase in saving (which fueled financial investments; see *Financial Stability* Report, 1, 2021), and to income remaining at levels below those of the previous year (see Chapter 5, 'Households').



Sources: Based on data from the Bank of Italy (Financial Accounts), Istat and the ECB. (1) Consumer and producer households and non-profit institutions serving

households. The black dashed line marks the start of the pandemic in Italy.

Developments in financial wealth varied greatly between households. According to the Special Survey of Italian Households (ISF), conducted in April of this year, a third of households reported that they suffered a decline in gross financial wealth in 2020 (the share was below 20 per cent during the global crisis of 2008). The percentage is higher, over 40 per cent, among those whose head is employed in the sectors hit hardest by the pandemic (restaurants, tourism, retail trade); these households were forced to dip into their savings to make up for the drop in income. Some 7 per cent of those interviewed instead declared that their financial assets increased. The percentage is more than double among households with at least two members who worked remotely or with financial wealth above \in 50,000 (15 and 20 per cent, respectively). Compared with the period before the pandemic, their spending on non-essential consumption fell mainly as a result of containment measures and fear of infection.

Given the heightened uncertainty about the development of the pandemic and recovery times, households have been cautious in their investments, preferring liquid financial assets (Table 7.1). In 2020 deposits rose by $\in 85$ billion, more than twice the average for the previous five years. People purchased insurances policies and investment fund units, which helped to diversify portfolio risk, in greater amounts than the year before. The net divestment of shares and bonds continued. At the end of the year, the share of gross financial wealth held in deposits and cash was just below 33 per cent, more than one point higher than in December 2019; that of asset management products rose similarly, to 35 per cent, while that of shares and bonds fell.

Table 7.1

Financial assets and liabilities of households (1) (millions of euros and per cent)									
	En	d-of-period sto	Flows						
-	2020	Percentage composition		2019	2020				
		2019	2020						
ASSETS (2)									
Cash	185.433	3.5	3.9	3.469	19.543				
Deposits (3)	1.379.288	27.7	28.9	58.131	85.141				
Italian	1,339,790	26.8	28.0	57,109	86,163				
Sight deposits	902,344	17.4	18.9	52,402	89,145				
Other deposits	437,446	9.4	9.2	4,707	-2,982				
Foreign	39,498	0.9	0.8	1,022	-1,022				
Debt securities	247,095	5.7	5.2	-41,229	-25,013				
Italian	170,362	3.9	3.6	-37,383	-21,075				
of which: issued by the public sector	132,648	2.7	2.8	-23,570	-2,312				
issued by banks	36,448	1.2	0.8	-9,439	-18,267				
Foreign	76,733	1.8	1.6	-3,846	-3,939				
Investment fund units	685,905	14.2	14.4	17,504	33,396				
Italian	231,239	5.1	4.8	-4,469	6,280				
Foreign (4)	454,666	9.1	9.5	21,973	27,116				
Shares and other equity	936,385	21.6	19.6	-26,965	-15,763				
Italian	852,425	19.9	17.8	-25,708	-18,527				
Foreign	83,960	1.7	1.8	-1,257	2,764				
Insurance, pension funds and severance pay entitlements	1,191,106	24.0	24.9	29,273	30,615				
of which: life insurance reserves	867,735	17.3	18.2	20,942	24,173				
Other assets issued by residents (5)	152,237	3.3	3.2	7,477	-1,891				
Total assets	4,777,449	100.0	100.0	47,661	126,027				
Memorandum item: managed assets (6)	1,679,408	34.0	35.2	43,404	61,461				
LIABILITIES									
Short-term debt (7)	42,716	5.0	4.4	-90	-4,688				
of which: to banks	38,473	4.5	4.0	-351	-4,286				
Medium- and long-term debt (8)	704,234	71.6	72.7	17,529	14,948				
of which: to banks	602,208	60.9	62.2	6,521	14,558				
Other liabilities (9)	221,917	23.4	22.9	7,120	-4,019				
Total liabilities	968,867	100.0	100.0	24,559	6,241				
BALANCE	3,808,582			23,101	119,786				

Source: Bank of Italy, Financial Accounts.

Source: Bank of Italy, Financial Accounts. (1) Consumer and producer households and non-profit institutions serving households. Rounding of decimal points may cause discrepancies in the totals. – (2) Individually managed portfolios are not shown; their assets are included under the individual types of investment. – (3) Includes Bancoposta current accounts and the liabilities of Cassa Depositi e Prestiti SpA. – (4) The methodological revisions introduced by Guideline ECB/2018/19 on international statistics affected the data on the foreign investment funds held by households. – (5) Trade receivables, derivatives and employee stock options, and other minor items. – (6) Includes financing provided by factoring companies. – (8) Also includes securitized loans, financing provided by leasing companies, consumer loans from financial companies and loans from other residents. – (9) Includes commercial debts, severance pay and pension provisions, and other minor items.

When investing in asset management products, households can also choose ones that respect environmental, social and governance (ESG) criteria; it is estimated that at the end of last year 17 per cent of Italian and foreign investment fund units held by households were comprised of ESG funds.³ According to the results of our analysis,⁴ at the end of 2020 ESG funds had invested almost 80 per cent of the savings received from households in foreign shares and bonds (Figure 7.2). The higher average value of this portion reflects the fact that the offering of financial instruments by Italian firms, already limited, is particularly small for securities that meet sustainability requirements.



Sources: Based on data from the Bank of Italy (supervisory reports), Securities Holdings Statistics and Morningstar Direct. (1) Consumer and producer households and non-profit institutions serving households. The data refer to December 2020. 'Other assets' includes deposits, loans and residual assets

In 2020, households held about 90 per cent of the units in investment funds compliant with the long-term individual savings plans (PIR) regulatory framework; the percentage (corresponding to €14.5 billion) is in line with the figures recorded since the introduction of these plans.⁵

Household indebtedness

In 2020, household debt as a ratio of disposable income rose by 2.6 percentage points to 64.7 per cent, still well below the euro-area average of 97.5 per cent;

³ The determination of whether an investment fund is an ESG funds is based on the information available in the Morningstar Direct database and was obtained using a three-step process. First, we considered funds that the asset management companies themselves declared to be ESG in the prospectuses. Absent this information, we considered funds to which Morningstar had assigned a sustainability rating of 4 or 5 (the rating runs from 1, least sustainable, to 5, most sustainable), and we decided it was possible to analyse at least two thirds of the fund portfolio, excluding government securities. For the residual component of the funds listed in the database, funds to which Morningstar attributed a low carbon designation were treated as ESG funds.

⁴ Estimates are based on a look-through approach to identify the assets underlying asset management products; see A. Cardillo and M. Coletta, 'Household investments through Italian asset management products', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 409, 2017 (only in Italian).

⁵ PIRs are designed to encourage investment in securities issued by Italian companies by offering preferential tax treatment; see the box 'Individual savings plans', in Financial Stability Report, 2, 2017.

the increase in the ratio was mainly attributable to the decline in income. In the face of a marked contraction in economic activity, the growth rate of lending to consumer households by banks and financial companies more than halved to 1.5 per cent (Table 7.2).

						Table 7.2		
Lending to consumer households (1) (end-of-period data; per cent and millions of euros)								
		12-mont	h percenta	ge chang	es	Stocks at		
	2017	2018	2019	2020	March 2021	(2)		
	Loans for house purchase							
Banks	2.3	2.5	2.5	2.3	2.9	382,177		
			Con	sumer cr	edit			
Banks	9.2	9.1	8.5	-0.6	-0.3	110,431		
Financial companies	3.2	4.0	8.5	3.3	3.2	37,200		
Total banks and financial companies	7.6	7.7	8.5	0.4	0.6	147,631		
			Oth	er loans	(3)			
Banks	0.8	1.0	0.5	0.1	1.0	99,560		
	Total loans							
Total banks and financial companies	3.1	3.4	3.5	1.5	2.1	629,368		

Source: Supervisory reports.

(1) Loans include repos and bad debts. - (2) Includes securitized loans. - (3) Mainly includes current account overdrafts and loans other than those for the purchase, construction or restructuring of residential properties.

New mortgage lending remained overall at levels similar to those of the previous four years; in 2020 the course of these debts was mainly determined by demand (Figure 7.3.a). Supply conditions remained relaxed as a whole, thanks in part to the impact of the Eurosystem's monetary policy. The average loan-to-value ratio continued to rise moderately, reaching 66 per cent, about 8 percentage points higher than the minimum level observed in 2013, but significantly lower than those of the European countries for which the real estate market represents a vulnerability to the financial system.⁶ The average mortgage loan amount continued to rise, partly reflecting the increase in the price of houses that were bought (see *Financial Stability Report*, 1, 2021). Since 2015 the percentage of mortgage loans over \notin 75,000 made to customers under 35 years of age has been about one third of the total, below what it was in 2007 (40 per cent). Based on the European Union Statistics on Income and Living Conditions (EU-SILC) survey for 2018, the share represented by younger borrowers was also smaller compared with the period of the global financial crisis in Germany, the United Kingdom and Spain as well.

⁶ These countries have received recommendations to adopt macroprudential measures to address the risks associated with the real estate market; see the website of the European Systemic Risk Board (ESRB): 'ESRB issues five warnings and six recommendations on medium-term residential real estate sector vulnerabilities', press release, 23 September 2019.

The decline in Italy reflected both intermediaries' more careful selection criteria and the lower demand for credit by younger households, which on average have less stable employment contracts than do households belonging to other age classes.

Consumer credit, which has increased considerably since 2015 in all the main euro-area countries,⁷ slowed down sharply with the outbreak of the COVID-19 epidemic. For all the major economies, the growth rate in 2020 nonetheless remained above the lows observed during the sovereign debt crisis (Figure 7.3.b). In Italy, the dynamics were mainly influenced by demand, which in the first half of last year fell significantly owing to the decline in consumption and household confidence; the slight improvement in confidence as of June (see *Economic Bulletin*, 1, 2021) was insufficient however to enable a return to pre-pandemic lending levels.



Sources: For panel (a), based on ECB Bank Lending Survey and supervisory reports; for panel (b), based on Bank of Italy and ECB data. As from December 2009, the figure for Italy also includes financial companies.

(1) Billions of euros. – (2) Right-hand scale. Diffusion indices: positive values indicate supply restriction/demand expansion compared with the previous quarter. The diffusion indices are constructed on the basis of the following weighting scheme: for supply conditions: 1=tightened considerably, 0.5=tightened somewhat, 0=basically unchanged, -0.5=decreased somewhat, -1=eased considerably; for demand: 1=increased considerably, 0.5=increased somewhat, 0=basically unchanged, -0.5=decreased somewhat, -1=decreased considerably. The range of variation of the index is from -1 to 1. – (3) The black dashed line marks the start of the pandemic in Italy.

In order to provide support to indebted households affected by the health emergency, the scope of the moratoriums enacted by law (Gasparrini Fund) and

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S. Magri, V. Michelangeli, S. Pastorelli and R. Pico, 'The expansion of consumer credit in Italy and the main euro area countries', *European Review*, 29, 3, 2021, pp. 1-31, also published in Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 500, 2019.

sponsored by the private sector was temporarily expanded.⁸ Based on a special survey conducted by the Bank of Italy in collaboration with the Ministry of Economy and Finance (MEF), since March 2020 moratoriums granted for loans given to consumer households have totaled around €40 billion; as of 7 May 2021 there were still $\in 8$ billion worth of loans actively in moratorium (Figure 7.4.a). Applications to suspend mortgage loan payments, the number of which was particularly high in the early months of the pandemic, were mainly submitted by individuals who claimed to have suffered a sharp decline in household income, who reside in the North West or who work in the areas of industry, services or in the retail trade and catering sectors.⁹ According to data from the public insurance services authority (Consap), around 40 per cent of the applications for funding from the Gasparrini Fund were submitted by employees who had been furloughed or whose working hours had been reduced, just over 30 per cent were from self-employed workers and professionals (Figure 7.4.b).



(1) Data from the joint task force coordinated by the Ministry of Economy and Finance; see the Bank of Italy's website: Task force per assicurare l'efficiente e rapido utilizzo delle misure di supporto alla liquidità. The amounts indicate the residual value of the loan for which the moratorium was requested. The data refer to 7 May 2021. – (2) Percentages of total applications. The data refer to 31 December 2020.

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⁸ The Solidarity Fund for mortgages for the purchase of a primary residence (Gasparrini Fund), formed in 2007, allows beneficiaries to suspend loan instalment payments for up to 18 months in the event of situations of temporary difficulty. Decree Laws 9/2020, 18/2020 and 23/2020 permanently expanded access to the Fund to include employees who have been furloughed or whose hours have been reduced for a period of at least 30 consecutive business days (wage supplementation) and, through December 2020, to self-employed workers and professionals who, in a quarter after 21 February 2020, declared a reduction in their business turnover of more than 33 per cent compared with the last quarter of 2019. Between March and December 2020 applicants were not required to submit the indicator of household composition and financial situation (ISEE) and the maximum loan threshold for access to the Fund was increased from €250,000 to €400,000. With the conversion of the 'Relief' decrees into Law 176/2020, the option of using the Fund for loans that have been in repayment for less than one year was extended until April 2022. In 2020 the Italian Banking Association (ABI) and consumer associations reached agreements to suspend loan payments on mortgages not included under the coverage of the Gasparrini Fund; Assofin promoted a moratorium on consumer credit. The deadline for applying for access to these private moratoriums expired in March 2021. The data presented here do not take into account moratoriums granted at the initiative of individual banks.

⁹ F. Ciocchetta, V. Michelangeli, R. Pico and A. di Salvatore, Impatto delle moratorie sui mutui sulla vulnerabilità finanziaria delle famiglie', Banca d'Italia, Note Covid-19, 22 March 2021 (only in Italian).

The data from the Regional Bank Lending Survey show that repayments are being made regularly for almost 90 per cent of mortgage loans that had reached the end of the repayment suspension period under the legislative and private moratoriums. Almost 90 per cent of the beneficiaries of the moratoriums, expired and still in effect, interviewed in April 2021 for the ISF stated that they had not delayed nor did they expect to delay making instalment payments at the termination of the suspension period.

Social distancing measures and restrictions on mobility served to encourage households to use digital channels to access banking services (see Chapter 13, 'Banks and institutional investors'). Around 9 per cent of households interviewed for the survey responded that they used home banking for the first time in or after March 2020; over 40 per cent state that they want to use mainly these services in the future as well. The percentage was higher for households whose head is younger than 45 years old (14 and 56 per cent, respectively).

A study based on the latest data available – regarding the period 2012-16 – from the Survey of Household Income and Wealth (SHIW),¹⁰ indicates that access to banking services via the internet by customers had a positive impact on their decision to start investing in financial markets. In fact, savers benefit from the decrease in research, transaction and transport costs, and from a greater flexibility in performing investment transactions online rather than at a branch. Access to information through digital channels also helped to improve the financial skills of households.

Firms' profitability and financial balance

In 2020, firms registered a strong contraction in income flows: the gross operating profit fell by 7.2 per cent. The decline in profits was mitigated by the low costs of debt. Net interest expenses continued to absorb a limited part of gross operating profit (7.1 per cent; Figure 7.5).

Based on the Survey of Industrial and Service Firms, the deterioration in economic results – spread across all size classes, but particularly acute in the sectors hardest hit by the pandemic – was considerable: the share of firms posting a profit (61 per cent) was 12 percentage points lower than the average for the previous three



Sources: Based on nominal Istat data; national accounts data for the institutional sector of non-financial corporations. (1) Indices: 2008=100. – (2) Right-hand scale. – (3) Net interest expense and self-financing are estimated based on Bank of Italy and Istat data.

¹⁰ V. Michelangeli and E. Viviano, 'Can internet banking affect households' participation in financial markets and financial awareness?', Banca d'Italia, Temi di Discussione (Working Papers), 1329, 2021.

years, but is still higher than the level observed during the double-dip recession of 2008-2013.

As a result of the steep drop in capital accumulation (see Chapter 6, 'Firms'), the ratio between self-financing and investment exceeded 100 per cent. The financial balance of the sector, more than \notin 37 billion (2.3 per cent of GDP), reached its highest level recorded since the launch of the survey in 1995 (Table 7.3).

Financial assets and liabilities of firms (1) (millions of euros and per cent)								
	En	d-of-period sto	Flows					
	2020	Percentage composition 2019 2020		2019	2020			
ASSETS								
Cash and deposits	478,867	20.4	24.3	25,272	87,098			
Securities	67,134	2.9	3.4	-14,499	7,664			
of which: Italian public sector	48,423	1.9	2.5	-13,628	7,750			
Shares and other equity	708,694	39.5	35.9	49,074	8,913			
Trade receivables	552,021	29.1	28.0	11,126	2,220			
Other assets (2)	165,668	8.1	8.4	14,910	-11,836			
Total assets	1,972,384	100.0	100.0	85,883	94,059			
of which: foreign	559,098	30.0	28.3	19,170	-208			
LIABILITIES								
Financial debt	1,269,697	31.4	32.8	-133	44,734			
Bank loans	667,980	16.2	17.2	-36,012	43,399			
Other loans (3)	447,967	11.5	11.6	37,839	-6,540			
Securities	153,750	3.7	4.0	-1,960	7,876			
Shares and other equity	1,853,548	49.9	47.8	50,994	-12,240			
Trade payables	506,476	13.0	13.1	14,852	3,815			
Other liabilities (4)	245,396	5.7	6.3	7,273	20,189			
Other liabilities	3,875,117	100.0	100.0	72,987	56,498			
of which: foreign	743,252	19.2	19.2	29,433	2,973			
BALANCE	-1,902,733			12,897	37,561			

Source: Bank of Italy, Financial accounts.

(1) The data refer to the non-financial corporations sector. As a result of its transformation into a joint stock company (società per azioni) in 1998, Poste Italiane is included in this sector; despite its significant financial assets, its primary business activity remains the provision of non-financial services. Rounding of decimal points may cause discrepancies in the totals. – (2) Investment funds, intra-group claims, insurance technical provisions domestic derivatives and other minor items. – (3) Also includes financing provided by leasing and factoring companies, intra-group loans and securitized loans. – (4) Postal current accounts, severance pay and pension provisions, domestic derivatives and other minor items.

Sources of funding for firms

Financial structure. – In 2020, indebtedness increased, halting the decline that had been occurring without interruption since 2011. Firms' financial debts rose to 76.9 per cent of GDP, remaining below the euro-area average (Figure 7.6.a). Leverage increased by 2 percentage points compared with the previous year, owing mainly to the decrease in

Table 7.0

the market value of equity; net of liquid assets, which increased significantly as a result of the increase in saving by firms, leverage would have decreased slightly (Figure 7.6.b).



Sources: Bank of Italy and ECB.

(1) The data refer to the non-financial corporate sector. – (2) Leverage is calculated as the ratio of financial debt to the sum of financial debt and net equity at market prices. – (3) Right-hand scale.

The trends are uneven across the different sectors, with a much more marked increase in debt for firms in those segments hit hardest by the containment measures (accommodation and food, entertainment; see the box 'The effects of the pandemic on the balance sheets and riskiness of firms in the various economic sectors' in *Financial Stability Report*, 1, 2021).

Around one third of the firms interviewed for the survey expect debt to increase by 3 percentage points in 2021 compared with the beginning of 2020; 10 per cent plan to pursue recapitalization by the end of the year, mainly by seeking a capital injection from current shareholders. The rebalancing of the composition of the sources of financing towards self-financing, desirable for all firms, will be particularly important for smaller firms, which are more exposed to persistent imbalances following recessive phases (see the box 'Trends in the financial leverage of Italian firms and the economic cycle').

TRENDS IN THE FINANCIAL LEVERAGE OF ITALIAN FIRMS AND THE ECONOMIC CYCLE

A high degree of leverage, calculated as the ratio of financial debt to the sum of financial debt and equity, may hamper firms' ability to invest or repay debts, with negative effects on economic growth. Analysing leverage dynamics during the different phases of the business cycle, the role of its components and the heterogeneity of these relationships across size classes may contribute to defining and assessing measures to be taken to strengthen the financial structure of the productive sector, a particularly pertinent issue in light of the effects of the pandemic.
A study based on the balance sheets of 165,000 Italian firms examines the evolution in leverage and the relative contributions of debt and equity in the period between 1982 and 2018; it also looks at whether the dynamics differ by size class, controlling for other characteristics.¹

Leverage is slightly countercyclical (see the figure). In the recessions that occurred during the time period considered, leverage grew initially owing to the increase in debt and the smaller increase (or drop) in equity; it subsequently fell due to the slowdown in debt. During the early years of expansionary phases, leverage continued to decrease as a result of the weaker debt dynamic and, especially, the increase in equity, spurred by the recovery in profitability. Specifically, during the expansionary phases at the start of the 1980s, 1990s and 2000s, there was a significant reduction in leverage without a contemporaneous contraction in credit.²



Sources: Based on Central Balance-Sheet Data Office and Istat data.

(1) Leverage is measured as the ratio of financial debt to the sum of financial debt and equity (excluding revaluation reserves). For each year, the change in leverage is calculated on a closed sample of firms. A positive debt (equity) contribution indicates an increase in indebtedness (a decline in own funds, including due to losses) and vice-versa. The years represented by darker-coloured bars mark recessions.

Leverage dynamics are affected by firm size. The analysis indicates that the initial increase during the recessions mainly applied to large firms, due to the rise in debt, and to small firms, which suffered the greatest drop in earnings. Furthermore, for smaller firms the subsequent decrease is slower than for others because of persistently lower profits; as a result, their ability to rebalance their financial structure appears to be more limited.

A. De Socio, 'Firms' leverage across business cycles', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 587, 2020. The paper decomposes the yearly change in leverage for the contributions of debt and equity. The firms are divided into ten classes (deciles) based on the distribution by total assets. The analysis also controls for the effect of age, profitability, riskiness and shares of short-term or bank loans, since these variables, along with size, affect firms' financing capacity.

² Leverage rose in the subsequent growth years. The increase was more intense during the prolonged cyclical expansions that preceded the crises of the early 1990s and 2000s compared with what was observed prior to the 2007-08 financial crisis.

These facts suggest that, to tackle the rise in leverage sparked by the pandemic crisis, the measures in support of firms' capitalization are very important, especially for smaller firms.³

According to Financial Accounts data, leverage increased both in Italy and in the other main European countries in 2020 (see Figure 7.6.a). In the medium term the rebalancing of Italian firms' financial structure is expected to also be accompanied by faster and more efficient debt restructuring and crisis management processes (see 'Hearing on matters relating to imbalances in the financial structure of Italian firms that risk being determined by the COVID-19 pandemic', testimony by the Head of the Financial Stability Directorate of the Bank of Italy, A. De Vincenzo, before the Chamber of Deputies, Rome, 18 March 2021, only in Italian).

Credit. – In 2020, loans to firms (including producer households) by banks and financial companies rose 7.4 per cent on an annual basis; the increase continued into more recent months (5.7 per cent in March 2021; Table 7.4). The growth was greater than average for large firms and for those in manufacturing and services.

				Table 7.4			
Lending to firms (1) (end-of-period data)							
12-month percentage changes							
2018	2019	2020	March 2021	March 2021			
		Banks					
2.7	-0.2	12.5	9.8	24.2			
-2.1	-3.9	2.1	2.6	11.3			
4.3	-1.0	11.4	7.5	38.5			
-3.5	-4.3	-0.4	0.2	9.2			
-2.7	-3.3	3.6	3.9	8.7			
-1.0	-2.3	6.8	8.9	16.5			
1.8	-1.7	8.7	5.8	75.4			
1.3	-1.8	8.4	6.3	91.9			
	Fina	ncial comp	anies				
-3.4	-6.9	-2.1	-0.4	5.2			
8.5	-4.4	-3.3	-5.3	2.1			
0.8	25.4	0.4	5.2	0.8			
0.3	-4.4	-2.3	-1.2	8.1			
Banks and financial companies							
1.2	-2.0	7.4	5.7	100.0			
	Lending to fi (end-of-perio 2018 2.7 -2.1 4.3 -3.5 -2.7 -1.0 1.8 1.3 -3.4 8.5 0.8 0.3 1.2	Lending to firms (1) (end-of-period data) 12-month percer 2018 2019 2.7 -0.2 -2.1 -3.9 4.3 -1.0 -3.5 -4.3 -2.7 -3.3 -1.0 -2.3 1.8 -1.7 1.3 -1.8 Fina -3.4 -6.9 8.5 -4.4 0.8 25.4 0.3 -4.4 Banks an 1.2 -2.0	Lending to firms (1) (end-of-period data) 12-month percentage chan 2018 2019 2020 Banks 2.7 -0.2 12.5 -2.1 -3.9 2.1 4.3 -1.0 11.4 -3.5 -4.3 -0.4 -2.7 -3.3 3.6 -1.0 -2.3 6.8 1.8 -1.7 8.7 1.3 -1.8 8.4 Financial comp -3.4 -6.9 -2.1 8.5 -4.4 -3.3 0.8 25.4 0.4 0.3 -4.4 -2.3 Banks and financial 1.2 -2.0 7.4	Lending to firms (1) (end-of-period data) 12-month percentage changes 2018 2019 2020 March 2021 Banks 2.7 -0.2 12.5 9.8 -2.1 -3.9 2.1 2.6 4.3 -1.0 11.4 7.5 -3.5 -4.3 -0.4 0.2 -2.7 -3.3 3.6 3.9 -1.0 -2.3 6.8 8.9 1.8 -1.7 8.7 5.8 1.3 -1.8 8.4 6.3 Financial companies -3.4 -6.9 -2.1 -0.4 8.5 -4.4 -3.3 -5.3 0.8 25.4 0.4 5.2 0.3 -4.4 -2.3 -1.2 Banks and financial companies 1.2 -2.0 7.4 5.7			

Source: Supervisory reports.

3

(1) Data for firms refer to non-financial corporations and producer households. The data for March 2021 are provisional. – (2) Limited partnerships, general partnerships, simple partnerships, de facto companies and sole proprietorships with fewer than 20 workers.

Demand for loans, high throughout the year, was driven mainly by the need to finance working capital (Figure 7.7.a). The increase in lending was buoyed by public measures taken to support the financial conditions of the production system (see Chapter 13, 'Banks and institutional investors'). The most financially sound firms and, as with the moratoriums, those operating in the sectors hit hardest by the pandemic

crisis, mainly sought recourse to state-guaranteed loans (see the box 'Financial support measures and credit to firms during the pandemic').



Sources: Bank of Italy, ECB and Cerved.

(1) Balance between the share of firms that increased their demand for bank loans and that of firms that lowered their demand compared with the previous half of the year, based on the reasons cited as most important among those indicated in the key. Data refer to about 4,000 industrial and service firms included in the Bank of Italy's Survey of Industrial and Service Firms. – (2) Overnight interest rates on the stock of bank loans.

FINANCIAL SUPPORT MEASURES AND CREDIT TO FIRMS DURING THE PANDEMIC

The financial support measures for firms adopted by the Government in 2020 focused on bolstering public loan guarantee programmes¹ and on introducing legislative debt moratoriums.² These measures effectively limited firms' liquidity needs³ and supported the expansion of credit during the pandemic, heading off a credit crunch.

¹ They system of state-backed loans, expanded by Decree Law 18/2020 (the 'Cure Italy' decree) and reinforced by Decree Law 23/2020 (the 'Liquidity Decree', improved the functioning of the Guarantee Fund for Small and Medium-sized Enterprises (see the box 'Public guarantees and the growth in lending to firms', Chapter 13) and assigned to SACE, whose responsibilities have been redefined, the task of issuing public guarantees mainly to large companies.

Article 56 of Decree Law 18/2020 introduced a debt moratorium for small and medium-sized enterprises (SMEs) that initially enabled them, through the end of September 2020, to obtain: an extension on maturing loans; the suspension of instalment payments; the freezing of uncommitted credit facilities, such as current account overdrafts. The programme was extended several times, most recently by the 2021 Budget Law. The legislative measure was accompanied by private moratoriums agreed with individual intermediaries and by that promoted by ABI, which enables participating banks and financial intermediaries to suspend, up to one year, instalment payments on loans and to extend their maturities.

³ Estimates performed on a sample of limited companies indicate that at the end of 2020, thanks to government measures approved between March and August, the number of firms with a liquidity gap fell from 142,000 to about 32,000, while total liquidity need fell from €48 billion to €17 billion (see A. De Socio, S. Narizzano, T. Orlando, F. Parlapiano, G. Rodano, E. Sette and G. Viggiano, 'The effects of the COVID-19 shock on corporates' liquidity needs, balance sheets and riskiness', Banca d'Italia, *Note Covid-19*, 13 November 2020).

In 2020, bank lending to firms rose by more than 8 per cent; during the previous recessionary phases it instead fell (by 2 per cent in 2009 and 7 per cent overall in the two years 2012-13; panel (a) of the figure). Credit was initially increased for medium-sized and large companies and, as of June, for smaller ones as well, reversing the contraction that had been under way for many years. The expansion involved long-term loans, while short-term loans fell slightly, reflecting in part the decision of companies to have available a more stable source of financing in a phase marked by great uncertainty concerning the economic outlook.⁴



Sources: For panel (a), supervisory reports; for panel (b), Mediocredito Centrale, SACE and the Central Credit Register. (1) Includes producer households and Cassa Depositi e Prestiti SpA. The values observed in years of recession/crisis are shown in red. – (2) Excludes firms with bad loans in February 2020. Based on a sample of more than 1.3 million firms. 'Firms with public guarantees' refers to those firms with at least one guarantee approved by the Guarantee Fund for SMEs or by SACE during the period considered. The size classification is in line with that set out in Commission Recommendation 2003/361/EC: (a) microenterprises are enterprises which employ fewer than 10 persons and whose annual turnover or annual balance sheet total does not exceed €2 million; (b) small enterprises have fewer than 50 employees and an annual turnover or an annual balance sheet total that does not exceed €10 million; (c) medium-sized enterprises have fewer than 250 employees and an annual turnover or an annual balance sheet not exceeding respectively €50 million and €43 million; (d) large enterprises are all other enterprises. Among large enterprises, mid-caps are defined as those with no more than 499 employees.

An analysis of dynamics in loans made by banks and financial companies to more than 1.3 million firms between March and December 2020 shows that the increase in long-term loans is almost entirely attributable to firms that received guaranteed loans, while the slight decline in short-term debt involved all firms.⁵

⁴ For more information, see the box: 'Lending to firms in Italy and in the main euro-area countries during the pandemic', *Financial Stability Report*, 1, 2021.

See S. De Mitri, A. De Socio, V. Nigro and S. Pastorelli, 'Financial support measures and credit to firms during the pandemic', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), forthcoming. The analysis was conducted on a broad sample that includes all the firms that received from the Central Guarantee Fund or from SACE approval for the guarantee of at least one loan, firms with loans subject to moratorium (legislative or private) as reported in the AnaCredit data and all other companies, recorded in the Central Credit Register, without a guaranteed loan. Short-term credit refers to revocable and self-liquidating transactions that, by their very nature, are of short duration.

These trends are present across almost all firm size classes; only the largest companies also saw an increase in credit to firms that did not make use of guarantees (see panel (b) of the figure).

The results indicate that, in the absence of support measures, the pandemic crisis would have led to a significant credit squeeze for small firms – structurally dependent on bank loans – and likely more difficult access to credit even for medium-sized companies and those with no more than 499 employees (mid-caps).

The heterogeneity of the effects of the pandemic on the production system was reflected in the use of the measures, which was greater for sectors severely impacted by the consequences of the health emergency: 40 per cent of the companies that benefited from the guarantees and 36 per cent of those that took advantage of moratoriums are active in the retail trade and in the accommodation and food sectors, which make up 33 per cent of the sample.

Other characteristics being equal, the probability of accessing state-backed loans, averaging 44 per cent for the firms analysed, was about 3 percentage points higher for the most sound companies (those with a ratio of net interest expense to gross operating income of less than 50 per cent at the end of 2020).⁶ Financially vulnerable firms, instead, were more likely to gain access to moratoriums (by around 4 percentage points, against an average of 34 per cent).

As the uncertainty surrounding the economic outlook eases, the support measures could become more selective, giving preference to firms with a good chance of bouncing back after the pandemic.

Access to credit was also facilitated by the decline in interest rates, which reflected the highly expansionary monetary policy and the drop in risk premiums demanded by intermediaries: the differential between the interest rates charged to the riskiest firms and those to the more solid ones fell to 2.1 percentage points. The cost of credit remained lower for large firms (Figure 7.7.b).

The pandemic crisis accelerated demand for digital services. Over the last year the share of loans applied for fully online by firms in the survey sample more than doubled, although it remained low (4 per cent); the companies that claimed to have received credit via digital channels mainly turned to traditional intermediaries.

Alternative sources of funding. – Bond market access conditions, which deteriorated rapidly in March 2020, improved as early as the following month. Gross issues amounted

The estimates are similar also when the vulnerability index calculated at the end of 2019 is used. These results are based on a sample of more than 660,000 limited companies. The vulnerability index used in making the estimate refers to the riskiness at the end of 2020 and is calculated on the Bank of Italy's microsimulation model for the financial position of firms (see *Financial Stability Report*, 1, 2021).

to \notin 47 billion,¹¹ in line with 2019. Around half of the value of the placements is attributable to the energy sector. Funding remained high among large firms, which benefited from relatively low bond issue costs and longer maturities.

Recourse to innovative financing channels continued to increase rapidly, albeit still limited in terms of volumes. Based on data from the Politecnico di Milano,¹² the value of invoice trading exceeded €1 billion in the twelve months ending in June 2020, an increase of 23 per cent compared with the previous year; direct lending through specialized funds is increasing.

New IPOs of non-financial corporations were less numerous than those planned at the beginning of the year and those made in the pre-pandemic period (21, compared with an average of 30 in the previous three years). The transactions covered almost exclusively the alternative investment market (AIM) segment, characterized by simplified admission procedures, and increasingly involved technology companies (see Chapter 14, 'The money and financial markets').

According to the data published by Invest Europe/EDC, the resources invested by private equity and venture capital firms in Italian companies amounted to \notin 5.4 billion in 2019, more than 20 per cent lower than observed in 2019. The decline mainly affected firms in the growth phase, while financing targeting companies in the early stage and late stage increased sharply, with 180 recipient firms, the largest number ever; total volumes of transactions are still modest compared with the main European countries. The public measures in support of the equity market may stimulate an expansion in the size of the production system and a swifter recovery of the economy.

¹¹ Placements by Italian non-financial corporations and groups listed in the securities database and on the Dealogic platform are included; the scope of the analysis also encompasses issues by foreign companies controlled by Italian firms.

¹² Politecnico di Milano, Unioncamere and Innexta, 'La finanza alternativa per le PMI in Italia', Osservatori Entrepreneurship & Finance, 3, November 2020.

8. THE LABOUR MARKET

The pandemic crisis dealt a severe blow to the labour market, but the decline in the number of workers in employment was much smaller than that in the number of hours worked, which reached their lowest level in the last four decades. Although more than half a million people lost their jobs, the measures introduced by the Government helped to stem the losses.

To combat the consequences of the pandemic, which has been exceptional both in magnitude and nature, it has been necessary to adopt a broad range of new social security measures and incentives to stimulate labour demand; despite the efforts of recent years, the shortcomings of the pre-existing instruments have been laid bare.

The number of job losses differed among categories of worker: fixedterm employment declined markedly, as did self-employment; employment in services also fell, especially in the tourism sector. The reduction in employment opportunities for young, often fixed-term workers, was especially marked, as it was for women, whose presence in the sectors hardest hit is greater than average.

The restrictions on mobility and fewer possibilities of finding a new job during the recession caused some cohorts of the population to stop looking for work. Ample spare capacity and uncertainty about how the economic situation will unfold have slowed down collective wage bargaining.

Employment and hours worked

In 2020, the number of persons employed fell by 2.1 per cent (-525,000 persons); the hours worked overall declined more markedly, by 11.0 per cent (Table 8.1). The sharp fall in labour input is entirely attributable to the effects of the pandemic (Figure 8.1).

Public support policies contributed to the relatively small decline in the number of employed persons, including the extension of wage integration schemes (such as the *Cassa integrazione guadagni* or CIG), the freeze on dismissals for economic reasons, and business support measures (see Chapter 6, 'Firms').

In March 2020, the Government introduced the emergency wage supplementation scheme (CIG-COVID-19), a tool that also covers workers excluded from the ordinary schemes (belonging to certain service segments and smaller firms) and does not require

employers to share the costs (Decree Law 18/20, the 'Cure Italy' decree).¹ There has been extensive use of this scheme, above all in the second quarter, when severe restrictions on people's movement and on commercial activities were in force. Based on Istat's labour force survey, an average of over 2.2 million people had recourse to wage supplementation over that period (about 18 per cent of non-agricultural private sector employees), of which 1.7 million with zero-hour integration.² The use of the CIG-COVID-19 scheme decreased in the summer and went up again in the autumn with the second wave of infection and the reintroduction of restrictions on business.

						Table 8.1		
Main labour market indicators (percentage changes on previous period; thousands of persons, millions of hours and per cent)								
	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Change in 2020 against 2019	2020 levels		
Total persons employed	-0.6	-2.4	0.7	0.3	-2.1	24,978		
Employees	-0.5	-2.4	1.1	0.2	-1.7	19,148		
Self-employed workers	-0.9	-2.3	-0.4	0.7	-3.1	5,831		
Agriculture, forestry, fisheries	-1.1	-2.9	2.7	-0.7		940		
Non-construction industry		-0.4		0.2	-0.5	4,254		
of which: manufacturing		-0.4		0.2	-0.6	3,919		
Construction	-0.2	-0.9	2.1	-0.1	1.4	1,547		
Services	-0.7	-2.9	0.7	0.5	-2.8	18,236		
of which: mainly public		-0.5	-0.1		-0.4	4,807		
Total hours worked	-8.1	-13.3	17.9	-1.5	-11.0	38,933		
Employees	-6.7	-11.7	14.2	-0.8	-9.8	27,811		
Self-employed workers	-11.3	-17.4	27.7	-3.3	-13.7	11,121		
Participation rate (1)	64.9	63.0	64.3	64.2	-1.6	64.1		
Unemployment rate (2)	9.2	8.4	9.6	9.2	-0.8	9.2		

Sources: Based on data from Istat's national accounts and on the labour force survey for participation and unemployment rates. (1) Seasonally adjusted quarterly data from the labour force survey (classification in force in 2020), rates calculated for the population aged 15-64. – (2) Seasonally adjusted quarterly data from the labour force survey (classification in force in 2020), rates calculated for the population aged 15-74.

2020

The COVID-19 emergency wage supplementation scheme refers to the set of instruments introduced by Decree Law 18/2020 and reconfirmed by Decree Laws 34/2020, 104/2020, 137/2020, 149/2020 and 41/2021. This includes the ordinary COVID-19 scheme (*CIG ordinaria Covid-19*), the under-waiver supplemental wage funding (*CIG in deroga*) and coverage by solidarity funds for the COVID-19 emergency. For a more detailed description of the current system and the main changes made to address the pandemic crisis, see S. Lo Bello, 'CIG: historical evolution, features and limitations', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 602, 2021, only in Italian).

² G. Bovini, D. Checchi, F. Di Nicola, E. Di Porto, P. Naticchioni and E. Viviano, 'Le imprese e i lavoratori in Cassa integrazione Covid nei mesi di marzo e aprile', INPS and Banca d'Italia, 29 July 2020 (only in Italian).



(1) The forecasts are those reported in Economic Bulletin, 1, 2020, which did not take account of the public health crisis.

On average for the year, some 900,000 employed persons benefited from wage supplementation schemes, three times the peak recorded during the double-dip recession of 2009-2013 (Figure 8.2.a). Other conditions being equal, wage supplementation has been significantly less widespread among those employed in sectors and businesses that have had the opportunity to resort to remote work (see the box 'Agile work in the private sector').

In order to encourage companies to adjust above all the hours worked, the extension of wage supplementation schemes has been accompanied by a freeze on individual dismissals for economic reasons and on collective dismissal procedures.³ Since August, the constraints have been relaxed for companies that close down (Decree Law 104/2020, the 'August Decree').⁴

Overall, it is estimated that the number of jobs in the non-agricultural private sector protected due to the combined effect of the extension of wage supplementation, the constraints on redundancies and other government measures amounted to around 440,000.⁵ According to data from the mandatory reporting of the Ministry of Labour and Social Policies, there were about 240,000 fewer redundancies in 2020 in the non-agricultural private sector than in 2019 (Figure 8.2.b), to which some 200,000 additional dismissals must be added that, based on our estimates, would have been caused by the recession in the absence of any support measures. Looking ahead, when assessing the impact of freezing dismissals,

³ Overall dismissals also include those not subject to the freeze, such as those for disciplinary reasons, those relating to managers and those relating to the carrying out of contracts. For the entire period, it was also possible to proceed with dismissals to terminate apprenticeship contracts.

⁴ As a result of the introduction of a moratorium on bankruptcies, the number of firms that had ceased to operate on this basis between March and July 2020 was about one third that of the previous year; see S. Giacomelli, S. Mocetti and G. Rodano, 'Fallimenti d'impresa in epoca Covid', Banca d'Italia, *Note Covid-19*, 27 January 2021 (only in Italian).

⁵ This figure updates previous estimates (see E. Viviano, 'Alcune stime preliminari degli effetti delle misure di sostegno sul mercato del lavoro', Banca d'Italia *Note Covid-19*, 16 November 2020, only in Italian), based on the information available at that time.

the way in which the lower turnover influences the dynamics of recruitment should also be considered, and therefore the employment opportunities for those returning to the labour market or joining it for the first time.



Sources: Istat's labour force survey (for workers receiving wage supplementation); Ministry of Labour and Social Policies, mandatory reporting (for dismissals); and INPS, Osservatorio sui lavoratori dipendenti (for the number of job positions filled until 2019). (1) Right-hand scale. – (2) Cumulative balance since 1 January 2020, difference compared with the corresponding period of 2019. – (3) The dismissal rate is calculated as the ratio of the number of dismissals in a specific month to the number of job positions filled in the previous month. Seasonally adjusted data. Right-hand scale.

AGILE WORK IN THE PRIVATE SECTOR

In order to safeguard the health of workers and to allow production activities to continue during the pandemic, the Government encouraged the use of remote work by simplifying the relative bureaucratic requirements.

The number of employees working remotely in the non-agricultural private sector grew rapidly from less than 200,000 in the second quarter of 2019 to more than 1.8 million in the same period of 2020 (14.4 per cent of employed persons, up from 1.4 million in 2019);¹ the number of firms that used remote working rose from 28.7 per cent in 2019 to 82.3 per cent in 2020).²

2020

D. Depalo and F. Giorgi, 'Il lavoro da remoto in Italia durante la pandemia: i lavoratori del settore privato', Banca d'Italia, *Note Covid-19*, 22 January 2021 (only in Italian). Like most microdata, the labour force survey data used here do not allow the legal definition of remote work to be replicated.

² The percentages are based on the Bank of Italy's Business Outlook Survey of Industrial and Service Firms conducted in September 2020 on industrial and service firms with at least 20 employees. Further details are available in G. Basso and S. Formai, 'Il lavoro da remoto in Italia durante la pandemia: le imprese del settore privato', Banca d'Italia, *Note Covid-19*, 22 January 2021 (only in Italian). With reference to the public sector, see W. Giuzio and L. Rizzica, 'Il lavoro da remoto in Italia durante la pandemia: le Amministrazioni pubbliche', Banca d'Italia, *Note Covid-19*, 22 January 2021 (only in Italian).

This type of employment has spread mainly among women, especially those with children aged between 6 and 14, and among employees with higher qualifications (see the figure), whose tasks are probably less affected by being physically present in the workplace. This has been more common in larger companies and sectors whose activities are more suitable for remote working, especially in ICT services (see Chapter 6, 'Firms' and Chapter 12, 'Business activity regulation and the institutional environment').



Source: Based on data from Istat's labour force survey.

Working remotely has enabled companies that use it to limit recourse to wage supplementation schemes. In the second quarter of 2020, other characteristics of employees and firms being equal, the likelihood of being placed in wage supplementation schemes was about 10 percentage points lower for remote workers than for other types of worker. Again with other characteristics being equal, the monthly remuneration for those who worked remotely was 6 per cent higher than for those who did not work in this way, as a result of the greater number of hours that they were able to work; the difference was higher among women, standing at 7.0 per cent, compared with 4.5 per cent for men.

During the third and fourth quarters of 2020 – despite the decline in new cases in the summer months, the recovery in hours worked and the reopening of schools – the number of remote workers remained significantly higher than prior to the pandemic (1.3 million employed persons in the third quarter and 1.5 million in the fourth quarter, equal to 9.9 and 12.1 per cent of employees in the non-agricultural private sector respectively). This greater use of remote work also occurred in the absence of any remunerative benefits and in light of companies having less need to make use of them.

Based on this evidence, it is plausible that the share of remote workers may remain at far higher levels than in 2019, even after a full recovery in economic activity when the pandemic is over. Fixed-term employment contracted significantly, down by 5.7 per cent. This has had particularly unfavourable repercussions for the employment of young people and women (Figure 8.3), who are often employed under this type of contract.⁶ In order to prevent fixed-term contracts from being interrupted, the Government suspended the requirement of the cause for the extension or renewal of fixed-term contracts for the whole year⁷ (introduced by Decree Law 87/2018, the 'Dignity Decree'), thereby reducing the costs relating to these contracts in a phase of weak demand and facilitating access to wage supplementation for this type of worker too.



Source: Based on data from the Ministry of Labour and Social Policies, mandatory reporting.

(1) 7-day moving averages. The balances are expressed in relation to the number of employees in 2019 for each category. The differences are calculated with respect to a counterfactual scenario that assumes that, in the absence of the pandemic, net hires (balance between hires and dismissals) would have recorded the same trends as in 2019, a year in which employment growth was modest.

The number of self-employed workers, concentrated in the sectors hardest hit by the crisis, also fell sharply.

Labour market trends varied, with a recovery in construction that started in the summer, manufacturing holding steady (except for clothing and footwear) and a fall in services.

According to mandatory reporting data, the demand for labour in road freight transport grew, boosted by the growth in e-commerce and by its effects on home deliveries. Employment in tourism, however, declined considerably; despite the recovery in the summer months, there were 90,000 fewer jobs at the end of 2020 (a fall of about 5 per cent) than at the end of 2019 (the net balance in the tourism sector was positive by more than 130,000 persons in 2019).

⁶ Banca d'Italia and the Ministry of Labour and Social Policies, Il mercato del lavoro: dati e analisi. Le Comunicazioni obbligatorie' ('Labour market data and analyses. Mandatory Reporting', 1, 2021 (only in Italian).

⁷ At the time of the 'Relaunch Decree' and the 'August Decree'.

The decline in the number of employed persons mainly affected provinces with mountainous areas and the cities of art (Figure 8.4); in the major urban centres, the tourism crisis was accompanied by a contraction in the non-food retail trade.

These sectors typically employ a significant share of women and this has contributed to the fall in female employment, which is much more pronounced than for men (-2.5 and -1.5 per cent respectively in the economy as a whole).

The early months of 2021. – According to provisional data from the labour force survey, the number of employed persons in the first quarter decreased by 1.1 per cent compared with the previous period, in part due to the statistical effect of a new classification of employees.⁸



Source: Based on data from the Ministry of Labour and Social Policies, mandatory reporting. (1) December 2020. Balance of net provincial hires in relation to employees in tourism at national level.

In the early months of this year, recourse to the CIG-COVID-19 scheme remained at the relatively high levels of the last quarter of 2020.

The dynamics of permanent employment continue to be supported by the freeze on dismissals for economic reasons.⁹ Decree Law 41/2021 ('Support Decree') envisaged that this rule would remain in force until 30 June for sectors with access to ordinary wage supplementation (essentially industry and construction) and until 31 October for the services sector, which has been hit hardest by the pandemic. For as long as the restrictions are in force, companies will have access to CIG-COVID-19 schemes without having to pay. The suspension of the restrictions introduced by the 'Dignity Decree' on renewals of fixed-term employment contracts was also extended until the end of 2021.

⁸ To fulfil the obligation to transpose Regulation EU/2019/1700, Istat has recently revised the criteria for defining employment status in the labour force survey (see Istat, 'Employment and Unemployment. Provisional Data', *Statistics Flash*, 6 April 2021): those who, despite having an employment contract at the time of the survey, have been absent from work for at least three months (e.g. because they are under zero-hour wage supplementation) or expect to be absent. If they do not actively seek a new job, these persons are now counted among the inactive, despite the existence of an employment contract. Previously, those who were in employment but were absent for more than three months from the workplace continued to be classified as employed if they were: (a) employees and continued to receive at least 50 per cent of their remuneration; or (b) self-employed persons whose work was not formally interrupted (e.g. collaborators with a still valid contract).

⁹ Banca d'Italia and the Ministry of Labour and Social Policies, 'Il mercato del lavoro: dati e analisi. Le Comunicazioni obbligatorie' ('Labour market data and analyses. Mandatory Reporting') 3, 2021 (only in Italian).

Labour supply

The labour market participation rate decreased by 1.6 percentage points in 2020 (to 64.1 per cent for the cohort aged 15 to 64). This led to a decrease in the unemployment rate (-0.8 percentage points, to 9.2 per cent on average for the year).

The restrictions on mobility and fewer possibilities of finding a new job discouraged people from looking for work. According to labour force survey data, the share of unemployed people who stopped looking for work in the space of one quarter and thus moved to inactivity increased sharply, from 39 to 48 per cent; the probability of moving from being employed to being inactive also rose, from 2 to 3 per cent (Figure 8.5.a).



Source: Based on Istat's labour force survey.

(1) Population aged 15-64. The probability of transition is calculated over a quarterly horizon; it corresponds to the share of workers that transit from one employment status to another in the reference period. -(2) 4-term moving averages. -(3) Right-hand scale. -(4) Average for the first 3 quarters of the year.

Giving up actively searching for a job was more marked among workers previously employed in services (Figures 8.5.c and 8.5.d), especially in tourism (hotels and restaurants). If there is no resumption of activity, it could be particularly difficult to reallocate workers from this sector, given the different characteristics and skills required in other sectors of the economy (see the box 'The prospects for reallocating workers in the sectors hit hardest by the pandemic').

THE PROSPECTS FOR REALLOCATING WORKERS IN THE SECTORS HIT HARDEST BY THE PANDEMIC

Accommodation and food service activities were the sectors most affected by the economic crisis following the pandemic. In these areas, the number of employees had increased by 24 per cent over the period 2014-19, accounting for about one sixth of the overall growth in employment. The employment opportunities in the sector were mainly for women (about half of employees) and younger people; these jobs required low-level qualifications and were mainly on a short-term and seasonal contract basis. Compared with workers in other nonfinancial private services, those in accommodation and food service businesses were equally likely to remain employed three years after their first contract, but were less likely to move to other sectors.¹

In order to assess the employment prospects for these workers in light of the tourism crisis⁻² an exercise was carried out to simulate employment flows between sectors based on the labour demand observed in the period 2014-19 and under the deliberately extreme assumption that it disappears in the tourism sector. The results show that the probability for a tourism worker of being employed would be reduced by 13 per cent over a three-year horizon. The Italian economy would therefore only be partially able to absorb the effects of declining demand in the tourism sector, in part because of the low qualifications of its workers. According to the results of the simulation, reallocation would mainly take place towards other services (business support, wholesale and retail trade) and manufacturing (see the figure), sectors where labour demand has not shown any clear signs of recovery so far.

In order to study the determinants of the sectoral reallocation of workers, we used data on the skills required and tasks carried out in relation to a wide range of work tasks that were taken from the ICP sample survey of professions (Indagine campionaria sulle professioni) run by the National Institute for Public Policy Analysis (INAPP). Specifically, some indicators were constructed on the relative demand for skills (basic, technical, managerial and social interaction) for the various professional roles in each sector, compared with the average for the

¹ G. Basso, A. Grompone and F. Modena, 'The (little) reallocation potential of workers most hit by the COVID-19 crisis', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 597, 2021.

² It only refers to accommodation and catering and not to any other tourism-related activities, such as travel agencies and certain retail trade and transport sectors.

rest of the economy (see the table). Positive (negative) values in the index for a sector indicate a higher (lower) demand compared with the average.



Source: Based on data from the Ministry of Labour and Social Policies, mandatory reporting, January 2014-June 2019 (the last month for which these data are available). (1) The numbers shown are the differences between the shares of total transitions from accommodation and food service activities

(1) The numbers shown are the differences between the shares of total transitions from accommodation and food service activities towards other services (estimated by assuming that labour demand in the tourism sectors was nil) and those observed between sectors in 2018.

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	n	

Job characteristics (1) (years, per cent and number of persons)							
	Accommodation and food service activities	Construction	Land transport	Rest of the economy			
Average age	33.4	39.5	40.4	37.3			
Share of men	49.1	94.5	91.0	53.3			
Low professional qualifications (2)	90.7	34.1	11.9	49.1			
No. of years of education	8.1	7.3	7.7	9.2			
Basic skills index (3)	-0.73	-0.54	-0.51	0.12			
Social skills index (3)	-0.13	-0.58	-0.52	0.10			
Technical skills index (3)	-0.39	0.15	-0.27				
Managerial skills index (3)	0.04	-0.13	-0.21	0.02			

Source: Based on data from the Ministry of Labour and Social Policies, mandatory reporting, January 2014-June 2019 (the last month for which these data are available) and INAPP and ICP (for the indices of required skills). (1) Age is expressed in years; the share of men and of low professional qualifications as a percentage on the total hirings between

(1) Age is expressed in years; the share of men and of low professional qualifications as a percentage on the total hirrings between January 2014 and June 2019; the indices for required skills are in standard deviations compared with the average for jobs in the economy as a whole. – (2) Low qualification jobs are those performed by unqualified workers in services and other basic jobs; medium qualification jobs are done by specialized workers in industry and construction, assembly workers and service workers; and high qualification jobs are performed by professionals, entrepreneurs and managers, and workers in specialist technical jobs. – (3) The indices are calculated as the averages of 35 indicators available in the data from a sample survey on jobs (Indagine campionaria sulle professionali, ICP). The average is subtracted for each indicator, and the result is divided by the standard deviation among all jobs; the normalized values are then aggregated into the four homogeneous skills groups shown in the table. The positive (negative) values of the index indicate a demand for skills higher (lower) than the average for the economy as a whole. Basic skills include, for example, comprehension of written texts and the ability to communicate effectively; social skills refer to the ability to persuade and to negotiate; technical skills refer to the ability to solve complex problems, analyse operative phases and produce technological designs; and managerial skills refer to the ability to make decisions, and manage time and material and human resources.

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The sectors where jobs increased in 2020 include construction and land transport;³ however, they employ workers with different characteristics and skills from those of tourism. According to data from mandatory reporting in these sectors, the share of young workers, women and people with low-level professional qualifications is smaller; in addition, some basic and technical skills are more widespread than in accommodation and food service activities.

Looking ahead, the recovery of lost jobs will require an improvement in tourism flows after the public health emergency, which will also have to be boosted by policies to revive the sector, as already envisaged by the Italian RRP. In the long term, active labour market policies and training programmes will facilitate reallocation to other activities.

Participation decreased to a greater extent for young people aged 15-34 and for women (Table 8.2). The increased need to cope with caring for family members also probably affected the female labour supply.¹⁰ Among the older cohorts, leaving the labour market was facilitated by the rules that relaxed the requirements for retirement between 2019 and 2021 (the *quota 100* early retirement scheme).¹¹

								Table 6.2	
Participation and unemployment rates and probability of transition between various employment situations (differences 2020-2019; percentage points)									
	Rates of Probability of transition (1)								
	activity	unemploy ment	from from from from from from from from						
Age groups									
15-34	-2.7	-1.0	0.3	1.9	0.4	-0.1	-1.4	9.2	
35-54	-1.4	-0.9		0.6	-0.4	0.6	-0.9	8.0	
55-64	-0.4	-0.5	-0.1	0.6	0.3	0.3	-2.8	8.1	
Men	-1.6	-1.0	0.1	0.6	0.1	0.4	-1.9	8.8	
Women	-1.9	-0.8		1.3	0.2		-0.6	8.3	

Source: Based on microdata from Istat's labour force survey (classification in force in 2020). (1) Quarterly data. Average for the first 3 quarters of the year.

Table 0.0

³ Banca d'Italia and the Ministry of Labour and Social Policies, 'The labour market: data and analyses. Mandatory Reporting', 1, 2021 (only in Italian).

¹⁰ Banca d'Italia and the Ministry of Labour and Social Policies, Il mercato del lavoro: dati e analisi. Le Comunicazioni obbligatorie' ('Labour market data and analyses. Mandatory Reporting'), 2, 2021 (only in Italian).

¹¹ With regard to the Pension Fund of State Employees, INPS reported an 86 per cent increase in new retirements in 2020 compared with 2019. This increase is largely due to the suspension of the adjustment of the retirement age to life expectancy resulting from the introduction of the *quota 100* early retirement scheme.

In the first three months of 2021, the unemployment rate grew by 0.3 percentage points compared with the previous quarter, reaching 10.2 per cent; the decline in the participation rate continued, with a return to 2013 levels (63.1 per cent). The new definition of 'employed' introduced in January was also a contributory factor, according to which some individuals may have been reclassified as inactive.

The other support measures for workers

The Government intervened with temporary measures designed to support the income of workers without a job or with an activity severely reduced by the pandemic. The duration of unemployment benefit (new employment insurance scheme, NASpI) was extended.¹² Contributions were envisaged for workers with more discontinuous careers and without the requirements for access to NASpI (including workers in seasonal tourism, entertainment, domestic service, administration and those with intermittent contracts);¹³ some 3.8 million workers benefited from this, with an average transfer over the year of €1,400 (€3,000 for seasonal tourism and €3,900 for intermittent workers).

To support the self-employed, the Government introduced temporary instruments, widely diversified according to the activity.

Professionals and those with collaboration contracts were granted a transfer of approximately €1,450, regardless of the loss suffered and the declared income. According to INPS data, some 400,000 workers received this sum. Further contributions are added for workers registered with funds for professionals.

Income support for entrepreneurs, artisans and traders was provided for the months of March and April, for a total of $\notin 1,200$, regardless of the damage incurred (see Chapter 8, 'The labour market', *Annual Report for 2019*, 2020). Under the 'Relaunch', 'August' and 'Relief' decrees, the transfers were commensurate with the amount of loss suffered, provided that it amounted to at least one third of the turnover of the previous year. Due to the inclusion of ceilings, the subsidy was relatively more generous for smaller firms (see Chapter 6, 'Firms'). Overall, it is estimated that a very large proportion of self-employed workers received compensation (owners of individual firms and members of partnerships), numbering about 70 per cent.

The 'Support Decree' extended the main income support measures. Temporary contributions were renewed for those categories of workers with no access to NASpI. Lastly, non-repayable grants were relaunched for holders of VAT numbers who recorded significant falls in turnover in 2020, and other transfers were made to operators in specific sectors (winter tourism, culture and entertainment, and the fairs sector).

¹² Decree Law 34/2020 ('Relaunch Decree') renewed the payments due to expire between March and April 2020 for two months; the 'August Decree' further extended the payments expiring between May and June 2020 for a further two months.

¹³ The 'Cure Italy' decree introduced an initial bonus of €600, subsequently extended for other monthly payments and for further categories by the 'Relaunch Decree', the 'August Decree' and Decree Law 137/2020 ('Relief Decree').

The incentives introduced to stimulate labour demand are also highly diversified. In order to facilitate the exit from wage supplementation schemes, the 'August Decree' set up a contribution waiver for firms that had had no further recourse to the CIG-COVID-19 scheme from July onwards, which was not proposed again in the subsequent decrees. Since the summer, schemes to reduce contributions have been introduced for permanent hirings and conversions to permanent contracts, in addition to those in force with varying rules for access to benefits (bonuses for the young and for the South of Italy). The 2021 Budget Law (Law 178/2020) included incentives for female employment (hirings and contract conversions), with different constraints compared with the reduction in contributions for the young. Furthermore, a partial reduction in contributions applicable to all employment contracts was introduced for employers in the *Mezzogiorno*, which should last until 2029, if approved by the European Commission.

The multitude of new measures underlines the shortcomings in the social welfare system, amplified by the exceptional nature of the shock. The variability in the requirements for obtaining benefits, introduced by the various decrees outside of any overall system owing to the urgency of the situation, has led to unequal treatment and the fragmentation of a system that was never very universalistic has increased, albeit temporarily.

Industrial relations and collective bargaining

The remunerations established by national collective bargaining continued to grow very slowly, with an increase on a current basis of 0.7 per cent in the non-farm private sector and of 0.6 per cent in the economy as a whole; given the great uncertainty, collective bargaining has in fact come to a halt (see Chapter 9, 'Prices and costs').

At the beginning of 2021, a number of national collective agreements were signed in the industry sector. The new agreements reconfirm a wage negotiation model based on inflation expectations, as also established by the agreement signed by unions and employers' associations in 2018 (contents and guidelines for industrial relations and collective bargaining of Confindustria and CGIL, CISL and UIL). In the metalworking sector, one innovation is the partial overcoming of the ex-post indexation mechanism, based on a comparison between the actual and expected figures for inflation. The agreement concluded in February 2021 provides for: increases in the minimum wage that are slightly higher than inflation expectations; an upward adjustment should the increases turn out to be lower than the recorded harmonized index of consumer prices; and a revision of the professional classification system with a unification of the lowest categories. The renewal is a positive sign for wage growth, particularly in light of the serious economic crisis.

Despite the agreements signed this year, wage growth has remained modest overall (see Chapter 9, 'Prices and costs'), partly because of the slowness of negotiations in the service sector, which has been particularly affected by the pandemic.

9. PRICES AND COSTS

The public health emergency translated into a significant drop in inflation, which was slightly negative on average in 2020. The sharp fall in energy prices, which reflected global economic conditions, and the repercussions on domestic prices of the recession and of wage stagnation, were among the contributory factors. Food prices were an exception, driven by greater demand for these goods, especially during the first lockdown.

Inflation turned positive at the start of 2021, following the recovery of the energy component and the improvement in the global economic outlook, but also owing to temporary factors. Some costs affecting the initial phases of price formation increased in the early months of 2021, but wage growth is likely to remain moderate in the rest of the year as well.

Based on the results of Bank of Italy surveys, the great majority of firms believe that the pandemic crisis was primarily transmitted to their businesses and product prices through the contraction in demand, rather than because of supply constraints. The findings also indicate that the longer firms believe the impact of the crisis on production will last, the lower their planned list prices will be.

Prices and costs in 2020

Inflation in Italy, as measured by the twelve-month change in the harmonized index of consumer prices (HICP), declined to -0.1 per cent in 2020 (Table 9.1), mostly owing to the sharp fall in the prices of energy products (-8.6 per cent). The trend in these prices more than counterbalanced the upward pressures stemming from rising food prices, which were particularly marked in April and June, due to more frequent recourse to home cooked meals, and were only partially offset by the decline in the catering sector.

Core inflation (estimated net of food, energy and tobacco products) was also moderate, at 0.5 per cent on average for the year. The prices of non-energy industrial goods rose at a slightly faster pace (0.7 per cent), while the change in those of services amounted to 0.4 per cent. The variation in service prices was curbed by the downward trend in the accommodation and transport components, which were harder hit by the measures taken to limit contagion.

Over the course of the year, the pandemic hampered the local collection of prices of some categories of products in many countries, leading national statistical institutes to use data imputation. In Italy, this proved necessary for a large share of elementary prices in April (almost 40 per cent of the basket), less so in subsequent months. Aside from the temporary effects on the price dynamics of the categories concerned, these problems had no significant impact on the general index during the year as whole.

			Table 9.1			
Price indices						
	Percentage cha	Percentage weights				
	2019	2020	2020			
Harmonized index of consumer prices (HICP)	0.6	-0.1	100.0			
Unprocessed food products	1.5	2.8	6.3			
Processed food products	0.7	1.0	14.2			
Energy products	0.5	-8.6	9.1			
Non-food, non-energy products	-0.2	0.7	27.3			
Services	1.0	0.4	43.1			
Goods and services with administered prices	0.4	-3.5	9.7			
Overall index excl. food, energy and tobacco	0.5	0.5	70.4			
GDP deflator	0.8	1.2				
Index of producer prices of industrial products sold on the domestic market.	0.0	-4.4				
Source: Based on Istat data.						

The global recession led to a marked fall in the producer prices of industrial products sold on the domestic market, which were instead stable in 2019. On average last year they declined by 4.4 per cent, owing in particular to the sharp fall in energy prices (-13.8 per cent). Net of food and energy products, producer price inflation was virtually nil (-0.1 per cent). Import prices declined markedly (-5.1 per cent), also mostly due to the contraction in the energy index (-27.5 per cent).

The public health emergency and the consequent deterioration of the economic outlook helped to prolong talks on numerous collective bargaining agreements that had expired: the share of employees in the non-farm private sector waiting for renewals in 2020 stayed at around 80 per cent, a very high level by historical standards. Growth in hourly contractual earnings in the non-farm private sector remained moderate (0.7 per cent).

Based on national accounts data, the increase in wages per hour worked was more marked: 2.4 per cent in the non-farm private sector and 2.6 per cent in the economy as a whole. However, this trend reflects possible statistical difficulties in the measurement of wages, given unprecedented recourse to wage supplementation schemes and the reallocation of the workforce towards sectors and professions with higher average wages, which were less affected by the crisis (see the box 'The impact on inequality of the COVID-19 crisis and of the income support measures in the first half of 2020', Chapter 5).

Growth in overall labour costs was limited by that in social security contributions per hour worked, which fell to 1.3 per cent in the economy as a whole (3.3 per cent in 2019).

The inflation outlook for 2021

Inflation turned positive again in the early months of 2021 (Figure 9.1), reaching 1.0 per cent in April. The rise reflects that in energy prices, which grew year-on-year in March for the first time since July 2019, following the recovery in oil prices (see Chapter 1, 'The global economic situation, economic policies and world trade'). The increase also reflects predominantly temporary factors that influenced the core component. In the first two months of the year, the prices of clothing and footwear products recorded especially strong growth, driven in around half of Italy's regions by the delayed start of the winter seasonal sales whose effect, however, subsided in March.



Source: Based on Istat data (1) HICP.

Notwithstanding continued weak demand, the costs of the inputs of goods and services that affect the early stages of price formation rose in the first few months of 2021. In April, the index of input costs inferred from the purchasing managers' index (PMI) reached the highest level recorded since 2011. Contributory factors included bottlenecks in the supply of raw materials, restrictions on transport and the consequent lengthening of delivery times, determined by the measures taken at national and global level to curb the pandemic. In March, producer price inflation of industrial products sold on the domestic market rose to 3.0 per cent, above all due to developments in the energy and intermediate goods components. Upward price pressures came from abroad, with prices rising again after almost two years of negative year-on-year changes: in March, the import prices of intermediate inputs and of energy products increased by 4.0 and 27.6 per cent respectively.

Wage developments are also likely to remain moderate for the remainder of the current year; the share of contracts that have expired or are due to be renewed remains large, though it is decreasing. Moreover, there continues to be ample margins of spare labour capacity. The share of non-farm private sector employees with expired contracts was equal to 55 per cent in May 2021. Despite the renewal of the contract of the metalworking sector and of other smaller contracts in the industrial sector, the overall trend in hourly wages increased only slightly (by one tenth of a point, to 0.8 per cent). An additional brake on the rise in labour costs in the quarters ahead will be exerted by both the confirmation for 2021 of significant reductions in social

security contributions linked to new hires of young people and women, and by the introduction of contribution relief on employment contracts in the South and Islands (Law 178/2020).¹

Inflation expectations for this year are recovering; those formulated by the analysts surveyed by Consensus Economics rose by 0.4 per cent in January, to 1.2 per cent in May. Expectations over the next twelve months expressed by the firms surveyed by the Bank of Italy went from 0.1 per cent in the survey conducted at the end of 2020 to 0.8 per cent in that of March (see 'Survey on Inflation and Growth Expectations', Banca d'Italia, Statistics Series, 12 April 2021).

The revision of own product prices by firms is conditioned both by the still rather unfavourable expectations regarding the duration of the health emergency and by pressures from competitors (see the box 'The pandemic and firms' price strategies'); in the survey released in April, it is mainly manufacturing companies that forecast a rise in prices over the next twelve months. A large majority of firms believe that the impact of the protraction of the pandemic is primarily seen in a reduction in demand.

THE PANDEMIC AND FIRMS' PRICE STRATEGIES

The pandemic had a significant impact on both aggregate demand, contributing to a sharp drop in consumption, and aggregate supply, due to restrictions on mobility and productive activities, and disruptions in global production chains. Assessing how the COVID-19 crisis affected firms' sales prices and inflation expectations, and how both may evolve with the gradual exit from the health emergency, is a complex task.¹

One study² analyses the impact of the pandemic crisis on changes in the list prices of Italian firms and on their inflation expectations, using the data collected from the quarterly survey conducted by the Bank of Italy of more than 1,000 firms in industry and services.³ Since the survey conducted in March 2020, this includes specific questions about the channels through which the pandemic is transmitted to firms' activity and the expected duration of its effects on production levels and on the economy as a whole.

Almost half of the firms interviewed considered that it would take between six and twelve months to return to previous production levels; just over one fifth believed the impact of the health emergency would last even longer (Figure A). The vast majority of firms indicated that the crisis was transmitted to their business

¹ O. Blanchard, 'Is there deflation or inflation in our future?', *VoxEU CEPR*, 24 April 2020.

² M. Bottone, C. Conflitti, M. Riggi and A. Tagliabracci, Firms' inflation expectations and pricing strategies during Covid-19', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), forthcoming.

³ For the methodology and the latest results of the survey see 'Survey on Inflation and Growth Expectations', Banca d'Italia, Statistics Series, 12 April 2021.

Social security contribution relief for employers in the South and Islands will remain in place until 2029; from 2022 onwards, this will be subject to the approval of the European Commission.

mainly through the contraction of both domestic and foreign demand, rather than through supply channels (for example, as a result of the restrictions imposed on the quantities offered, unavailability of labour, or problems linked to the supply of raw materials). These assessments appear robust over time and are valid for both the surveys conducted immediately after the outbreak of the epidemic and more recent ones.⁴



Source: Based on the findings of the Bank of Italy's quarterly Survey on Inflation and Growth Expectations. Up to October 2018, the survey was conducted jointly with *II Sole 24 Ore*. (1) Responses to the question: 'How many months do you think it will take before your firm regains the levels of activity preceding the outbreak of the epidemic?'

The study compares the change in sales prices planned by individual firms for the 12 subsequent months and their inflation expectations over different time horizons with: (a) the expected duration of the effects of the pandemic on the production levels of each firm; (b) assessments of the general state of the economy; (c) the intensity of the competitive pressures to which the firm is subject (measured by the degree of attention paid to competitors' pricing strategies); (d) the existence of liquidity constraints, in addition to other characteristics, such as sector, size and geographical area.

The results indicate that the longer firms believe the impact of the crisis on production levels will last, the lower their planned list prices will be. The intensity of competitive pressures from competitors also helps to mitigate sales price dynamics. Inflation expectations (Figure B) at one and two years and between three and five years, are significantly influenced by the expected duration of the pandemic effects on the general economic situation, leading

⁴ See the box 'The impact of the COVID-19 pandemic according to business surveys', Chapter 6, *Annual Report on 2019*, 2020.

to a downward revision. The study also suggests that during the health emergency, decisions to change sales prices were unaffected by the financial and liquidity conditions of the firm. By contrast, during the sovereign debt crisis,⁵ there were indications that strict financial constraints had led Italian firms to limit price reductions, even in the face of declining demand, in order to avoid the excessive contraction of cash flows.⁶ This different behaviour may reflect the effectiveness of the unprecedented fiscal and monetary measures adopted since March 2020 to support liquidity and financing in the economy.7





(1) The date in the key indicates the month in which the survey was conducted. The first point of each curve is the definitive figure available at the time of the survey that is provided to respondents to use as the basis for formulating their expectations; the second point represents the average of the forecasts (for the 12-month change in prices) for the subsequent 6 months; the third point is the average of the forecasts for the subsequent 12 months; the fourth point is the average of the forecasts for the subsequent 24 months.

⁶ I.A. Duca, J.M. Montero, M. Riggi and R. Zizza, 'I will survive. Pricing strategies of financially distressed firms', Banca d'Italia, Temi di Discussione (Working Papers), 1106, 2017.

⁵ See the box 'Italian firms' price policies during the crisis', Chapter 9, *Annual Report for 2015*, 2016.

⁷ A. De Socio, S. Narizzano, T. Orlando, F. Parlapiano, G. Rodano, E. Sette and G. Viggiano, 'The effects of the COVID-19 shock on corporates' liquidity needs, balance sheets and riskiness', Banca d'Italia, *Note Covid-19*, 13 November 2020.

10. FOREIGN TRADE, COMPETITIVENESS AND THE BALANCE OF PAYMENTS

As in other euro-area countries, Italian exports were affected by the marked contraction in world trade, temporary halts in production, and the appreciation of the euro: following the decline in the initial phase of the pandemic, sales of goods nonetheless rapidly returned to the levels recorded in the previous year. Unlike the losses observed when trade collapsed during the global financial crisis, Italy's share of world goods trade remained virtually unchanged, reflecting the increased competitive capacity of our exporting firms.

Lower expenditure on energy products helped to keep the current account surplus high, offsetting the drop in tourism revenues and the smaller surplus in non-energy goods. Thanks to the continuous current account surpluses recorded in recent years, Italy's net international investment position turned positive for the first time in more than thirty years.

Tourism was among the sectors hit hardest by the pandemic, with revenues down by close to 90 per cent in the period from March to May, followed by an upturn during the summer months and then another downturn. To relaunch this sector, effective curbs on infection rates are indispensable.

Foreign portfolio investments recorded large outflows in the first half of the year, in concomitance with the tensions on the financial markets, which then gradually turned into inflows as the markets became more optimistic. In the second half of 2020, purchases of Italian securities by foreign investors increased; the widening of the negative balance on TARGET2 in the first half of the year was gradually reabsorbed.

Exports and imports

Exports. – Exports of goods and services decreased by 13.8 per cent in volume in 2020. The fall, which was common to the other major euro-area countries, mostly mirrored that in world trade; it was more pronounced for the services component and for tourism in particular.

Goods exports alone fell by 9.8 per cent in volume, reflecting weak demand and, to a lesser extent, supply factors linked to the restrictions on non-essential production in force in March and April. Taking account of these supply factors and of changes in the sectoral composition of international trade – also in relation to exceptional demand for pandemic-related goods, such as protective face masks – it is estimated that the fall in exports was almost in line with that of potential demand from outlet markets.

Following the abrupt drop in the first half of the year, sales of goods abroad revived and in the closing months of the year were close to pre-pandemic levels; the recovery was faster compared with the trends observed in some of Italy's main European trading partners, and in France especially (Figure 10.1.a). Overall in 2020, Italian exporters succeeded in maintaining almost all of their share of foreign markets, which had instead contracted sharply when world trade collapsed during the 2008-09 financial crisis (Figure 10.1.b).



Sources: Based on data from IMF, Eurostat and Istat.

(1) Quarterly exports of goods in volume. – (2) Market shares are calculated at current prices and net of trade in energy products.

The decline in goods exports was more marked vis-à-vis EU markets, toward France and Spain especially, where the fall in GDP was particularly pronounced. Among the main non-EU markets, losses were concentrated in exports to OPEC countries (mainly related to the luxury sector), while they were more limited for those bound for the United States and Switzerland. Sales to China, among the few economies to post growth in 2020, instead increased slightly. The main sectoral contributions to the decrease in goods sales came from mechanical machinery and equipment, means of transport, leather goods and clothing; pharmaceuticals and food products instead made a positive contribution, confirming their strong performance on foreign markets in previous years (see the box 'Italy's sectoral exports in the last decade and the effects of the pandemic').

ITALY'S SECTORAL EXPORTS IN THE LAST DECADE AND THE EFFECTS OF THE PANDEMIC

From 2010 to 2019, Italy maintained its market share in world goods trade (around 3 per cent at current prices), following the pronounced decline of the previous decade. Based on international merchandise trade statistics reclassified into 200 sectors (ATECO 5-digit codes), two-fifths of Italian industries maintained their market share; 90 sectors recorded a sharp decrease, 32 a significant increase.¹ More than half of the



¹ S. Federico and C. Giordano, 'Beneath the surface: investigating industry heterogeneity in Italy's goods export market share performance,' Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), forthcoming. A marked decrease (significant increase) means a decrease (increase) of more than 0.3 percentage points in the decade 2010-19.

latter performed especially well on foreign markets, given that global imports of their products increased by more than average.

About one third of the 32 Italian sectors that gained market share in the last decade belong to the food and beverage industry; this category also includes leather goods, wearing apparel and pharmaceutical products (Figure A). The industries which instead have lost market share mostly belong to the macro-sector of minerals, metals and related products; they also comprise furniture, numerous chemical products, rubber and plastic items, and various means of transport, such as automotive components, motorcycles and railway rolling stock.



Source: Based on international merchandise trade statistics from the Centre d'Études Prospectives et d'Informations Internationales, Base pour l'Analyse du Commerce International (CEPII-BACI).

(1) The sectors analysed are the Italian industries (5-digit ATECO classification) that recorded an increase of more than 0.3 percentage points in their export share in world markets in the decade 2010-19; only the 15 leading industries for Italian exports in 2019 are shown, in order of weight (indicated in percentages between brackets on the y-axis). The bars are coloured according to the macro-sector to which each 5-digit industry belongs.

A comparative analysis of the international context in which the various Italian sectors operate shows that those industries which have gained market share, compared with those that have lost it, tend to have a more favourable product quality ranking compared with competitor countries and to be more highly integrated in global value chains. They also tend to be less exposed to competitive pressures from China and the economies of Central and Eastern Europe.²

Italian firms in the sectors that have gained market share are very heterogeneous in terms of how they are organized; they include large enterprises and medium-to-small

² The quality ranking of a sector is measured by a non-price competitiveness indicator, following the methodology outlined in A.K. Khandelwal, P.K. Schott and S.-J. Wei, 'Trade liberalization and embedded institutional reform: evidence from Chinese exporters', *American Economic Review*, 103, 6, 2013, pp. 2169-2195. Participation in global value chains is approximated by import propensity.

exporters, foreign-owned firms and stand-alone companies. The proportion of workers with third-level education also varies a lot and is not significantly higher, on average, compared with that observed in the sectors which have lost market share. On the other hand, the sectors that have recovered market share structurally employ a higher proportion of younger workers (aged under 40) and women.

Medium-term sectoral trends have been partly altered by the very uneven impact of the pandemic shock. The only sectors in which foreign sales rose last year are pharmaceuticals, basic metal products (particularly precious metals) and food products, while the corresponding potential demand from market outlets was either increasing too or virtually stationary (see panel (a) of Figure B).³ Exports decreased in the other sectors, in some cases by less than the corresponding potential demand (beverages, non-metallic



Source: Based on ECB, Eurostat, Istat, Office for National Statistics, Ufficio federale di statistica della Svizzera, United States Census Bureau, US Bureau of Labor Statistics.

(1) The sectors are classified using the 2-digit ATECO codes; excluding the production of goods from the press services and the tobacco industry, and considering 23 countries of destination (United Kingdom, United States, Switzerland and the leading 20 EU countries). – (2) The final two columns 'textiles not including face masks' exclude these items from both exports and demand. – (3) The y-axis shows, for each sector, the difference between the percentage change of exports and that in corresponding potential demand; the x-axis shows the percentage of suspensions of non-essential production within each sector during the lockdown of March-April 2020. The textile sector is shown net of protective face masks. The 'food' and 'beverages' indicators overlap.

³ The data showing world market shares with a 5-digit sectoral breakdown are unavailable for 2020. The analysis is carried out in the 2-digit manufacturing sectors, selecting a small but representative set of outlet markets; the analysis focuses on manufactures excluding the production of goods from the press services and tobacco industry, due to the unavailability of all the necessary data, and considers 23 outlet markets (United Kingdom, United States, Switzerland and the largest 20 EU countries) which together account for 71 per cent of Italian manufacture exports. For each sector, potential demand is calculated as the weighted average of the imports of Italy's trading partners, in volume terms, using as weights their respective shares in value terms of Italian exports for that sector. See G. Allione and A. Felettigh, 'External demand and export performance: regression residuals during the Covid-19 pandemic', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), forthcoming.

mineral products, motor vehicles and other means of transport),⁴ in others, in line with potential demand (such as mechanics, Italy's main sector of specialization). The sectors in which sales fell by more than demand are mostly those of refined oil products, wood production (excluding furniture) and clothing. Exports also contracted in the textile sector, where potential demand only grew thanks to the contribution of protective face masks, essentially absent from specialized production in Italy.

Overall, it is estimated that the performance of aggregate manufacturing exports compared with that of the corresponding potential demand is largely attributable to the supply constraints resulting from the lockdown in March and April last year (see panel (b) of Figure B); this evidence suggests that the pandemic shock has not significantly affected the ability of Italian firms to compete in international markets.

In the first three months of 2021, exports continued to recover in value terms, driven by sales to EU markets. Those to the rest of the world instead fell slightly compared with the last quarter of 2020, but nonetheless recorded a moderate increase net of sales to the United Kingdom. The latter were affected, especially in January, by the entry into force of the Brexit withdrawal agreement.

In 2020, exports of services fell markedly; this mostly reflected the collapse in tourism revenue, which notwithstanding the partial recovery in the summer months, fell by more than 60 per cent during the year as a whole (see the box 'International tourism in Italy during the pandemic'), in line with trends in global tourism in Italy's main competitor countries. Sales of transport services were also down as a result of the contraction of freight and passenger flows and, to a lesser extent, sales of business services; the latter were supported in part by the especially favourable performance of the R&D services component.

INTERNATIONAL TOURISM IN ITALY DURING THE PANDEMIC

Tourism was among the sectors hit hardest by the pandemic worldwide. In 2020, the number of international travellers was down by 74 per cent compared with 2019.¹ Foreign tourists in Italy were down 60 per cent and related earnings fell from \notin 44 billion to \notin 17 billion on the previous year.

Last year, tourism revenues were heavily impacted by trends in new cases and the related containment measures: from March to May, the contraction was close to 90 per cent compared with the corresponding year-earlier period. The partial recovery in the summer months, almost entirely attributable to travellers from

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Beverage exports grew in particular in the first quarter of 2020, driven by wine sales in Germany and the United States. The production of non-metallic minerals (such as glass and ceramics) benefited from a recovery of price competitiveness, in contrast to manufactured products as a whole. Exports of means of transport were supported by the launch of ships commissioned before the pandemic.

World Tourism Organization (UNWTO) estimates; for more details, see UNTWO, *Covid-19 and tourism. 2020: a year in review*, January 2021.



European countries, was followed by a fresh contraction in the last quarter of the year (see panel (a) of the figure).

Tourism flows were affected by the restrictions on entry into Italy, which were more stringent for travellers arriving from areas outside of the European Union, but also by a greater preference for nearby destinations that could be reached independently: overall, compared with more distant countries such as the United Kingdom, flows from bordering countries, such as France, recorded smaller declines.² With the rise in new cases after the summer, the data available at provincial level also point to a negative correlation between the weekly stays of foreign tourists, observed based on mobile phone data, and the local epidemiological situation. Controlling for restrictions, every additional 100 new positive cases per 100,000 inhabitants, detected over a period of two weeks, is associated with a contraction in foreign tourists in the following week of about 5 percentage points more than in the other provinces. This suggests that the effective control of infection, and not just a loosening of restrictions, is essential to relaunching this sector.

The drop in international tourism revenue was larger for journeys made for personal reasons compared with business travel (see panel (b) of the figure). Cultural travel was especially hard hit, with contractions in the main Italian art

Source: 'Survey on International Tourism', Banca d'Italia, Statistics Series. (1) Includes: Albania, Andorra, Belarus, Bosnia and Herzegovina, Faroe Islands, Gibraltar, Guernsey, Iceland, Isle of Man, Jersey, Kosovo, Liechtenstein, Moldavia, Montenegro, North Macedonia, Norway, Principality of Monaco, Russia, San Marino, Serbia, Switzerland, Turkey, Ukraine, United Kingdom.

² V. Della Corte, C. Doria and G. Oddo, 'The impact of Covid-19 on international tourism flows to Italy: evidence from mobile phone data', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), forthcoming.

cities of between 70 and 80 per cent. Seaside or mountain resorts generally reported smaller declines.

The interviews carried out from July to December 2020 as part of the Bank of Italy's Survey on International Tourism³ indicate that, compared with their initial plans, only a small proportion of those who visited our country for non-work-related reasons changed significant aspects of the trip (destination, duration, accommodation). This indicates a polarization between international travellers who, during the pandemic, kept their plans largely unchanged, and those who instead gave up completely on travelling to Italy. The vast majority of respondents deemed that the measures in place to limit the spread of the virus in the localities visited were adequate.

Imports. – In 2020, imports of goods and services to Italy decreased in volume by 12.6 per cent, with almost half of the fall attributable to the contraction in services, mostly in connection with Italians' lower expenditure on foreign travel (-64.7 per cent in value terms). The decline in goods purchases, which was steeper vis-à-vis Italy's EU trading partners, was mostly attributable to means of transport, mineral products and mechanical machinery and equipment. Imports of pandemic-related goods grew, above all owing to purchases of protective face masks (€3.1 billion).

In the first three months of 2021, imports of goods in value terms rose with respect to the last quarter of 2020. The expansion extended to purchases from both EU and non-EU countries, for which the increased expenditure on energy products more than offset the decline in imports from the United Kingdom following Brexit.

Price competitiveness

In 2020, the export price competitiveness of Italian firms, which measures their ability to compete with local producers and other exporting countries in the outlet markets, deteriorated; this was mostly due to the appreciation of the nominal effective exchange rate of the euro. According to the indicator based on producer prices of manufactures, the decline amounted to 1.8 percentage points on average for the year, and was more pronounced on markets outside the euro area (Figure 10.2.a).

If measured by the overall price competitiveness indicator, which also takes into account firms' ability to compete in domestic markets, the loss was practically the same. The deterioration of competitiveness was common to the leading euro-area countries, less so in Spain and France but more so in Germany (Figure 10.2.b). According to the indicator calculated by the European Central Bank and based on the unit labour costs of the economy as a whole, competitiveness instead improved in

³ The survey was not carried out between March and June 2020, when estimates of tourist flows were instead made based on alternative sources, mainly mobile phone data and payment card transactions (see A. Carboni, C. Doria and S. Zappa, 'The production of statistics during the COVID-19 emergency: the estimate of "trips" in the balance of payments', Banca d'Italia, *Note Covid-19*, 19 June 2020; only in Italian). The survey gradually resumed in the subsequent months, although it was affected by regulatory restrictions to curb the spread of the virus and stricter rules on access at border points than in the past. As a result, the data are subject to a greater margin of error than in previous years.

Italy, while it worsened in Germany, France and Spain; however, these dynamics are susceptible to effects attributable to the rules on the statistical classification of wage supplementation schemes, which may alter international comparisons based on this deflator (see Chapter 9, 'Prices and costs').



Source: For the real effective exchange rate of the euro, ECB.

(1) An increase in the indicator signals a loss of competitiveness. The data for the last quarter are partly estimated. – (2) The export-weighted competitiveness indicator measures countries' capacity to compete with 60 other exporters and with local producers in the international outlet markets. – (3) Overall competitiveness indicators; weighted average of import-weighted competitiveness, which captures the ability of countries to compete on the domestic market with imported products, and export-weighted competitiveness. The real effective exchange rate of the euro is calculated in relation to 42 countries outside of the euro area and weighted by trade flows of manufactures and services.

The balance of payments and the net international investment position

The current account. – The current account surplus reached \notin 58.6 billion in 2020 (\notin 57.4 billion in 2019), equal to 3.5 per cent of GDP (Figure 10.3.a and Table 10.1). According to our estimates, which take account of the cyclical phase in Italy and that of its main trading partners (measured by the size of the output gap in Italy), as well as of the elasticity of exports and imports to the various demand components, the structural surplus also remains ample (around 1.7 per cent of GDP; Figure 10.3.b).

The current account balance benefited from the reduction in the energy bill (- $\in 20.8$ billion, from - $\in 35.7$ billion in 2019), which more than offset the lower surplus in non-energy products and the higher deficit in services, due to the contraction of the tourism surplus; the sharp fall in expenditure of foreign travellers was only partially counterbalanced by the reduction in foreign travel of residents, due to global travel restrictions and a preference for destinations in Italy.

The primary income surplus expanded, driven by the capital income component, which in turn benefited from an improvement in the net foreign investment position



Sources: For GDP, Istat; for the breakdown between energy and non-energy products in panel (a), based on Istat foreign trade data; for panel (b), based on data from the Bank of Italy, the European Commission (AMECO), the IMF, Istat and the OECD. (1) For the methodological aspects, see S. Fabiani, S. Federico and A. Felettigh, 'Adjusting the external adjustment: cyclical factors and the Italian current account', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 346, 2016. The grey area indicates the range of values obtained with alternative estimation models.

and by the positive differential between the return on foreign securities held by residents and that of Italian securities in non-residents' portfolios. The secondary income deficit instead increased, owing both to the larger deficit vis-à-vis the EU institutions (due to an expansion of transfers to the EU budget following cash fluctuations) and the rise in immigrant workers' remittances abroad, The latter only takes account of transfers through official channels, whose growth in 2020 is

presumably due to the transfers that had previously been carried in cash to the destination countries.

The current and capital account balance, which can be seen as indicative of savings and investment decisions by resident institutional sectors, expanded, despite the sharp increase in general government net borrowing linked to measures taken to counter the effects of the pandemic (from 1.6 to 9.5 per cent of GDP; see Chapter 11, 'The public finances'). The higher public deficit was more than offset by a significant expansion in net lending by the other institutional sectors (Figure 10.4), in line with what was observed in the euro-area countries (see the box 'Financial flows in the



Source: Istat.

(1) Includes non-profit institutions serving households.

Table 10.1

Balance of payments (1) (billions of euros, unless otherwise indicated)						
	2017	2018	2019	2020	2020 JanMar.	2021 JanMar.
Current account	44.8	44.5	57.4	58.6	7.2	7.4
Per cent of GDP	2.6	2.5	3.2	3.5	::	::
Goods	54.4	45.9	60.2	67.6	13.2	12.5
Non-energy products (2)	85.9	85.4	95.9	88.4	20.6	19.3
Energy products (2)	-31.5	-39.5	-35.7	-20.8	-7.4	-6.8
Services	-3.8	-2.9	-0.8	-6.8	-4.8	-3.1
of which: transport	-9.2	-9.5	-9.8	-8.0	-2.8	-1.7
travel	14.6	16.2	17.2	7.8	0.5	-0.1
Primary income (3)	9.3	18.9	15.2	17.0	4.4	4.4
Secondary income (4)	-15.1	-17.4	-17.1	-19.3	-5.6	-6.4
Capital account	1.2	-0.3	-1.8	-0.4	-0.4	-0.6
Financial account (5)	47.6	26.7	46.5	49.1	-2.5	15.2
Direct investment	0.4	-4.1	1.5	9.4	-1.1	-1.8
Italian investment abroad	10.9	33.8	29.3	4.3	2.3	2.1
Foreign investment in Italy	10.5	37.9	27.8	-5.1	3.4	3.9
Portfolio investment	84.1	120.2	-52.8	109.7	37.8	19.5
Assets, equity and investment funds (6)	85.8	28.6	37.7	58.7	-0.3	34.5
Assets: debt securities (6)	29.3	17.2	31.3	33.7	0.6	11.2
Liabilities: equity and investment funds (6)	17.8	-4.8	15.3	-4.1	-6.0	1.5
Liabilities: debt securities (6)	13.1	-69.5	106.5	-13.3	-31.4	24.7
Financial derivatives	-7.2	-2.7	2.5	-2.9	-0.7	-0.7
Other investment	-32.3	-89.3	92.2	-71.1	-39.0	-1.3
Changes in official reserves	2.7	2.6	3.2	4.0	0.6	-0.6
Errors and omissions	1.6	-17.5	-9.1	-9.1	-9.3	8.4

Source: For GDP, Istat.

(1) For January, February and March 2020, provisional data. – (2) Based on Istat foreign trade data. – (3) Employment income, capital income and other primary income. – (4) Current transfers between residents and non-residents. – (5) Since the adoption of the *Balance of Payments and International Investment Position Manual*, Sixth Edition (BPM6), 2009, the sign convention for financial accounts provides that, as was already the practice for liabilities, positive (negative) values for external liabilities now indicate an increase (decrease). – (6) Assets: net acquisitions (net sales in the case of a negative balance) by residents of securities issued by non-residents; liabilities: net acquisitions (net sales in the event of a negative balance) by non-residents of securities issued by residents.

euro-area countries during the pandemic', Chapter 2). In particular, the net savings of households expanded, following the contraction in consumption, as did those of non-financial corporations, which cut back on investment.

The financial account. – In 2020, foreign portfolio investment reached \notin 92.4 billion, rising sharply on 2019, in part owing to the reduction in the yields on Italian securities in the second half of last year. Residents mostly purchased foreign investment fund shares (amounting to \notin 52.9 billion, primarily ascribable to households and

insurance companies) and debt instruments (public sector securities and bonds issued by banks and firms, worth €33.7 billion).

Uncertainty about the course of the pandemic had a stronger impact on direct investment, in a global context marked by greater investor caution; according to still provisional data, foreign direct investment fell to \notin 4.3 billion (from \notin 29.3 billion in 2019).

On the liability side, in 2020 as a whole, non-resident investors, especially insurance companies and investment funds in the euro area, made net sales of Italian portfolio securities worth $\in 17.3$ billion. Sales were concentrated in March and April; starting in June, as tensions eased on the financial markets, foreign investors' demand recovered ($\in 41.1$ billion up to December), and mostly involved purchases of public sector securities and bonds issued by banks and firms (amounting to $\in 13.9$ billion and $\in 22.5$ billion respectively).

According to still provisional data, foreign direct investment in Italy fell by €5.1 billion, in the intra-company loans sector alone.

Net fund raising abroad by Italian banks in the form of loans and deposits fell by \notin 36.3 billion, reflecting the rise in refinancing with the Eurosystem through targeted longer-term refinancing operations (TLTROs); see Chapter 13, 'Banks and institutional investors'. Foreign inflows to the public sector classified among 'other investment' came to \notin 16.9 billion, owing to the disbursement of the first two tranches of loans by the European Commission under its instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE).

Overall in 2020, the Bank of Italy's negative balance on the TARGET2 European payment system increased by \notin 77 billion, reaching \notin 516 billion at the end of the year (Table 10.2). The increase, which reflected a marked worsening in the first half of 2020 in concomitance with market tensions, was later gradually reabsorbed; the main contributory factors were portfolio outflows and the reduction in foreign net funding by resident banks, partly offset by the current account surplus. The latter recorded another slight increase in the early part of 2021. Inflows from net purchases of Italian securities by non-residents and from loans received by the Treasury under SURE, helped to reduce the negative balance on TARGET2, which declined to \notin 481 billion at the end of April.

The net international investment position. – At the end of 2020, for the first time in more than thirty years, Italy's net foreign investment position was positive (€30.4 billion, equal to 1.8 per cent of GDP; Figure 10.5.a). The improvement of €46.9 billion compared with the previous year was entirely due to the current account surplus; the positive price adjustments were compensated by the negative exchange rate ones linked to the appreciation of the euro against the dollar (Figure 10.5.b). The overall change from the trough reached at the end of 2013 amounted to more than 25 percentage points of GDP; it benefited from persistent current account surpluses and, to a lesser extent, the positive effect of valuation adjustments, especially on the asset side, due to the favourable performance of international equity markets in recent years (Figure 10.5.b).
Table 10.2

Change	s in the TAH	GE12 ba	alance a	nd relation (billion)	on with t s of euros,	he othe	er baland	e of pay	ments i	tems (1)	
	TARGET2 balance (end of period)	Change in TARGET2 balance (compared with the end of the previous period)	Foreign portfolio investment in Italian public sector securities	Foreign portfolio investment in Italian private sector securities (excl. bank bonds)	Foreign portfolio investment in Italian bank bonds	Net foreign funding of resident monetary financial institutions (excluding central bank) in loans and deposits		Current Other y account items (2 and capital account balance		Italian) portfolio investment in foreign securities	
		(A)+(B)+ (C)+(D)+ (E)+(F)- (G)	(A)	(B)	(C)	(D)	of which: intermed- iated by resident central counter- parties	(E)	(F)	(G)	
2020	-516	-77	-27	5	4	-36	5	58	11	92	
2020 – Q	1 -492	-52	-25	-12		-24	15	7	2		
Q2	-537	-45	-4	-4	-1	5	5	5	-7	39	
Q	3 -546	-10	17	2	2	-31	-19	24	-5	19	
Q4	-516	30	-15	19	4	13	4	22	21	34	
2021 – Q ⁻	1 -516		22	7	-3	-8	5	7	21	46	
Ap	or481	35									

(1) A negative change in the TARGET2 balance indicates an increase in the Bank of Italy's liabilities in TARGET2. For more information, see 'Balance of Payments and International Investment Position', Banca d'Italia, Statistics Series, 19 February 2019. For 2021 Q1, provisional data. – (2) Direct investment, financial derivatives, residual items in other investment, official reserves, errors and omissions



Figure 10.5

Source: For GDP, Istat.

11. THE PUBLIC FINANCES

The health and economic emergency has had a profound impact on the public finances for 2020 and on the outlook for the years to come. In 2020, general government net borrowing rose to 9.5 per cent of GDP, from 1.6 per cent in 2019. The primary balance recorded a deficit (6 per cent of GDP) for the first time since 2009. The ratio of debt to GDP rose by more than 21 percentage points, to 155.8 per cent; around half of this increase is attributable to the contraction of the GDP denominator. Based on the assessments of the European Commission, the change in the cyclically-adjusted primary surplus – a measure of the fiscal policy stance – was equal to 2.8 per cent of GDP.

According to the plans presented in last April's 2021 Economic and Financial Document (DEF) – which also take account of the measures included in the National Recovery and Resilience Plan (NRRP) – net borrowing will reach 11.8 per cent of GDP this year. It will decline gradually in the subsequent three years (to 3.4 per cent in 2024). The debt-to-GDP ratio will rise to 159.8 per cent; it will decline starting in 2022, notwithstanding persistent primary deficits, thanks to continued accommodative financial conditions and to the robust expansion of the economy.

The Government aims to bring the ratio of debt to GDP back to pre-crisis levels by the end of the decade, including by making the necessary budgetary adjustments. The simulations reported in the 2021 DEF show that attaining this objective will depend on the capacity of economic policy to ensure a return to consistently higher growth and a sufficient improvement in the primary balance when macroeconomic conditions permit it.

The NRRP, recently submitted to the European Commission, mobilizes European and national resources worth more than €235 billion between 2021 and 2026; around 70 per cent of these funds are for new projects (see the box 'The National Recovery and Resilience Plan', Chapter 4).

The public finances in 2020

Net borrowing: objectives, interventions and outturns. – The pandemic and the exceptional measures that were needed to counter the spread of the virus and its economic consequences had a profound impact on the public accounts in 2020, as was the case in the other leading world economies.

The 2020 Draft Budgetary Plan (DBP) published in October 2019 set a net borrowing target of 2.2 per cent of GDP for 2020.¹ During the year, numerous support

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In line with this objective, the budgetary package approved in December by Parliament implied an increase in the deficit of almost 1 percentage point of GDP, compared with its current legislation value at that time.

measures were required, and the estimates and objectives for the public finances in 2020 were modified on several occasions.

In March last year, Decree Law $9/2020^2$ introduced measures to support the areas first affected by the spread of the virus, financed with resources already available under existing legislation.

In conjunction with the extension of restrictions on travel and economic activities nationwide, and also taking account of the decisions made at European level (see Chapter 2, 'The economy and fiscal policies of the euro area'), the Government obtained Parliament's authorization for a budgetary variance of €20 billion for 2020 and passed two decree laws – Decree Law 18/2020 ('Cure Italy' decree)³ and Decree Law 23/2020 ('Liquidity Decree')⁴ – with the dual objective of enhancing the response capacity of the health system and of providing financial support to households, workers and firms.

In the 2020 DEF⁵ approved by the Council of Ministers at the end of April last year, the net borrowing objective was revised upwards by 8.2 percentage points of GDP, to 10.4 per cent. In addition to the abovementioned decrees, the new target took account of the deterioration of the macroeconomic outlook and a new request for a budgetary variance presented to Parliament, together with the 2020 DEF, for around €55 billion in terms of net borrowing in the same year.⁶ The budgetary space created by this variance was utilized in May in Decree Law 34/2020 ('Relaunch Decree').⁷

After receiving Parliament's authorization for a third budgetary variance of €25 billion, the Government issued Decree Law 104/2020 ('August Decree'),⁸ which for the

⁸ Report by the Bank of Italy prepared for the Fifth Committee (Economic Planning and Budget), 'Draft Law 1925, converting into law Decree Law 104/2020, containing urgent measures to support and relaunch the economy', Senate of the Republic, Rome, 7 September 2020 (only in Italian).

² Report by the Bank of Italy prepared for the Budget Committee, 'Draft law A.S. 1746, converted into law by Decree Law 9/2020, containing urgent measures to support households, workers and firms in connection with the COVID-19 epidemiological emergency', Senate of the Republic, Rome, 10 March 2020 (only in Italian).

³ Report by the Bank of Italy prepared for the Fifth Committee (Economic Planning and Budget), 'Draft Law A.S. 1766, converted into law by Decree Law 18/2020, containing measures to strengthen the national health service and to provide economic support to households, workers and firms in connection with the COVID-19 epidemiological emergency', Senate of the Republic, Rome, 25 March 2020 (only in Italian).

⁴ 'Conversion into law of Decree Law 23/2020 (containing urgent measures concerning access to credit and tax obligations for firms, special powers in strategic sectors, health and labour measures, and the extension of administrative and procedural deadlines', testimony by F. Balassone, Head of the Bank of Italy's Structural Economic Analysis Directorate, before the Chamber of Deputies, Rome, 27 April 2020 (only in Italian). While it did contain significant measures to support corporate liquidity, the provision had no impact on official assessments of the deficit.

⁵ 'Preliminary hearing on the 2020 Economic and Financial Document', testimony by E. Gaiotti, Head of the Bank of Italy's Economics, Statistics and Research Directorate General, before the Chamber of Deputies, Rome, 29 April 2020 (only in Italian).

⁶ The 2020 DEF estimated that GDP would contract by 8 per cent in real terms last year, compared with the slight expansion of 0.6 per cent envisaged in the 2020 DBP.

⁷ Report by the Bank of Italy prepared for the Fifth Committee (Budget, Treasury and Planning), 'AC 2500, Conversion into law of Decree Law 34/2020, containing urgent measures concerning health, support for employment and the economy, as well as social policies, in connection with the COVID-19 epidemiological emergency', Chamber of Deputies, Rome, 8 June 2020 (only in Italian). The decree also included measures with a permanent impact on the public accounts, principally the cancellation of the safeguard clauses on indirect taxes.

most part strengthened and extended the measures included in the previous decrees, increasing estimated net borrowing for 2020 by an amount equal to the requested variance.

In early October, in the Update to the 2020 Economic and Financial Document,⁹ and in light of a more favourable trend in the public finances than had been anticipated in the spring,¹⁰ the net borrowing target was only marginally raised compared with the objective indicated in April's DEF (to 10.8 per cent of GDP), and notwithstanding the effects of the 'August Decree'. In the 2021 DBP, which was released a little later, the estimate was cut to 10.5 per cent.

Since the end of October, in connection with the resurgence of the pandemic, the Government has passed four decree laws (the 'Relief' decrees).¹¹ According to official assessments, in 2020 the decrees cost nearly \in 18 billion in assistance to workers and businesses. Thanks to the improved public finance outlook, a budgetary variance of just \in 8 billion was sufficient to secure the financial coverage of the decrees.

On 20 January 2021, in a letter to the European Commission,¹² the Government raised the borrowing estimate for 2020 to 10.8 per cent of GDP, as indicated in the Update to the DEF. At the end of the year, the accounts had performed better than in the official forecasts, mainly due to greater-than-anticipated revenues and the degree of prudence exercised when estimating the cost of the support measures. In 2020, general government net borrowing came to 9.5 per cent of GDP, from 1.6 per cent in 2019 (Figure 11.1 and Table 11.1). The deterioration reflected that of the primary balance (which went from a surplus of 1.8 per cent of GDP to a deficit of 6 per cent).

Large increases in deficits were observed in most of the advanced economies. Given the increase of almost 8 percentage points of GDP recorded in Italy, according to the latest estimates by the European Commission, growth was 10.3 percentage points in Japan, 10 percentage points in the United Kingdom, 9.5 in the United States, 8.1 in Spain, 6.2 in France and 5.7 in Germany (see also Chapter 1, 'The global economic situation, economic policies and world trade').

⁹ 'Preliminary hearing on the Update to the 2020 Economic and Financial Document', testimony by E. Gaiotti, Head of the Bank of Italy's Economics, Statistics and Research Directorate General, before the Chamber of Deputies, Rome, 12 October 2020 (only in Italian).

¹⁰ The government estimated that the impact on the deficit of the better-than-expected performance of the public finances was around 1.3 percentage points.

Decree Laws 137/2020, 149/2020, 154/2020 and 157/2020; the last three were incorporated into the first when converted into Law 176/2020. See the Report by the Bank of Italy prepared for the Fifth (Budget, Treasury and Planning) and Sixth (Finance and Treasury) Committees meeting in joint session, 'Draft Law 1994, converting into law Decree Law 137/2020, containing additional urgent measures to protect public health, to support workers and businesses, and on justice and security, in connection with the COVID-19 epidemiological emergency', Senate of the Republic, Rome, 10 November 2020 (only in Italian).

¹² In which the Government gave notice of its intention to request that Parliament authorize an increase of €32 billion in the deficit for 2021 compared with the figure indicated in the Update to the DEF (see on the website of the Ministry of Economy and Finance, 'New COVID-19 emergency measures. Letter from Minister Gualtieri to Dombrovskis and Gentiloni', 21 January 2021); only in Italian.

Figure 11.1



Table 11.1

Consolidated accounts of general government (1) (billions of euros and per cent of GDP)							
	2015	2016	2017	2018	2019	2020	
Current revenue	781.4	784.4	797.9	814.2	838.8	785.3	
of which: social contributions	219.1	220.6	225.6	234.5	242.2	228.6	
direct taxes	242.6	247.6	250.3	248.6	258.1	252.6	
indirect taxes	246.6	242.5	248.5	254.4	257.8	228.9	
Capital revenue	9.3	7.1	6.9	4.3	4.3	4.0	
Tax burden	42.9	42.2	41.8	41.7	42.4	43.1	
Total revenue	790.7	791.5	804.8	818.5	843.1	789.4	
per cent of GDP	47.8	46.7	46.3	46.2	47.1	47.8	
Current primary expenditure	697.5	710.3	714.6	733.9	748.6	798.6	
Interest payments	68.1	66.4	65.5	64.6	60.4	57.3	
Capital account expenditure (2)	67.3	55.6	66.8	58.6	62.0	90.3	
of which: gross fixed investment	39.8	39.0	38.3	37.8	41.4	44.2	
Total expenditure	832.9	832.3	846.8	857.2	871.0	946.2	
per cent of GDP	50.3	49.1	48.8	48.4	48.6	57.3	
Primary balance	25.8	25.6	23.5	26.0	32.5	-99.6	
per cent of GDP	1.6	1.5	1.4	1.5	1.8	-6.0	
Net borrowing	42.2	40.8	42.0	38.6	27.9	156.9	
per cent of GDP	2.6	2.4	2.4	2.2	1.6	9.5	

Source: Istat. (1) Rounding of decimal points may cause discrepancies in totals. (2) This item includes (with a negative sign) the proceeds from sales of non-financial assets.

Summary of the discretionary measures adopted during the year. – The budgetary variances approved by Parliament for 2020 amount to around €108 billion (equal to 6.5 percentage points of GDP). Based on the official ex ante evaluations of the decree laws that utilize the funds made available as a result, around half of the resources are estimated to have been allocated to measures in favour of firms and one third to direct support for households and workers; transfers to local authorities, the health system, education and security, account for the remainder (Table 11.2). Among the measures for firms, the most important in financial terms were the non-repayable grants to VAT holders and to specific sectors hit by the emergency (€14.4 billion), the deferral of some tax payments (€14.9 billion)¹³ and the extension of public guarantees¹⁴ (approximately €8 billion). Much of the support for workers came in the form of wage supplementation for both the self-employed and employees (€27.8 billion).

The budgetary impact of some of the support measures was softer than envisaged in initial conservative estimates, as in the case of firms' effective recourse to the wage supplementation scheme (CIG).

Based on the assessments of the European Commission, the deterioration in the cyclically-adjusted primary surplus – a measure of the fiscal policy stance – amounted to 2.8 percentage points of GDP in 2020. However, this measure is susceptible to possible distortions, especially in the current situation.

In assessing the impulse imparted by the public finances to economic activity, it is well to remember that, due to the accounting rules agreed at European level, while some measures did not raise the deficit in 2020, they did help to support economic activity: these included the deferral to subsequent years of the deadlines for some tax and social security payments, and non-standard guarantees in favour of firms.

Most of the measures are temporary and their effects on the public accounts are limited to 2020. However, taken together, the decree laws approved also determine an increase in net borrowing in 2021 (\in 31.4 billion), 2022 (\in 35.5 billion) and in subsequent years, mainly due to the decision to definitively cancel the increases in indirect taxation provided for in the so-called safeguard clauses.

Italy's fiscal policy response to the current recession has been significantly more expansive than the one it had to the global financial crisis. In 2009, despite a contraction of 5.3 per cent in GDP, borrowing expanded by 2.6 percentage points of GDP and the cyclically-adjusted primary balance worsened by only 0.3 percentage points.

¹³ Resulting in lower cash revenue (meaning there will be higher revenue in subsequent years). Based on the principle of competence agreed at European level, Istat, on the other hand, accounts for a portion of these revenue streams in 2020.

¹⁴ The measures include the strengthening of the Central Guarantee Fund for small and medium-sized enterprises and the establishment of a new line of public guarantees mostly aimed at large companies and managed by Italy's credit export agency, SACE S.p.A. The same measures also include an extraordinary moratorium on revocable and expiring loans, and the suspension of mortgage and lease payments.

Table 11.2

Anticipated impact on the general government's profit and loss account of the (millions of euros)	ne emerç	gency d	ecrees
	2020	2021	2022
USE OF FUNDS Higher expenditure (A=A1+A2+A3+A4+A5)	118,664 92,685 35.071	35,609 25,280 2 346	37,193 10,245 484
Wage supplementation (CIG) and other social safety net schemes for payroll employees (net impact) Allowances for the self-employed or those employed in specific sectors (net impact)	18,737 9.014	1,241 162	2 79
Parental leave, baby-sitting vouchers, extension of the benefits granted pursuant to Law 104/1992 and bonuses for payroll employees Emergency and last-resort income support and compensation for domestic workers (net	3,406	39	0
impact) Other measures in favour of households Measures to support firms and economic activity (A2)	1,669 2,245 31,426	0 904 13.479	0 403 1.414
Non-repayable grants to the self-employed and to specific sectors (net impact) (1) Provisions for guarantees issued in favour of firms Tax credits for rental payments, sanitization, holidays and property renovations Transformation of DTAs into tax credits Support for the recapitalization of SMEs Equilization fund for fiscal and support measures approved between March and	14,419 8,044 3,734 1,058 10	1,084 0 2,932 0 2,005	25 0 1,357 0 5
November (2) Other measures to support firms (net impact) Resources for local government entities and schools and universities (A3)	0 4,161 14,316	5,300 2,158 4,247	0 26 2,600
Fund for essential functions and other measures in favour of municipalities (net impact) Fund for the functioning of the regions and provinces and other measures (net impact) Support to schools and universities Contributions in favour of the local public transport sector	6,418 5,033 1,846 1,020	1,261 775 1,742 470	1,310 550 661 80
Measures to support the public health system (A4) Fund for national emergencies and other measures (net impact) Reorganization and strengthening of the public health system Other (A5)	9,346 4,148 5,198 2,525	1,235 604 630 3,973	1,661 1,660 4.087
Interest expense stemming from higher net issues of government debt securities Other	591 1,934	2,211 1,763	3,055 1,032
Lower revenue (B=B1+B2)	-25,980	-10,329	-26,948
Measures to support firms and economic activity (B2)	-25.980	9.492	-20,735
Restructuring and deferral of some tax payments (2) Cancellation of payment of the IRAP balance for FY 2019 and of the first instalment of the advance payment for 2020	-14,929	13,123	1,739
Social security contribution relief to support employment Suspension of payments and increase in the annual ceiling of credits that can be offset against taxes or reimbursed	-3,059	-1,606	-3
Exemption from property tax (IMU) and tax on occupation of public space (TOSAP) Deferral of entry into force of various taxes (net impact) Reduction of VAT rate on actionant for tracting and cuproceing the virus	-863 - 519	-113 - 45	-30 72
Tax credits for holidays and property renovations (net impact) Other (net impact)	-237 -23 -472	-1,322 -434	-1,321 -354
SOURCES OF FUNDS Increased revenue (C)	10,518 2,280	4,255 2,164	1,735 645
security contribution relief) Other (net impact) Lower expenditure (D)	1,515 765 -8,238	1,222 943 -2,090	584 61 -1,091
Savings included in the policy scenario of the 2021 DBP (3) Lower utilization of the budgetary funds (net impact) Incentives for the use of electronic payment devices (net impact) Other	-5,417 -726 2	0 -3 -1,250	0 -429 0
Change in net revenue (E=B+C) Change in net expenditure (F=A+D) Change in net borrowing (G=F-E) per cent of GDP (4)	-2,098 -23,700 84,446 108,146 6.5	-837 -8,165 23,190 31,355 <i>1.8</i>	-662 -26,303 9,155 35,458 1.9

Based on official documents pertaining to Laws 27/2020, 40/2020, 77/2020, 126/2020 and 176/2020, converting Decree Laws 18/2020, 23/2020, 34/2020, 104/2020 and 137/2020. (1) Takes account of the use of resources of the reserve fund provided for by Law 176/2020 (for the management of costs stemming from the possible change of risk category of the Regions) to cover non-repayable grants in favour of the food service sector provided for by Decree Law 172/2020, converted into Law 6/2021. – (2) The tax payments owed in 2020 and deferred to subsequent years (mostly to 2021) are recorded on a cash basis (leading to lower revenue in 2020 and greater revenue in subsequent years). Conversely, based on the statistical rules agreed at European level, Istat recorded these streams of revenue on an accrual basis at the end of 2020. – (3) In official assessments, these savings are not included among lower expenditure but they are actually used to cover the measures envisaged under the decrees. – (4) Nominal planned GDP as reported in the 2021 DEF.

Revenue. – In 2020, total revenue fell by 6.4 per cent (from \in 843.1 billion to \in 789.4 billion; Table 11.1), primarily owing to the contraction in nominal GDP (-7.8 per cent). In the course of the year, a number of tax deadlines were deferred; in line with ESA 2010 accounting standards, Istat nevertheless entered in the accrual accounts for 2020 a portion of the amounts affected by the deferrals.¹⁵

About 80 per cent of the decrease in revenue was due to lower income from indirect taxes (- \in 28.9 billion; -11.2 per cent), a trend broadly in line with the fall in household consumption (see Chapter 5, 'Households') and social security contributions (- \in 13.6 billion or -5.6 per cent; see Chapter 9, 'Prices and costs').

Among indirect taxes, in addition to VAT revenues (- \in 12 billion; -10.8 per cent), excise duties on mineral oils also contracted (- \notin 4.5 billion; -17.2 per cent), as did the regional tax on productive activities (IRAP; - \notin 4.1 billion or -16.9 per cent) and lottery and gaming receipts (- \notin 3.3 billion; -30.7 per cent). The decline in IRAP was affected by the cancellation of the payment of the balance due for 2019 and the first down payment for 2020 for firms and self-employed workers with revenue of below \notin 250 million, financed under the 'Relaunch Decree' (\notin 4 billion).

There was a smaller drop in direct taxes (- \in 5.5 billion; -2.1 per cent), partly following the introduction of payment mechanisms, which limit the effects of reducing the taxable income on the advance paid in the same year. Personal income tax (IRPEF) fell by 2.2 per cent, corporate tax receipts (IRES) by 1.0 per cent.

Expenditure. – Last year, general government expenditure rose by 8.6 per cent (from \in 871.0 billion to \notin 946.2 billion). This is a very sizeable expansion: in 2019, it had risen by 1.6 per cent; in the previous decade, the average annual growth rate had been 0.8 per cent.

The expansion in primary expenditure was more marked (9.7 per cent), but this was partially offset by the fall in interest payments (-5 per cent; compared with the previous high registered in 2012, interest expense is currently lower by about one third). The reduction in taxes on issuance of government securities in the second half of the year contributed to the fall in the average cost of the public debt (2.4 per cent, against 2.5 per cent in 2019).

Current primary expenditure (6.7 per cent) was mostly affected by the increase in social benefits in cash (10.6 per cent). In particular, the non-pension component rose by almost 50 per cent, mainly due to wage supplementation (which went from under $\notin 0.8$ billion in 2019 to $\notin 14.5$ billion; see Chapter 8,

¹⁵ The 'Cure Italy', 'Liquidity' and 'Relaunch' decrees rescheduled the deadlines for all tax and social security obligations. Further specific postponements were approved for payments of withholdings on the labour income of employees and equivalent workers, pension and social security contributions, VAT, compulsory insurance premiums for firms and withholding taxes for self-employed workers who meet the requirements on turnover, production sector and location. The measures provided for payments to be made in any event by the end of 2020. The 'August Decree' further extended the deadlines for VAT and withholding taxes, allowing up to 50 per cent of the payments to be made in a maximum of 24 monthly instalments beginning, at the latest, in January 2021 and without incurring penalties or accruing interest.

'The labour market' and the box 'The impact on inequality of the COVID-19 crisis and of the income support measures in the first half of 2020', Chapter 5) and to the temporary measures to combat poverty introduced during the year (non-pension welfare benefits went from \notin 20 billion to \notin 34.6 billion; see Chapter 5, 'Households').

Pension expenditure expanded at a similar pace to that in 2019 (2.4 per cent; after the 2011 reform and until 2018, the average annual rate of growth was 1.4 per cent).

Current health expenditure increased by 6.7 per cent in 2020, due to the additional resources allocated in the course of the year (estimated at around $\notin 9.3$ billion in official ex ante evaluations and mostly used to boost spending on hospital staff and beds). The increase in 2020 follows a decade of anaemic growth (averaging 0.6 per cent per year between 2010 and 2019), after the very pronounced expansion recorded in the previous decade overall (annual growth of 6.2 per cent). Last year, all the main expenditure components increased: benefits in kind purchased on the market (3 per cent), labour income (1.4 per cent) and above all intermediate consumption (12.7 per cent). Expenditure on hospital care, which has stagnated in nominal terms since 2009, increased sharply by 8.9 per cent. Based on the latest data available for international comparison (referring to 2019), Italy's public health expenditure as a share of GDP was 0.4 percentage points lower than the average for the other euro-area countries.

More than one third of the increase in primary expenditure is attributable to capital account expenditure. The main contributory factors were the nonrepayable transfers to firms provided for by the emergency measures and provisions against the 'standard' state guarantees issued during 2020 (see the boxes 'Financial support measures and credit to firms during the pandemic', Chapter 7, and 'Public guarantees and the growth in lending to firms', Chapter 13). Gross fixed investment – calculated gross of property disposals – increased by 5.9 per cent, compared with 8.7 per cent in 2019. On the infrastructure endowment throughout Italy, see the box 'Territorial gaps in infrastructure endowment'.

TERRITORIAL GAPS IN INFRASTRUCTURE ENDOWMENT

The resources spent by the general government on the accumulation of infrastructure capital, measured by the sum of gross fixed capital investment and capital contributions to enterprises, fell from an average of 4.1 per cent of GDP in the ten years from 2001 to 2010, to 3.0 per cent in the decade from 2011 to 2020. Strengthening infrastructure capital is among the economic policy priorities of the Next Generation EU (NGEU) recovery plan, adopted in response to the pandemic crisis.

The effectiveness of this action presupposes the possibility of adequately measuring local infrastructure endowments. A reliable measurement of infrastructure must take account of the variety of capital goods classified as such, along with their quality and specific function. Compared to the synthetic indicators generally used, this, more detailed approach confirms the very pronounced differences between the different areas of Italy, with the South and Islands at a disadvantage in most cases.¹

For road and rail transport networks, the speed of territorial links is taken into account. For each labour market area² (*sistema locale del lavoro* or SLL), average connection times with other SLLs for certain distances can indicate how transport infrastructure changes accessibility at the national level.³ Based on this metric, the infrastructure provision is greater for SLLs in the North East for both road and rail transport; Calabria and the inland Apennines instead appear to be disadvantaged, owing to the distance from the main motorways and high-speed railway junctions.⁴

For air and sea links, ease of access to the major freight or passenger hubs are measured based on road travel times. For airports, accessibility is better in the SSLs in the Po Valley and gradually worsens as one proceeds southward. The deterioration is more marked for freight transport alone (see panels (a) and (b) of the figure).

For telecommunications, the availability of the 100 Mbps internet service and mobile broadband is concentrated in large urban areas; coverage around the Apennines is particularly limited (see figures (c) and (d) of the panel).⁵

For the distribution of electricity, the parameter considered is service continuity. The number of temporary power outages per user is greater around the Apennines of central Italy and in the South and Islands especially; in these regions, the annual frequency of interruptions for each low-voltage user is equal to 14.3 (5.1 in the Centre and North) and one third of the medium-voltage users – mainly medium-large production plants – receive a service that is below the standards set by the Italian Regulatory Authority for Energy, Networks and Environment (ARERA), compared with 7 per cent in the rest of the country.

With regard to the water supply network an efficiency indicator is used, given by the share of water pumped into the distribution networks that is actually available to end users. The highest values, above 70 per cent, are found in the

M. Bucci, E. Gennari, G. Ivaldi, G. Messina and L. Moller, 'Infrastructure gaps in Italy: a case-by-case measurement', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), only in Italian; see the box 'Territorial gaps in transport infrastructure endowment' in Regional Economies, Economic Developments in the Italian Regions', Banca d'Italia, Regional Economies, 22, 2019, only in Italian.

² The SLL delineates the territorial perimeter within which the social and economic relations of the resident population in a given area are concentrated; it is defined by Istat using commute flows detected by general censuses (there are currently 611 SLLs).

³ The indicator is obtained by the difference between two measures of accessibility based on the population: in the first, the population is weighted by a decreasing function of the distances from all destinations and in the second by a decreasing function of the travel times to the same destinations; both are normalized for their respective average value. The distance is the shortest possible one.

⁴ The Islands, and especially Sardinia, are also disadvantaged, for which the most appropriate measures of connections are to port and airport links.

⁵ The indices show the supply of the service but not its actual use, which also depends on the heterogeneity of demand.



Sources: Based on data from Openroute service (2019), Assaeroporti (2018), Agcom (2019) and Istat (2018). (1) The indicator is calculated as the weighted average of the goods traffic of airports (a) and ports (b) of strategic or national importance, each weighted by a decreasing function of the distance by road from the nearest SLL. The thresholds of the colour scale correspond to quartiles. – (2) Ratio of the number of households that can access a 100 Mbps network to the number of households in the SLL. – (3) Percentage of 4G coverage throughout Italy.

northern regions and in some central areas. In some areas of the South and Islands, the share of water available is as much as 50 per cent less than the amount put in, making rationing necessary in some cases.



To measure the accessibility of hospitals and waste disposal facilities, the time it takes to reach them from each SLL is considered. As regards hospitals, the longest travel times are in Calabria, Sicily and Sardinia; the shortest in the Centre and especially the North. The central and northern regions have a significant advantage in accessibility of waste treatment infrastructures, which is particularly marked in the case of differentiated waste.

The public debt: objectives and outturns. – In October 2019, the 2020 DBP set a target of overall stability for the debt-to-GDP ratio. Following the pandemic crisis and the budgetary measures taken to mitigate its impact, the actual trend in 2020 was profoundly different. The 2020 DEF already envisaged that debt would rise by almost 21 percentage points in proportion to GDP, to 155.7 per cent; October's Update to the same document brought the objective to 158.0 per cent. In his letter to the European Commission in January 2021, the Minister for the Economy and Finance revised this estimate slightly downwards (to 157.0 per cent). At the end of the year, the debt-to-GDP ratio was 155.8 per cent.¹⁶

The pandemic also had a strong impact on the debt of the other major advanced economies (see Chapter 1, 'The global economic situation, economic policies and world trade'); according to data from the European Commission, the increase in the debt-to-GDP ratio automatically determined by the reduction in the denominator only, was around 10.5 percentage points in Spain, 9.6 in Japan, 6.3 in France, 4.3 in the United Kingdom, 2.6 in the United States and 2.1 in Germany.

Both the primary deficit (Figure 11.2) and the ample gap between the average cost of the debt (2.4 per cent; Figure 11.3) and nominal GDP growth (-7.8 per cent) contributed to the expansion of general government debt in 2020.



¹⁶ The extension of the general government perimeter, as defined by Istat in agreement with Eurostat, also contributed (by 0.2 percentage points) to the increase of 21.2 percentage points compared with 2019.

Figure 11.3

The expansion of the debt ($\in 163.4$ billion) outstripped the increase in net borrowing, reflecting above all the rise in the Treasury's liquid balance (€9.6 billion) and the postponement of some tax deadlines (which, as mentioned above. due to the accounting rules only partially affected net borrowing); how State guarantees are accounted for (provisions made against the potential enforcement of 'standard' guarantees that lead to higher net borrowing but do not increase the debt), had the opposite effect.

The share of the public debt held by the Bank of Italy rose to 21.6 per cent, from 16.8 per cent in 2019, reflecting net purchases of securities under the asset purchase programme (APP) and the pandemic emergency



Source: Istat, for interest expense.

(1) Ratio of interest expense in the previous four quarters to the stock of the debt at the end of the corresponding year-earlier quarter. -(2) The yield at issue is calculated as the weighted average, based on the amounts allotted, of the compound allotment rates at the auctions settled during the month. -(3) Average monthly yield at maturity of the benchmark security traded on the online government securities market. -(4) Right-hand scale.

purchase programme (PEPP); see the section, 'The money market and the public sector securities market', Chapter 14.¹⁷

The share held by non-residents fell from 31.9 to 29.8 per cent. The average residual maturity of the debt remained virtually unchanged, at around 7.4 years (compared with 7.3 years at the end of 2019). Since October 2020, Italy has begun to receive the loans granted by the EU under its instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE), totalling $\in 16.5$ billion at the end of the year (see Chapter 2, 'The economy and fiscal policies of the euro area'). These loans have an average maturity of about 16 years and an average interest rate that is almost 1 percentage point lower compared with Italian government securities of equal maturity.

Some general government liabilities are not included in the definition of public debt that complies with European rules (so-called Maastricht debt). These include a portion of the commercial debts (which at the end of 2020 were estimated at \notin 47 billion, compared with \notin 44 billion in 2019)¹⁸ and some liabilities in derivatives

¹⁷ In contrast to Chapter 14, 'The money and financial markets', the shares shown here are calculated with reference to the face value (and not the market value) and to the total amount of the debt (and not just the bond component).

¹⁸ The estimate reflects data on outstanding claims in the balance sheets of firms collected in sample surveys carried out by the Bank of Italy, which comprise VAT and may also include loans in litigation. Also taking into account the trade liabilities sold without recourse to creditors, as recorded in the supervisory reports and already included in the Maastricht debt, in 2020 general government commercial debt amounted to around €58 billion (€54 billion in 2019). For details on the methodology, see L. D'Aurizio, D. Depalo, S. Momigliano and E. Vadalà, 'Trade debts of Italian general government: an unsolved problem', *Politica economica*, 3, 2015, pp. 421-458.

(\notin 29.7 billion, up by \notin 2.7 billion from 2019, mainly due to lower interest rates, while their notional value rose only marginally).¹⁹

Finally, the public debt excludes contingent liabilities related to guarantees issued in favour of non-general government entities. The stock of these guarantees almost tripled in 2020, rising from 4.8 to 13.1 per cent of GDP (from \in 86 billion to \in 216 billion). Their actual impact on the debt – which could eventually be significant, though spread over several financial years – will depend on default rates; in the two years 2012-13 the latter were close to 10 per cent.

The public finances in 2021 and the medium-term prospects

The budgetary session. – Last October's 2021 DBP envisaged a gradual reduction of the deficit: to 7 per cent of GDP in 2021, to 4.7 per cent in 2022, and to 3 per cent in 2023. In line with these objectives, the budget approved by Parliament at the end of December²⁰ raised the deficit with respect to the current legislation levels by 1.4 per cent of GDP in 2021, and by 0.6 points in 2022; it reduced it by 0.2 per cent in 2023.

However, the extent – and accordingly the macroeconomic impact – of the expansionary measures was significantly greater than the change in net borrowing might suggest. In the official estimates, partial coverage of the measures (equal to $\notin 9.5$ billion in 2021, $\notin 10.4$ billion in 2022 and $\notin 8.9$ billion in 2023) was in fact provided by the European subsidies to be disbursed under Next Generation EU (NGEU; see Chapter 2, 'The economy and fiscal policies of the euro area') and the greater revenue from the economic growth driven by the budget itself ($\notin 12.9$ billion and $\notin 20.5$ billion in 2022 and $\notin 33$ billion in 2023 (almost three quarters of which are accounted for by expenditure increases in the three years on average).

The main expansionary measures introduced by the budgetary package are: (a) the extension of social security contribution relief for firms operating in the South and Islands; (b) the extension and strengthening of incentives for private investment; (c) the allocation of additional resources for the introduction of a single and universal child allowance, and the launch of the tax reform. Moreover, some of the measures introduced in the course of 2020, such as those to support the liquidity of firms, have been extended owing to the ongoing emergency.

¹⁹ The European statistical rules provide that, for accounting purposes, any loan component in derivative contracts be included in the public debt.

²⁰ 'Preliminary hearing on the 2021 Economic and Financial Document', testimony by E. Gaiotti, Director General for Economics, Statistics and Research, before the Senate of the Republic, Rome, 24 November 2020 (only in Italian).

The measures approved in the early part of the year. – In light of the worsening epidemiological situation in early 2021, the Government issued a decree law²¹ in March (the 'Support Decree') containing further emergency measures. According to official assessments, the measures raise general government net borrowing for this year by almost \in 32 billion (1.8 per cent of GDP); the impact on net borrowing is expected to be nil in the subsequent years.

More than half of the resources (almost $\notin 18$ billion) are allocated to support firms, mainly through the distribution of non-repayable grants to holders of VAT numbers. A little more than $\notin 6$ billion have instead been allocated to measures for workers and households, including the extension of the ordinary and under-waiver wage supplementation schemes (CIG and CIG *in deroga*) and the strengthening of measures to combat poverty. More than $\notin 5$ billion are directly linked to the health emergency, especially the management of the vaccination campaign. The bulk of the remaining $\notin 3$ billion are for local government authorities and education and research.

In May, Decree Law 59/2021 established a National Fund managed under the NRRP and increased the resources of the Development and Cohesion Fund and for high-speed resources. In the same month, a new decree law ('Support-*bis*') introduced, among other things, non-repayable grants for the workers and firms hit hardest by the emergency. In order to permit net borrowing to be raised by the two decrees, in mid-April Parliament had approved a budgetary variance of \notin 40 billion for 2021, and of around \notin 6 billion on average per year for the period 2022-33.

The DEF and the NRRP. – In April, with the 2021 DEF, the Government updated its estimates and targets for the current year and for the following three years (Table 11.3).²² In the policy scenario outlined in the document, net borrowing is set to reach 11.8 per cent of GDP in 2021, and to then gradually come down in subsequent years (to 3.4 per cent in 2024). Compared with the new current legislation scenario (which incorporates the impact of the budgetary law), planned net borrowing is 2.3 points higher in 2021 and 0.5 points higher on average in the two years 2022-23; the two values coincide in 2024. In addition to the effects of the 'Support-*bis*' decree issued in May, the differences between the two scenarios are attributable to the refinancing of the measures envisaged under unchanged policies, to be enacted by the 2022 Budget Law, and to the redrafting of the NRRP with respect to the version presented in January by the previous Government.

²¹ Decree Law 41/2021, converted by Law 61/2021. Report by the Bank of Italy prepared for the Fifth (Budget, Treasury and Planning) and Sixth (Finance and Treasury) Committees meeting in joint session, 'Draft Law 2144, converting into law Decree Law 41/2021 containing urgent measures to support firms and economic operators, employment, health and local government services, in connection with the COVID-19 epidemiological emergency', Senate of the Republic, Rome, 8 April 2021 (only in Italian). As provided for under national legislation, in January 2021 the Government had requested and obtained authorization from Parliament to increase this year's deficit compared with the one projected in the Update to the 2020 DEF.

²² 'Preliminary hearing on the 2021 Economic and Financial Document', testimony by E. Gaiotti, Director General for Economics, Statistics and Research, before the Senate of the Republic, Rome, 20 April 2021 (only in Italian).

Table 11.3

The public accounts outlook in the latest official documents (per cent of GDP)														
	Updat po	Update to the 2020 DEF policy scenario				2021 DEF current legislation scenario				2021 DEF policy scenario				
	2020	2021	2022	2023	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Net borrowing	10.8 (1)	7.0	4.7	3.0	9.5	9.5	5.4	3.7	3.4	9.5	11.8	5.9	4.3	3.4
Primary surplus	-7.3 (1)	-3.7	-1.6	0.1	-6.0	-6.2	-2.5	-0.8	-0.8	-6.0	-8.5	-3.0	-1.5	-0.8
Interest expense	3.5	3.3	3.1	3.1	3.5	3.3	3.0	2.8	2.6	3.5	3.3	3.0	2.8	2.6
Debt	158.0	155.6	153.4	151.5	155.8	157.8	154.7	153.1	150.9	155.8	159.8	156.3	155.0	152.7
GDP growth	-9.0	6.0	3.8	2.5	-8.9	4.1	4.3	2.5	2.0	-8.9	4.5	4.8	2.6	1.8
(1) In the 2021 DBP, net borrowing and the primary surplus were revised to 10.5 and -7.0 per cent respectively.														

The main risks to these forecasts are those relating to economic developments, linked above all to the course of the pandemic.

In the Government's plans, the debt-to-GDP ratio is expected to increase by around 4 percentage points in 2021, reaching 159.8 per cent (around 4.2 points above the level forecast by October's Update to the 2020 DEF). Notwithstanding what are still significant primary deficits, it is expected to fall from 2022 onwards, mostly as a result of the negative differential between the average cost of the debt and nominal GDP growth (estimated at around -2.5 per cent on average in the three years 2022-24) due to the anticipated continuation of accommodative financial conditions and a return to growth. In the ten years prior to the outbreak of the health crisis, this differential had contributed to the growth of the debt burden and was always negative, by around 2 points on average.

Unlike what happened in the years before the pandemic, the primary balance is expected to run a deficit for the next four years, from -8.5 per cent of GDP in 2021 to -0.8 per cent in 2024 (with the exception of 2009, Italy has recorded primary surpluses without interruption since 1992). The gradual reabsorption of the primary deficit should be facilitated by the relatively high real growth rates expected during that period (4.5 per cent in 2021, 4.8 in 2022, 2.6 in 2023 and 1.8 in 2024). Interest expenditure should gradually fall in relation to GDP (from 3.3 per cent in 2021 to 2.6 per cent in 2024).

For the years after 2024, the 2021 DEF plans to bring the debt-to-GDP ratio back toward pre-crisis levels (134.6 per cent in 2019) by the end of the current decade. The document contains a number of simulations that show how reaching this objective will depend on the ability of economic policy to ensure a return to higher growth in the years to come and a sufficient improvement in the primary balance when macroeconomic conditions permit it.

The NRRP, recently submitted to the European Commission, sets out an extraordinary economic recovery plan, amounting to over €235 billion (see the box 'The National Recovery and Resilience Plan', Chapter 4); of these, almost €123 billion

in loans and about €69 billion in grants would be disbursed through the Recovery and Resilience Facility. Further grants are envisaged under the other programmes included in Next Generation EU, while an additional €30.6 billion would be borne by the national public budget, under the National Fund specifically established by the May 2021 Decree. According to the Government, roughly 70 per cent of these funds (around €166 billion) are for new projects.

12. BUSINESS ACTIVITY REGULATION AND THE INSTITUTIONAL ENVIRONMENT

Since the early 1990s, competition in Italy's markets for goods and services has increased, helping to support productivity and economic activity. However, the liberalization process of regulated sectors has slowed in recent years, also owing to the crisis connected with the COVID-19 epidemic. The NRRP envisages the adoption, over the next five years, of a package of measures to open up these sectors to competition (see the box 'The National Recovery and Resilience Plan', Chapter 4).

The support measures and the moratoriums on bankruptcy proceedings have contributed to keeping down the number of bankruptcies that have occurred due to the repercussions of the health emergency (see Chapter 6, 'Firms'). However, it is likely that bankcruptcies will increase in the near future; the extent of this will depend on the economic recovery. This scenario could exacerbate the problems facing the business crises management system – already characterized by lengthy procedures and limited recourse to restructuring tools by smaller firms – and thereby hinder the reallocation of production factors.

The partial interruption in the activity of the courts during the spring of last year slowed the improvement of the functioning of the civil justice system begun in recent years. The NRRP envisages organizational reform and a simplification of procedures in order to speed up judicial proceedings, as well as an expansion of alternative dispute resolution schemes.

The pandemic emergency has also highlighted that the public administration is lagging behind in the adoption of digital technologies. The NRRP has allocated about €7.5 billion to this area for the creation of digital infrastructures and for upgrading employees' skills through targeted recruitment and investment in training; it also envisages measures to streamline and simplify administrative procedures and to reform career paths.

Competition and market regulation

Competition. – Unlike in the United States, where the market power of the Big Tech companies has increased significantly over the last two decades, in the main European economies the degree of competition in the goods and services markets has remained virtually unchanged (Figure 12.1.a). In Italy, mainly as a result of the liberalization measures implemented since the late 1990s, there has been a gradual reduction in market power in regulated services, particularly in the retail trade and in professional activities (Figure 12.1.b). The decline has also affected the information and communication technology (ICT) sector, although its markups remain higher due to the higher level of investment and innovation.



Source: E. Ciapanna, S. Formai, A. Linarello and G. Rovigatti, 'Measuring market power: macro and micro evidence', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), forthcoming. (1) Lerner's markup, equal to 1/(1-L) where L (the Lerner Index) is calculated as the ratio of gross operating profit (adjusted for the cost of

(1) Lerner's markup, equal to 1/(1-L) where L (the Lerner Index) is calculated as the ratio of gross operating profit (adjusted for the cost of self-employed workers) to turnover. The index equals 1 in the case of perfect competition.

According to our estimates, some of the reforms introduced in recent years with the aim of increasing competition, making the business environment more favourable, and supporting innovation have fostered greater productivity and higher aggregate growth (see the box 'The impact of the reforms on productivity and growth: the evidence for Italy').

THE IMPACT OF THE REFORMS ON PRODUCTIVITY AND GROWTH: THE EVIDENCE FOR ITALY

The reforms that act on the supply side by removing the obstacles to the efficient production of goods and services can help increase productivity and economic growth. These objectives can be pursued, for example, by improving the institutional environment in which businesses operate, making changes to the regulation of the labour market and of products, and by encouraging investment in research and innovation. The European Commission's guidelines on the allocation of funds under the Next Generation EU programme reaffirm the need to adopt reforms that have a significant impact and lasting effects on specific objectives, such as improving institutions, increasing employment, and economic development.

Some indications of the stimulus for growth that these reforms can provide can be inferred from a study of the macroeconomic effects of three major reforms carried out in Italy over the past decade:¹ liberalizations in services markets under Decree Law 201/2011 (the 'Save Italy' decree); the incentives for business innovation included in

E. Ciapanna, S. Mocetti and A. Notarpietro, 'The effects of structural reforms: Evidence from Italy', Banca d'Italia, Temi di discussione (Working Papers), 1303, 2020.

the 'Industry 4.0' national plan that was launched in 2016; and the various measures implemented between 2011 and 2018 to improve the functioning of the civil justice system.

To assess the impact of each reform on the relevant economic variables, several empirical exercises based on business data were carried out. These estimates suggest that since the beginning of the last decade, liberalization measures in the services sector have increased total factor productivity (TFP) by 4.3 per cent and reduced the markup, i.e. the difference between the sales price and the cost of production, by 0.7 percentage points; the incentives for innovation and civil justice reforms appear to have increased the productivity of the economy as a whole by 1.4 per cent and 0.5 per cent respectively.

These parameters were used in a macroeconomic model to simulate the effects of the reforms considered. As a result of the increased productivity and competition observed at the microeconomic level, it is estimated that Italy's GDP was around 5 per cent higher at the end of 2020 than it would have been without the reforms (see panel (a) of the figure); this effect could vary between 3 and 7 per cent given the uncertainty associated with microeconometric estimates. The associated long-term increase in potential output (i.e. the maximum level of output obtainable if all available resources are used) would be 6.3 per cent in the central estimate, ranging between 4 and 8 per cent, if statistical uncertainty is taken into account (see panel (b) of the figure). The effects on the labour market would also be significant: at full capacity, according to the central estimate, employment would be 0.4 per cent higher and the unemployment rate lower by 0.3 percentage points.²



Sources: Based on data from the Bank of Italy's Survey of Industrial and Service Firms, Cerved, Istat, Ministry of Justice and OECD. (1) Percentage deviations from the baseline scenario. – (2) Three scenarios are depicted (lower bound to higher bound), to take account of the uncertainty characterizing the microeconometric estimates.

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The process of opening up markets has slowed down significantly in recent years. In 2020, mainly in response to the need to provide support for firms suffering serious financial difficulties caused by the COVID-19 epidemic, some measures that had already been passed by law had to be postponed, including those relating to local public transport and energy and to some property concessions (hydroelectric and maritime).

The NRRP stipulates that competition laws must be adopted in the next few years to progressively introduce interventions in various sectors: in 2021 the telecommunications networks, with the aim of reducing red tape and stimulating demand; in 2022 in local public services and in the energy production sector; and in subsequent years in motorways and in retail energy sales, with the completion of the transition to the free market system.

Direct intervention on the part of the State. – Among the measures to support the production system adopted during 2020, Decree Law 34/2020 (the 'Relaunch Decree') provided for the creation of a dedicated fund, with the participation of the Ministry of Economy and Finance and managed by Cassa Depositi e Prestiti, with a maximum financial endowment from the State of €44 billion for a period of 12 years. This fund, which is not yet operational, may acquire shareholdings subject to time limits, or underwrite subordinated loans (including mandatorily and optionally convertible ones) in favour of large companies (with a turnover exceeding €50 million). There are about 3,800 companies that meet these size requirements, accounting for 0.6 per cent of Italian non-financial companies; they make 40.5 per cent of revenues and employ 26.8 per cent of employees. Interventions can be carried out in two different ways: in accordance with the arrangements laid down in the temporary framework for State aid (until 31 December 2021; see Chapter 2, 'The economy and fiscal policies of the euro area') or at market conditions.

Important restructuring operations are being carried out in relation to the ownership of the major companies in the motorway and air transport sectors, which will lead to a significant expansion of public ownership in sectors that had previously been privatized.

Business crisis management

Despite the sharp contraction in economic activity, the number of bankruptcies declared by the Italian courts in 2020 was down by about one third compared with the previous year. This was also thanks to both the temporary moratorium on bankruptcy declarations in force between March and June (Figure 12.2) and the economic and financial support measures adopted following the pandemic (see Chapter 7, 'The financial situation of households and firms' and Chapter 8, 'The labour market'). It is estimated that in the absence of these support measures, the number of companies with insufficient capital in December 2020 would have been about 25 per cent higher (Table 12.1).¹

¹ A. De Socio, S. Narizzano, T. Orlando, F. Parlapiano, G. Rodano, E. Sette and G. Viggiano, 'The effects of the COVID-19 shock on corporates' liquidity needs, balance sheets and riskiness', Banca d'Italia, *Note Covid-19*, 13 November 2020.

The weakening of the economic and financial situation of many companies and their difficulty in returning to pre-pandemic activity levels is expected to lead to an increase in business crises in the near future, as the government gradually withdraws its assistance.² This increase will have to be managed within a system that is characterized by lengthy insolvency proceedings and, especially for smaller firms, limited recourse to restructuring instruments. This might produce adverse effects on the reallocation process for the factors of production.

The introduction of some regulatory changes could also be



Source: Based on Ministry of Justice data.

problematic in the current cyclical framework. Most of the provisions of Legislative Decree 14/2019 (the Business Crisis and Insolvency Code), including alert procedures, will enter into force on 1 September 2021.³ It is estimated that when the alert measures are implemented, some 13,000 companies could be involved in such procedures initiated by the corporate supervisory bodies.⁴ The number is about double what would have been observed in the absence of the pandemic crisis. The difficulty of using a new instrument to handle the large number of cases, particularly in the current economic situation of high uncertainty, could undermine its effectiveness.

				Table 12.				
Companies with insufficient capital (1) (thousands of companies and per cent)								
	2020 with no su	pport measures	2020 with supp	ort measures (2)				
	Number	Share (3)	Number	Share (3)				
Firme	100.6	14.1	00.0	11.0				
Firms	102.6	14.1	82.2	11.3				
Workers (4)	1,156.0	12.3	669.5	7.1				

Sources: Based on Cerved, Infocamere and INPS data.

(1) Net assets below the legal requirement. The value of the companies' net assets is estimated at 31 December 2020. – (2) The measures taken into consideration are those contained in Decree Laws 18/2020, 23/2020, 34/2020, 104/2020, 137/2020, 149/2020, 154/2020 and 157/2020. – (3) In relation to the total number of companies active in 2020. (4) The average number of workers in 2019.

² S. Giacomelli, S. Mocetti and G. Rodano, 'Fallimenti d'impresa in epoca Covid', Banca d'Italia, *Note Covid-19*, 27 January 2021 (only in Italian).

³ The entry into force of the Code, initially scheduled for August 2020, was postponed under Decree Law 23/2020. The deadline for transposing Directive EU/2019/1023 on preventive restructuring was extended by one year to July 2022.

⁴ T. Orlando and G. Rodano, 'Firm undercapitalization in Italy: business crisis and survival before and after COVID-19', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 590, 2020.

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The institutional environment

Civil justice. – The gradual improvement in the functioning of civil justice observed in recent years slowed in 2020. Pending court cases fell by only 1 per cent against 2019, compared with an average reduction of 5 per cent per year in the last five years. This development, owing to a larger contraction in the number of resolved cases than in the number of cases initiated (Figure 12.3.a), reflects the partial interruption of the judicial offices' activity in the central months of the first lockdown and its slowdown in the subsequent months (Figure 12.3.b), which was also dictated by difficulties in performing some functions remotely. Organizational factors within the judicial offices may have played an important role: the decline in resolved cases was more pronounced in courts that were less efficient even before the pandemic.



Sources: Based on Ministry of Justice data. (1) With respect to the same quarter in 2019.

Proceedings pending in the courts at the end of 2020 were nearly 2 million, of which about one sixth for over three years. The NRRP aims to reduce the backlog and speed up proceedings, according to predefined quantitative targets. On the organizational front, in addition to completing the digitalization of the justice system, it is planned to significantly expand the human resources in order to provide greater support to the work of the judges through the creation of 'Ufficio del processo' (administrative offices). At the regulatory level, the Plan proposes measures to facilitate the use of alternative dispute resolution tools and amendments to the Code of Civil Procedure aimed at speeding up proceedings.

General government. – In comparison with the other countries of the European Union, Italy is below the average both in the provision of digital public services – measured by the Digital Economy and Society Index (DESI) – and in the percentage of civil servants with above basic digital skills (Figure 12.4.a).

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Figure 12.4



Sources: For panel (a), based on data from the European Commission (DESI, 2000) and Eurostat; for panel (b), A. Benecchi, C. Bottoni, E. Ciapanna, A. Frigo, A. Milan and E. Scarinzi, 'Digitalization in Italy: evidence from a new regional index', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), forthcoming.

(1) The DESI Index refers to 2020. The data on digital services at regional level and on the competencies of public servants are in reference to 2019. The index on the provision of digital public services is the average of 5 sub-indices: E-government users' corresponds to the percentage of individuals who used the internet in the last year and sent modules to general government offices online; 'Pre-filled forms' means the amount of data pre-filled in the forms made available online by general government offices for a set of requirements; 'Level of completeness of online services' means the share of the administrative steps related to the same requirements that can be performed online; 'Public digital services for businesses' means the proportion of public services needed to start and run a business that is available online; 'Open data' measures the existing open data portal. The highest values indicate the best results.

There are also regional differences within the country. In 2019 the level of digitalization of general government offices was generally higher in the northern regions (Figure 12.4.b). The public sector labour force in the South and Islands is characterized by an average age that is 1.3 years older and by a share of civil servants with tertiary educational qualifications that is lower by about 7 percentage points than in the North. According to our estimates, these differences have also affected the lower capacity of local government in the South to adopt smart working during the pandemic.⁵

The NRRP provides an endowment of around €7.5 billion for digitalization and innovation in general government. These resources should make it possible to implement integrated systems of databases and applications of government offices and to strengthen the digital skills of civil servants, allowing the recruitment of specialized professionals and the training of staff already in service. The Plan also includes a reform agenda aimed at simplifying and making administrative and management processes more efficient. This includes a review of organizational arrangements to ensure better matching of skills and career paths and the simplification of recruitment procedures, with the strengthening of pre-selection tools based on the evaluation of qualifications

⁵ W. Giuzio and L. Rizzica, 'Il lavoro da remoto in Italia durante la pandemia: le Amministrazioni pubbliche', Banca d'Italia, *Note Covid-19*, 22 January 2021 (only in Italian).

and experience (already provided for in Decree Law 44/2021) and the introduction of fast-track recruitment procedures for the most specialized job profiles.

Public contracts. – In 2020, there were almost 180,000 new calls for tenders for contracts worth more than \notin 40,000, an increase of around 4 per cent compared with the previous year (5 per cent only considering tenders for public works). The total worth of tenders remained more or less stable in comparison with 2019, while that for public works alone increased by more than 50 per cent, driven by tenders for some major works. About three quarters of the procedures were carried out electronically, a slightly higher proportion than in the period before the pandemic.

After a steep decline during the first lockdown, particularly marked in the public works sector, the number of new calls for tenders showed a strong recovery in the second half of the year (Figure 12.5), also due to the presence of procedures that had been put on hold during the first months of the pandemic.

With the aim of speeding up the implementation of public works, Decree Law 76/2020 (the 'Simplification Decree') introduced some measures to speed up administrative procedures and temporary rules for the award of public contracts based on wider use of direct awards and negotiated



Source: Based on Open Anac data (2020). (1) With respecti to the same month in 2019. New calls for tender worth

procedures. The NRRP provides for the strengthening of simplification instruments and the extension of temporary measures until 2023.

The new award provisions broaden the discretion of the contracting authorities in the choice of the contractor. It is still important to ensure an appropriate balance between the need to reduce the duration of public works and the need to safeguard competition among potential contractors, without which there could be negative effects in terms of the quality or the price of the works. In addition, the contract award phase affects the overall duration of projects only marginally.⁶

The risks of organized crime infiltrating the economy. - The COVID-19 pandemic has affected organized crime in various ways. According to information from the

⁽¹⁾ With respect to the same month in 2019. New calls for tender worth more than €40.000.

⁶ C. Carlucci, C. Giorgiantonio and T. Orlando, 'Public works in Italy: time to completion and its determinants', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 538, 2019 (only in Italian).

Ministry of the Interior,⁷ there is a high risk that criminal organizations will illegally intercept public resources used to support citizens and businesses, and that they will be awarded contracts relating to the management of the emergency. The activities of organized crime in the legal economy appear to been redirected towards have certain economic sectors that had been made particularly profitable by the pandemic (for example, the production and marketing of medical and health products), while economic and financial difficulties might make some companies more vulnerable to infiltration by mafiatype organizations, which are able to provide liquidity quickly.

Data from the Bank of Italy's 'Survey of Industrial and Service



Source: 'Survey of Industrial and Service Firms in 2020', Banca d'Italia, Statistics Series, English version forthcoming. (1) Respondents were asked to indicate how likely they thought it was that the owner of a business working in their same geographical area and economic sector might: (a) obtain a loan outside official channels (i.e. banks, financial companies); (b) receive an offer to buy their own business with unusual conditions (i.e. in terms of price, time frame and/or payment conditions); (c) receive threats, intimidation or attempts at extortion. The figure shows the percentage of respondents who replied that it was 'somewhat likely' or 'very likely' to each question or to at least one of the questions.

Firms' indicate that criminal presence in the legal economy may have increased considerably in the last year. The percentage of respondents who believe that organized crime-related phenomena in the area in which they work was 'somewhat likely' or 'very likely' to have occurred rose from 9 per cent in 2019 to 16 per cent in 2020, with a more substantial increase in relation to financial crime compared with violent crime (Figure 12.6). The perceived risk is also higher among business owners in the regions of the South and Islands (19 per cent), in the accommodation and food service sector (30 per cent) and in the construction sector (22 per cent).

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Report by the Organismo permanente di monitoraggio ed analisi sul rischio di infiltrazione nell'economia da parte della criminalità organizzata di tipo mafioso (Permanent body for the monitoring and analysis of the risk of infiltration in the economy of mafia-type organized crime), Ministry of the Interior, 4, December 2020, available only in Italian at: https://www.interno.gov.it/sites/default/files/2021-03/report_4_2020.pdf

13. BANKS AND INSTITUTIONAL INVESTORS

In 2020, Italian financial intermediaries' activities were strongly influenced by the consequences of the pandemic.

Banks met the increase in firms' demand for funding, which was fuelled by the liquidity needs that emerged following the suspension of production activities and by the propensity to accumulate precautionary reserves. The availability of credit was favoured by the possibility of taking advantage of public guarantees on loans and by the ample recourse to Eurosystem refinancing.

The improvement in capital adequacy was significant; the public guarantees on loans and supervisory authorities' recommendations to limit dividend distribution were relevant factors in this respect. The gap between the capital level of Italian significant banking groups and the average level of the other banks supervised by the Single Supervisory Mechanism (SSM) has essentially closed. Capital strengthening enables Italian banks to address the likely deterioration of credit quality from a more solid position.

The pandemic has not slowed down the plans to dispose of non-performing exposures, which have continued to decline. The flow of new non-performing loans decreased over the course of 2020, despite the contraction in economic activity, but recorded a moderate increase in the last quarter of the year; banks considerably increased the share of performing loans classified as Stage 2, i.e. whose credit risk rose.

The growth in expected losses has led to a marked increase in loan loss provisions, which affected profitability; the effects stemming from the cyclical downturn added to the structural challenges that existed even before the pandemic. The profitability outlook will depend on the speed and intensity of the economic recovery; the current uncertainty calls for a careful evaluation of the adequacy of loan loss reserves, especially on the part of less significant banks.

Banks, especially the large ones, have continued to reorganize the distribution network by cutting the number of branches and employees. The restrictions on mobility favoured a greater use of digital distribution channels, encouraging investment in the development of projects connected to financial innovations applied to the provision of financial services.

Institutional investors' funding was positive, but lower than in 2019. The outflows for Italian open-ended investment funds recorded last spring were partly offset in the second half of the year, when the prices of financial assets picked up.

The structure of the banking industry

At the end of 2020, Italy's banking system was composed of 59 banking groups, 90 stand-alone banks – of which 39 cooperative credit banks (BCCs) and 39 public limited companies – and 81 branches of foreign banks. There were 11 groups classified as significant under the SSM, one less than in 2019, following the merger of the UBI group with Intesa Sanpaolo. The significant banks accounted for around 80 per cent of the total assets of the banking system.

The number of employees decreased by 2.3 per cent, the number of branches by 3.2 per cent, continuing a trend under way since 2008. Since then the number of branches has been reduced by about one third; the average number of inhabitants per branch rose to about 2,500, a figure between those of France and Spain (just under 2,000) and that of Germany (about 3,100).

The rationalization of the branch network has mainly concerned significant groups other than cooperative ones, which since 2008 have reduced the number of both branches and employees in the nationwide network by just under 40 per cent. The fall in the number of branches was smaller in relation to the less significant banks (5.5 per cent).

In December, some 79 per cent of customers were accessing their current accounts online. The regional surveys conducted by the Bank of Italy's branches indicate that around 80 per cent of banks believe that the spread of the pandemic has prompted customers to make more use of remote financial services. Compared with the end of 2019, the share of banks that allow their customers to receive offers and make requests for financing remotely has also increased (from 36 to 39 per cent for households and from 16 to 22 per cent for firms); two thirds of banks offer mobile micropayment services as well as online asset management services.

Almost all larger banks and a third of smaller ones have planned or started projects for financial innovation applied to the provision of financial services (FinTech). The main areas of interest are the improvement of customer services and using data for the fine-tuning of commercial strategies. About a third of banks expanded their investment plans compared with what was planned at the beginning of last year, mainly to better address the needs created by the public health emergency.

Banks' assets

Credit. – Lending by Italian banks increased by 4.1 per cent (Figure 13.1), the highest level recorded since the start of the global financial crisis in 2008. The acceleration of credit began in March with the suspension of production activities to counter the spread of the epidemic (see Chapter 13, 'Banks and institutional investors', *Annual Report for 2019*, 2020).

The economic crisis has had different effects on credit growth in the main sectors: the lower growth of loans to households was more than offset by the acceleration in financing to firms (8.4 per cent, compared with a fall of 1.8 per cent in 2019), the share of which in total bank lending rose from 45.6 to 46.9 per cent.





Source: Supervisory reports.

(1) The data for March 2021 are provisional. Loans include repos and bad debts. Percentage changes are adjusted to take account of the effects of securitizations, reclassifications, write-downs, exchange rate adjustments and other changes not due to transactions.

The slowdown in loans to households largely depends on the 0.6 per cent drop in consumer credit, compared with an increase of 8.5 per cent in 2019; this dynamic was similar to that observed for the euro-area average (see Chapter 7, 'The financial situation of households and firms'). In the first three months of 2021, consumer credit returned to growth, albeit modestly (to an annualized 0.3 per cent).

Residential mortgages increased by 2.3 per cent, a change in line with 2019, as a result of both the fall in interest rates, (especially on fixed-rate contracts), and lower repayments linked to the moratoriums on outstanding mortgages.

The strong demand for corporate loans was fuelled by the increased liquidity needs linked to the decline in cash flows and the greater propensity, especially for smaller firms, to accumulate liquid resources for precautionary purposes (see *Financial Stability Report*, 2, 2020). Loans have grown to a similar extent across the different size categories of firms and more markedly in the manufacturing and service sectors. Credit also increased at a fast pace in the first quarter of 2021, to an annualized rate of 6.3 per cent.

The expansion of financing to firms, especially for small and medium-sized enterprises, has been supported by the Government's programme for stateguaranteed loans, launched in response to the pandemic emergency. In the twelve months ending in March 2021, Italian banks provided loans with a public guarantee for an amount of \notin 157 billion, equivalent to 17.7 per cent of loans to firms outstanding at the end of the period and about one third of the total loans granted over the year. Guaranteed loans have helped to increase the share of medium- and long-term financing, rising from 52 to 62 per cent over the same period, while reducing the use of short-term credit lines. Almost all guaranteed loans have a maturity of more than one year and more than 70 per cent of these loans have a maturity of more than 5 years. This has helped to significantly lower the share of loans to firms with a maturity of less than one year, which fell from

31.5 to 21.5 per cent in the twelve months ending in March.

Loan growth was much higher for those firms that requested and obtained guaranteed loans (Figure 13.2), largely used to expand the availability of credit, especially at the early stage of the crisis (see the box 'Public guarantees and the growth in lending to firms'). The presence of public guarantees and monetary policy interventions enabled banks to keep credit supply conditions relaxed (see *Economic* Bulletin, 2, 2020). Despite an increase in the average maturity of loans, the average interest rate on outstanding corporate loans in 2020 was around 20 basis points lower than at the end of 2019, at 1.8 per cent, and remained stable in the first three months of 2021.



Source: AnaCredit.

(1) The sample includes firms surveyed quarterly by AnaCredit over 2020, for which no bad loans had been recorded. Firms that, in 2020, received at least one new loan that was guaranteed under the programmes introduced by Decree Law 23/2020 are considered as beneficiaries of the COVID-19 guarantees. The sectors are classified according to Istat's classification of economic activities (ATECO). 2007.

PUBLIC GUARANTEES AND THE GROWTH IN LENDING TO FIRMS

As part of the wide-ranging package of measures to limit the effects of the pandemic on production, in the first half of 2020, the Government strengthened the Central Guarantee Fund (FCG) with the aim of favouring access to credit for a broad spectrum of small and medium-sized enterprises (see the box 'Financial support measures and credit to firms during the pandemic', Chapter 7). The presence of public guarantees means that banks can nullify capital absorption on the portions of the loans covered by the FCG guarantee.

Decree Law 23/2020 ('Liquidity Decree') introduced three main guarantee programmes provided by the FCG: (a) loans guaranteed 100 per cent for amounts up to \in 30,000; (b) loans guaranteed by the FCG up to 90 per cent and for up to \notin 5 million;¹ and (c) renegotiations and consolidations of existing loans with a guarantee of 80 per cent.² In addition, the coverage ratios for loans granted through FCG programmes already in place were raised to 80 per cent. The 2021 Budget Law extended the provisions linked to the pandemic emergency, originally set to remain in force until 31 December 2020, to 28 February for large firms

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¹ This category includes loans granted pursuant to letter n), paragraph 1 of Decree Law 23/2020, with counter-guarantees from loan guarantee consortiums with coverage equal to 100 per cent.

Access to this programme provides for the disbursement to the same beneficiary of additional credit equal to at least 25 per cent of the amount of the residual debt.

with no more than 499 employees (mid-caps) and to 30 June 2021 for the other small and medium-sized enterprises (SMEs).³

Following the introduction of the new programmes, the guarantees granted by the FCG involved around \notin 42 billion worth of loans in the second quarter, the same amount in the third quarter and \notin 36 billion in the fourth quarter (see the figure).



Sources: Based on Central Credit Register and Mediocredito Centrale data.

(1) Additional credit: change, in euros, in the credit granted by the bank to the firm (compared with the level at the end of the previous quarter) for every euro of the amount guaranteed received by the same bank; weighted sum. Excludes the amounts of suspended loans backed by a subsidiary guarantee pursuant to Article 56 of Decree Law 18/2020. – (2) Right-hand scale.

The distribution of guarantees among the various FCG programmes changed in 2020: in the second quarter, recourse to loans guaranteed up to 100 per cent and for up to \notin 30,000 was particularly high; instead in the following two quarters, the share of loans guaranteed up to 90 per cent and for larger amounts increased, as did the share of those granted for the renegotiation and consolidation of existing loans.

The different characteristics of the FCG programmes and the varying degrees of coverage are reflected in the marked heterogeneity in their capacity to increase the availability of funding for firms compared with the amount of credit agreed by the bank prior to taking out the guaranteed loan. In particular, loans covered up to 100 per cent were associated with a greater disbursement of additional credit compared with the other public guarantee programmes, in the order of 85 per cent of the guarantees granted in the first quarter. The decline in the capacity to increase lending observed between the second and the third quarters of the year, when additional credit fell on average from 63 to 56 per cent of the amount of the guarantees, is due to the increase in the shares of loans guaranteed up to 90 per



³ Based on Commission Recommendation 2003/361/EC, the category of SMEs includes firms with fewer than 250 employees and an annual turnover or assets not exceeding €50 million and €43 million respectively. Among large enterprises, mid-caps are defined as those with no more than 499 employees.

cent and in the share of renegotiated loans compared with those providing a full guarantee. The further decrease in the last quarter, to 38 per cent, instead reflects a trend common to all the FCG programmes and could indicate a more widespread use of guaranteed loans to roll over maturing loans.

The degree of additionality for guaranteed loans compared with existing loans was generally uniform among the various intermediaries for loans with 100 per cent coverage; for those with a lower guarantee, it was instead higher for more capitalized banks.

Non-performing loans. – Despite the sharp contraction in economic activity, in 2020, the ratio of new non-performing loans to total loans fell slightly, compared with 2019, to 1.1 per cent. This fall was heavily influenced by the moratoriums, income support measures for households and firms, and by the more flexible classification of loans following the pandemic (see *Financial Stability Report*, 1, 2020).¹ Since the fourth quarter of last year, the rate of transition of loans from performing to non-performing status has slightly increased – from 0.9 per cent in the third quarter of 2020 to 1.1 per cent in the first quarter of 2021 – increasing mainly in the sectors most affected by the crisis.

The stock of non-performing loans on banks' balance sheets decreased compared with the end of 2019, both in terms of the low value of incoming flows and for disposals, which continued without being affected by the pandemic; during 2020, the banks sold 33 billion worth of NPLs, more than anticipated at the beginning of the year. The amount represents about 20 per cent of the amount of NPLs at the end of 2019, a value above the average for the three-year period 2017-19 (17 per cent). This result was partly due to the incentive introduced by Decree Law 18/2020 (the 'Cure Italy' decree), which permits banks to convert a portion of deferred tax assets into tax credits against NPL disposals.

Disposals remain the main channel for reducing these assets: since 2016, when market transactions began to gain importance, sales reached almost €190 billion before value adjustments.

At the end of 2020, the stock of NPLs net of loan loss provisions reached \in 51 billion, 28 per cent less than the previous year, so that the ratio of net non-performing loans to all loans fell from 3.3 to 2.2 per cent (Figure 13.3).²

Unlikely-to-pay loans – decreasing in absolute value – accounted for about 60 per cent of net NPLs on banks' balance sheets (54 per cent at the end of 2019), partly due to significant disposals of bad loans.

¹ The supervisory and regulatory authorities have clarified that participation in legislative moratoriums (or non-legislative moratoriums sponsored by a large part of the banking system) and recourse to public guarantees would not automatically lead to loans being reclassified as forborne or as non-performing exposures. Participation in a moratorium does not automatically imply that a loan will move to Stage 2 of the classification under IFSR 9 accounting standards.

² In the same period, gross NPLs fell from \in 147 billion to \in 104 billion.





Sources: Consolidated supervisory reports for banking groups and individual supervisory reports for stand-alone banks. (1) Includes loans to customers, credit intermediaries and central banks. Includes banking groups and subsidiaries of foreign banks; excludes branches of foreign banks. Amounts are calculated net of adjustments. The coverage ratio is measured as the ratio of loan loss provisions to the corresponding gross exposure. – (2) Provisional data. – (3) The non-performing loan sub-categories reflect the Bank of Italy's unharmonized definition, which is in line with the one used at European level. This allows for a distinction to be made between exposures in classes arranged in descending order of risk: bad loans, unlikely to pay, and non-performing past-due and/or overdrawn exposures, consistent with the definitions used in the past. – (4) Right-hand scale.

In 2020, Italian banks recorded a 36 per cent increase in performing loans with a significant increase in credit risk, after which they transitioned from Stage 1 to Stage 2 of the classification under the IFRS 9 accounting standard. This change would not have taken place under the previous accounting framework. The increase in claims classified as Stage 2 by the significant banking groups was around 40 per cent, 13 percentage points higher than the increase recorded by the less significant banks. The ratio of these loans to total performing loans went from 8.7 to 10.7 per cent.³ Growth in this category led to an increase in the coverage ratio of performing loans, which reached 0.6 per cent in December.

Holdings of securities. – In December 2020, the value of banks' securities, other than those related to their own securitized assets and those issued by resident banks, were worth \notin 598 billion, up by \notin 46 billion compared with the end of 2019. The increase is entirely attributable to public sector securities, which account for 85.1 per cent of total securities held by Italian banks, mainly Italian government bonds (69.9 per cent of the total).

Euro-area countries' share of public sector securities in total bank assets rose by 0.7 percentage points, compared with the end of 2019, to 12.6 per cent; the increase was particularly marked among cooperative credit institutions. In the first quarter of 2021, this share continued to grow as a result of new purchases by larger intermediaries.

³ Only considering loans to households and firms, the ratio of loans classified as Stage 2 to total performing loans increased by more than 3 percentage points to 14.4 per cent over the same period.

The banks increased the stock of Italian government bonds by 6.6 per cent. Net purchases were concentrated in the first half of the year (56.9 billion), when the economic consequences of the spread of the pandemic caused a widening of the yield spread between Italian government bonds and the corresponding German Bund (see Chapter 14, 'The money and financial markets', *Annual Report for 2019*, 2020). Financial tensions attenuated in the second half of the year, thanks mainly to the positive knock-on effects of purchases under the PEPP – the Eurosystem's pandemic emergency purchase programme (see *Financial Stability Report*, 2, 2020 and the box 'The PEPP and the stabilization of financial markets' in Chapter 3). There were more sales (€32.5 billion) than purchases, especially on the part of the largest intermediaries. These transactions confirm the usual role of Italian banks as contrarian investors making purchases at times of market tension and reselling securities when conditions are more relaxed (see *Financial Stability Report*, 2, 2020).

Banks continued to classify a growing amount of new Italian government bond purchases in the portfolio of assets valued at amortized cost, the proportion of which rose from 68.4 to 74.3 per cent. Banks often use this strategy as it reduces the impact on the profit and loss account of changes in value due to fluctuations in bond yields (see *Financial Stability Report*, 1, 2021).

Funding

Bank borrowing increased by 12.2 per cent (Figure 13.4) as a result of the expansion of residents' deposits and liabilities towards the Eurosystem. This was the biggest change since the financial crisis in 2008. The decline in deposits held by non-residents is mainly due to lower funding from foreign banks not belonging to Italian groups. Wholesale bond funding and net liabilities towards central counterparties remained virtually unchanged compared with the end of 2019.



Source: Supervisory reports.

(1) The sum of the contributions is equal to the 12-month percentage change in total funding. The percentage changes in the individual components are calculated net of the effects of reclassifications, exchange rate variations, write-downs, and other changes not due to transactions. Does not include liabilities towards resident Monetary Financial Institutions. Net liabilities towards central counterparties represent repo funding with non-residents carried out through central counterparties.



In 2020, intermediaries' liabilities towards the Eurosystem also increased to $\notin 154$ billion, benefiting from the possibility of participating in the third series of targeted longer-term refinancing operations (TLTRO III). Increased recourse to Eurosystem refinancing by individual banks was accompanied by higher lending to the private sector.⁴ For all Italian intermediaries, the increase in liabilities towards the Eurosystem was associated with an increase in funds on reserve accounts with the central bank, which grew by just under $\notin 200$ billion; as at December 2020, the difference between liabilities and assets vis-à-vis the Eurosystem was $\notin 74$ billion, down from $\notin 114$ billion in 2019.

Retail funding increased by 9.5 per cent on account of a large inflow of deposits from residents, just under \notin 170 billion, of which more than half came from firms whose deposits grew by more than a quarter because of both the sharp contraction in investment and the effects of the government's liquidity support measures (see *Financial Stability Report*, 1, 2021).

Households' deposits increased by 6.7 per cent, mainly as a result of lower consumption and a strong increase in households' propensity to save (see *Economic Bulletin*, 4, 2020), while their holdings of bank bonds continued to decline, accounting for less than 3 per cent of retail funding at the end of the year.

The increase in the flow of deposits was greater than that of loans to customers, reducing borrowing needs. As a result, the funding gap (the difference between the value of the loans and retail funding, expressed as a percentage of loans) fell by 6 percentage points, compared with 2019, to -9.7 per cent (Figure 13.5).

The average cost of funding fell from 0.16 to 0.11 per cent. The decline is attributable to the reduction in the average rate paid on deposits and bonds, down by 3 and 21 basis points respectively.

In the first three months of 2021, liabilities towards the Eurosystem continued to grow at a fast pace, with the settlement in



Source: Supervisory reports. Excludes Cassa Depositi e Prestiti SpA and branches of foreign banks in Italy.

 Loans to residents minus retail funding (residents' deposits plus bonds held by households). The latest data refer to the end of March 2021. –
Right-hand scale.

March of the seventh auction of TLTRO III, while the amount of residents' deposits remained broadly unchanged.

⁴ Our analyses at the level of individual intermediaries show a positive relationship between recourse to refinancing with the Eurosystem and the volume of credit granted to companies as a result of the improvement of the TLTRO III terms and conditions (see Chapter 3, 'Monetary policy in the euro area').

Banks' capital and profitability

Profitability. – Over the year, the profitability of Italian banks declined significantly (Figure 13.6) and the annualized return on equity (ROE), net of extraordinary components, fell from 5.0 per cent to 1.9 per cent. The 33 per cent increase in loan loss provisions, reflecting higher expected losses, explains around two thirds of the reduction in the ROE.⁵



Source: Consolidated supervisory reports for banking groups and individual supervisory reports for stand-alone banks. (1) As a ratio to average equity in the year. - (2) Provisional data. - (3) Right-hand scale.

Net interest income, although improving in the second half of the year, fell by 3.3 per cent. The decrease in interest rates on new loans, also due to the lower return on guaranteed loans, was only partially offset by the increase in financing provided to firms. Funding costs were reduced mainly due to the contribution of TLTRO III within the Eurosystem and, to a lesser extent, the reduction in interest rates on new debt issues. Other revenues declined as well, especially those from the trading and sale of financial assets at fair value, contributing to the fall in gross income (-5.1 per cent).

Operating expenses rose by 3.3 per cent, mainly owing to non-recurring staff costs relating to the early termination of employment contracts within the main groups, in relation to the completion of restructuring their activities. Net of these costs, operating expenses decreased by 2 per cent. The decline in other administrative costs – connected with the restrictions imposed on the movement of persons to contain the virus – were more than offset by the integration costs due to the mergers between the Intesa Sanpaolo and UBI groups and increased contributions to resolution funds and deposit guarantee schemes. On the other hand, the decrease in taxes and profits resulting from the negative goodwill generated by the merger had a positive effect on the overall profitability of the system.

⁵ The cost of risk, measured as the ratio of loan loss provisions to the average value of the loans, increased from 75 to 96 basis points.
The ROE for the significant groups, net of extraordinary components, fell from 4.9 to 1.4 per cent and three banks reported losses. Ten out of eleven banks recorded a decline in profitability compared with the previous year. The ROE of the less significant banks more than halved, falling to 3.1 per cent, although among these, the share of banks reporting negative results decreased from 15 to 9 per cent; nevertheless, almost two thirds recorded lower profits than in 2019.

In the quarters to come, bank revenues will depend on the speed and intensity of the economic recovery. The main risk stems from the possible impact of a deterioration in credit quality. The situation as regards operating costs are likely to benefit from the completion of the restructuring activities begun by some banks, whose costs have already been borne during the year. Market participants' expectations indicate a recovery in average profitability, but this is likely to remain below the 2019 level: the expected ROE for 2021 is 4.6 per cent for listed Italian banks and 5.7 per cent for the main euro-area banks.

Capital. – At the end of December, the Italian banking system's common equity tier 1 capital (CET1) stood at 15.5 per cent of total risk weighted assets (RWAs), an increase of 150 basis points in relation to the end of 2019. Capital strengthening was the second largest since 2007, after that of 2017⁶ (Figure 13.7) and this enables banks to face, from a more solid position, the consequences of the pandemic crisis on credit quality that are likely to occur in the coming months.



Source: Consolidated supervisory reports for banking groups and individual supervisory reports for stand-alone banks. (1) Core Tier 1 up to 2013, and Common Equity Tier 1 for subsequent years. – (2) Provisional data. – (3) Index: 2007=100. – (4) Right-hand scale.

The improvement affecting both significant groups and less significant banks is, for almost two thirds, the result of the reduction in RWAs and, for the remainder, of the increase in CET1. The main contributing factors in the decline in weighted assets were

⁶ The improvement of around 230 basis points, recorded in 2017, was largely determined by the UniCredit group's extraordinary increase in capital.

the implementation of the public guarantee programme⁷ and the recomposition of the assets of some of the larger groups towards less risky exposures. The increase in capital benefited mainly from the effects of the guidance of the supervisory authorities to limit the distribution of dividends in 2019 and 2020.

At the end of last year, the Italian banking system recorded an average surplus in the CET1 ratio of more than 6 percentage points in relation to the regulatory minimum.⁸ The gap between the average level of capitalization of Europe's significant banks and that of their Italian peers had narrowed to 10 basis points (110 bps at the end of 2019 (Figure 13.8).



Sources: Consolidated supervisory reports; 'Supervisory banking statistics', ECB.

(1) Provisional data. – (2) The net NPL ratio is calculated as the ratio of non-performing loans, net of loan loss provisions, to total loans.

Non-bank financial intermediaries and loan guarantee consortiums

In 2020, loans by non-bank credit intermediaries specialized in loans secured by a pledge of one fifth of salary or pensions, rose by 17 per cent, to \in 8 billion, while loans from intermediaries specialized in other kinds of consumer credit declined by 2 per cent, to \in 27 billion.⁹ This reflected both demand factors, including reduced spending needs and increased precautionary saving, as well as supply-side factors linked to the crisis affecting employee and retirement income to a lesser extent. Loans from leasing and factoring companies declined by 5 per cent, to \in 80 billion, in line with the previous year.

⁷ Loans with public guarantees benefit from a lower weighting, which has reduced the level of risk weighted assets.

⁸ This minimum is set according to the Supervisory Review and Evaluation Process (SREP) and expressed as the sum of Pillar I and Pillar II requirements for the capital conservation buffer and the systemic buffers.

⁹ Intermediaries specializing in consumer credit (including those mainly dealing in loans against one fifth of salary or pension) provide a total of around 95 per cent of total targeted and non-targeted financing granted by financial corporations to consumer households for the purchase of goods and services (see Chapter 7, 'The financial situation of households and firms').

Moratoriums and measures to support household incomes and business activities mitigated the effects of the pandemic on credit quality (see Chapter 7, 'The financial situation of households and firms'). Gross of loan loss provisions, the ratio of non-performing loans to total loans granted by non-bank intermediaries as a whole fell by 2.1 percentage points, to 5.9 per cent. The lower weighting of loans with public guarantees enabled, as for banks, the reduction of RWAs and favoured capital strengthening. The ratio of supervisory capital to risk-weighted assets increased by 2 percentage points, to 15.5 per cent.

The amount of guarantees issued by the credit consortiums listed in the single register increased by 9.7 per cent, to €7.7 billion, including as a result of the public guarantee programmes set up by the government in response to the pandemic. Nonperforming positions as a share of the total guarantees issued amounted to 24.5 per cent (down from 29.6 per cent in 2019). The ratio of supervisory capital to risk-weighted assets remained at a high level (29.5 per cent).

Institutional investors

Funding. - In 2020 Italian institutional investors recorded a net outflow of funds of €44 million, compared with a net inflows of €21 billion in the previous year (Table 13.1 and Figure 13.9). The decline is mainly attributable to managed asset portfolios (-€18.5 billion) and reflects the transfer abroad of part of the managed assets.

						Table 13.1
Institutional investors: net flows and assets under management (millions of euros and per cent)						
	Net	flows				
_	2019 2020 (1)		2019 2020 (1)		Composition	
					2019	2020 (1)
Investment funds (2)	-4,316	5,389	339,365	345,611	14.9	14.5
Insurance companies (3)	42,544	39,250	788,859	825,116	34.6	34.6
Pension funds (4)	4,236	4,802	185,354	197,922	8.1	8.3
Individually managed portfolios	-286	-18,515	968,758	1,012,879	42.4	42.5
Total	42,178	30,926	2,282,336	2,381,528	100.0	100.0
Consolidated total (5)	20,709	-44	1,586,611	1,622,468	-	-
(per cent of GDP)	1.1		86.6	98.2	-	-
Memorandum item: Foreign investment funds (6)	18,060	31,479	832,093	899,570	-	-
or which: managed by Italian intermediaries	8,586	12,337	189,390	204,725	_	-

Sources: Based on data from the Bank of Italy, IVASS, Covip and Assogestioni. (1) Provisional data. – (2) Italian investment funds. – (3) For assets under management, technical provisions net of reinsurance reserves. Does not include Italian branches of EU insurance companies and includes Italian branches of non-EU insurance companies. – (4) For end-of-quarter assets under management, balance sheet assets. – (5) Net of investments in Italian investment funds by the various categories of financial intermediaries, investments by insurance companies and pension funds in portfolios managed by asset management companies, and the technical reserves of insurance companies associated with the management of open-ended pension funds. - (6) Foreign open-ended investment funds. Assets under management and net flows are respectively based on the value of the units held and subscribed by Italian investors.



Excluding managed assets, net funding for the asset management sector stood at around $\in 6.5$ billion. The crisis linked to the public health emergency led to a decrease in the funding of insurance and of openended funds governed by Italian law. This was partly offset by an increase in the subscription of closed-end funds and, to a lesser extent, pension funds.

Italian open-ended investment funds recorded significant net outflows of €5 billion.¹⁰ In the same way as for funds domiciled in other countries, the outflows were more pronounced in the first quarter, in conjunction with the high volatility of financial asset prices and increased uncertainty about the economic



Sources: Bank of Italy, IVASS and Covip.

(1) The flows are gross of funds raised from other institutional investors. Includes only Italian investment funds. For 2020, provisional data. – (2) See note (5) below Table 13.1.

effects of the health emergency. The outflows were concentrated in the segments with the most risk and which were exposed to less liquid markets. In the second half of the year, the improvement in financial market conditions favoured a rebalancing, with shifts from the mixed (balanced and flexible) segments to those with higher expected returns such as equity. The money market funds, which account for only 0.8 per cent of total open-ended funds, recorded positive net subscriptions, in contrast to the money market funds of other countries which are more exposed to the private securities market.

The volume of funds remained basically unchanged for investment funds complying with the restrictions on individual savings plans (PIR funds). Redemptions of shares in PIR funds were modest owing to tax legislation that encourages investors to hold the shares for at least five years. In 2020, in response to the pandemic emergency, a new type of individual savings plan was introduced (alternative PIR Funds) to encourage investment in the equity of Italian small and medium-sized enterprises.¹¹ This legislation could support the development of funds specialized in unlisted securities, such as European long-term investment funds (ELTIFs) and private equity and venture capital funds. By the end of the year, six funds had been authorized which complied with the requirements of the legislation.

Closed-end securities funds raised €3 billion, equal to 11 per cent of assets under management, mainly in the second half of the year. Growth was mainly on account

¹⁰ Including foreign funds managed by Italian asset management companies, the net funding of Italian openended funds in 2020 was positive overall (see *Financial Stability Report*, 1, 2021).

Decree Law 34/2020 (the 'Relaunch Decree') extended the fiscal benefits included in the legislation for ordinary PIR Funds to savings plans that invest at least 70 per cent of their total asset value in financial instruments, including unlisted ones, issued by companies that are not on the FTSE MIB and FTSE Mid Cap indexes on the Italian stock exchange (Borsa Italiana) or equivalent (see *Financial Stability Report*, 2, 2020).

of the funds investing in private equity and those specializing in direct financing or in purchasing loans originating from other intermediaries.

The expansion of Italian real estate funds continued, which raised funds of \notin 7 billion, mainly in the second half of the year. Growth was exclusively in funds reserved to professional investors and was mainly supported by Italian investors, while investments by foreign investors declined. In the last five years, closed-end investment funds established in Italy raised funds amounting to around \notin 30 billion, corresponding to more than 40 per cent of assets under management at the end of 2020; the investments were concentrated in Milan and Rome.

Net insurance funding amounted to €39 billion, down from €43 billion in 2019. A significant share is attributable, as in the past, to the banking channel (see the box 'Commercial agreements and shareholdings between banks and insurance companies in Italy' The flow of new resources declined in the life sector to €25 billion, and increased slightly in the non-life sector to €14 billion (compared with €30 billion and €13 billion respectively in 2019). The decline in the life sector is attributable to the risks deriving from the persistently low interest rates,¹² which limit insurance companies' capacity to provide guaranteed minimum returns (see the box 'The effects of low interest rates on Italian insurance companies', *Financial Stability Report*, 2, 2019). The increase in the non-life sector also stems from the fall in claims on third party insurance policies for vehicles, which was recorded as a result of the restrictions on mobility as a result of the health emergency. Gross subscriptions of Class I policies (those with minimum guaranteed returns) fell by 10 per cent to €66 billion, while subscriptions for class III policies (unit linked and index linked, for which the investment risk is wholly or partly borne by policyholders), increased by 6 per cent, to €30 billion.

COMMERCIAL AGREEMENTS AND SHAREHOLDINGS BETWEEN BANKS AND INSURANCE COMPANIES IN ITALY

Since the late 1980s, there has been a steady but increasing integration of banks and insurance companies' activities. This was in response to the need to encourage investment by customers in alternative non-bank products. For both categories of financial intermediaries, greater cooperation is an opportunity to make the most of cost synergies, increase the range of products on offer, and to reach a wider clientele. However, increasing cooperation between banks and insurance companies may also lead to new risks arising, for example, from increased organizational complexity and financial contagion among the intermediaries involved, reducing the benefits associated with cooperation.¹



The academic literature shows that greater collaboration generally provides substantial benefits for the intermediaries involved, especially in terms of profitability, while it is not associated with a significant increase in risk. For further details, N. Genetay and P. Molyneux, *Bancassurance*, Palgrave Macmillan, 1998; J.F. Slijkerman, D. Shoenmaker and C.G. de Vries, 'Systemic risk and diversification across European banks and insurers', *Journal of Banking & Finance*, 37, 3, 2013, pp. 773-785.

¹² The European Insurance and Occupational Pensions Authority (EIOPA) raised market awareness of the vulnerabilities that the reduced profitability of investments produces in the insurance sector, encouraging the adoption of measures to monitor them and limit their negative effects (see the EIOPA website, 'Supervisory statement on the impact of the ultra-low/negative interest rate environment').

In Italy, as in other major European countries,² cooperation between banks and insurance companies is important both in terms of commercial agreements for the distribution of insurance products through the network of bank branches, and in terms of the participation of banks in insurance company capital. On the other hand, insurance companies' holdings in banks' capital are quite small and only concern a limited number of banks.

In 2019 (the last year for which complete information is currently available) the funding of insurance companies through the banking channel was equal to 35 per cent of the total, a share only slightly lower than that attributable to insurance agencies (37 per cent).³ In the last 15 years, the premiums for life insurance policies collected at bank branches have increased in value from €39 billion to €47 billion (see panel (a) of the figure, accounting for 44 per cent of the total), with wide variations in relation to financial market trends. In the non-life sector, this form of funding has grown even more markedly, from €0.5 billion to €2.4 billion, while remaining at relatively low levels (7 per cent of the total).⁴



Sources: Supervisory reports and IVASS.

(1) Right-hand scale. – (2) Average for each year, excluding insurance companies without any bank shareholders. – (3) Ratio of the number of insurance companies with bank shareholders to the total number of companies currently doing business in Italy. Right-hand scale.

² EIOPA, 'Insurance Distribution Directive. Evaluation of the Structure of Insurance Intermediaries Markets in Europe', December 2018.

³ The remaining portion of the premiums is collected at post office counters (13 per cent), financial sales personnel (10 per cent), brokers and direct collection by companies (5 per cent).

⁴ In the life sector, between 2005 and 2012 the share of premiums collected through the banking channel decreased considerably (from 53 to 34 per cent), and then returned to growth in the following years. On the other hand, in the non-life sector, collection through bank branches increased steadily over the whole period examined, from 1.4 per cent in 2005 to 7.0 per cent in 2019.

For companies in which banks have shares, the average portion of capital held by banks is just over 20 per cent. This percentage declined in conjunction with the recent financial crises, beginning to grow again since 2013, reaching similar levels in 2019 to those observed in the two years 2005 and 2006 (see panel (b) of the figure). At the end of 2019, there were 29 Italian banks with a shareholding in one or more Italian insurance companies, accounting for about 81 per cent of the assets of the banking sector.⁵ Such shareholdings are generally associated with a higher recourse to the placement of insurance products through the banking channel.⁶

Banks with greater commercial or shareholding links with insurance companies are on average larger and with a higher degree of diversification of revenue sources. The insurance companies themselves tend to specialize in the types of policies that the banks can sell more easily: life insurance policies (mainly unit linked and index linked), which allow the banks to expand their range of savings products, and non-life policies other than compulsory third-party vehicle insurance, which are often combined with loans. On average, increased collaboration is associated with greater profitability for both banks and insurance companies.

Capital. – The assets managed by institutional investors increased, despite the fact that net funding was slightly negative on account of the pick-up in asset prices on the main financial markets in the second half of the year.

The share of Italian households' financial assets managed by institutional investors reached 35.2 per cent (see Chapter 7, 'The financial situation of households and firms'), about 12 percentage points higher than at the end of 2012. This share remains below the average for the euro-area countries and that of the United Kingdom and the United States, mainly because of the lower share of financial assets managed by pension funds (Figure 13.10.a).

The share of investments in equity and bonds issued by Italian firms decreased to 5.4 per cent (it was 6.0 per cent at the end of 2019), in the face of an increase in foreign government securities, in line with euro-area and investment fund trends. The share invested in Italian government bonds fell by a further 2 percentage points, to 32.7 per cent, although this is still high compared with the euro-area average (Figure 13.10.b).

Profitability. – In 2020, the profits of asset management companies fell by 7 per cent compared with the previous year. The reduction in net fees was only partially offset by the reduction in operating costs. The ratio of supervisory capital to the overall capital requirement remained basically stable at high levels (8.7 per cent).

⁵ There were 35 companies in which banks held shares and they collected about 40 per cent of the premiums of the Italian insurance industry. Of these, 8 were joint ventures, i.e. companies with a significant stake held both by a bank and by an insurance company, and 8 had shares held by banks for a total of more than 50 per cent.

⁶ Insurance companies controlled by banks collect almost all premiums through bank branches and financial salespeople who are often connected to the banking network. For banks, the volume of insurance products distributed is also positively correlated with their shareholdings in insurance companies.



Sources: For panel (a), Bank of Italy, ECB and Federal Reserve; For panel (b), ECB.

(1) For Italy, includes investment fund shares, life insurance policies, pension funds, and complementary pension funds, excluding severance pay. The euro-area aggregate is based on a 19-country composition. For the United States, the pension funds data relates to private pension funds and to state and local pension funds, excluding federal pension funds. Includes foreign funds held by residents. – (2) Excludes individually managed portfolios; data for the euro area do not include Italy.

Insurance companies' ROE was around 12 per cent, slightly down compared with 2019. In the life sector, it was 11 per cent, down by more than 3 percentage points on account of the fall in premium income, only partly offset by the increase in asset values. Instead, the ROE in the non-life sector increased by 3 percentage points, to 12 per cent. This increased profitability benefits from the reduction in the combined ratio (sum of losses and management expenses divided by premium income), also due to the effects that the restrictive measures for the pandemic had had on the volume of claims (see *Financial Stability Report*, 1, 2021).

14. THE MONEY AND FINANCIAL MARKETS

In 2020, following their marked deterioration between the end of February and mid-March (see Chapter 14, 'The money and financial markets', *Annual Report for 2019*, 2020), the conditions in Italy's financial markets gradually improved, thanks to the Eurosystem's interventions and the favourable expectations created by the measures taken by the national and EU fiscal authorities, in particular the agreement on the Next Generation EU programme. Despite the new rise in the number of cases, the improvement continued during the autumn too, favoured by the news on the effectiveness of the vaccines and the abating of the uncertainty concerning the outcome of the US presidential elections.

Net issues of Italian government securities, which nearly tripled compared with the previous year, were easily absorbed by the ample demand that emerged during auctions. Purchases in the secondary market conducted by the Eurosystem for monetary policy purposes were significant: at end-2020, the share of Italian public sector securities held by the Bank of Italy rose to 25.8 per cent of the total. Despite the abrupt and temporary rise recorded in the spring, the sovereign risk premium and the yields on Italian government securities declined during the year as a whole; the financing costs of banks and firms decreased.

Share prices recouped most of the losses that had marked the most acute phase of the health emergency. However, the dynamics were very diverse across segments owing to the varied impact of the pandemic on the different economic sectors.

In the early months of 2021, the conditions in Italian financial markets continued to benefit from the measures adopted by the ECB and from the expansionary fiscal policy. The favourable expectations created by the rollout of the vaccination campaigns offset the negative effects of the increase in the number of cases. As in the rest of the euro area, the outlook continues to be highly dependent on the course of the pandemic.

The money market and the public sector securities market

The money market. – In 2020, the abundant liquidity injected by the Eurosystem in response to the epidemic made it easier to maintain calm market conditions.

On the MTS platform, trading in the repo market for government bonds remained high, though slightly lower than in 2019, reaching \notin 116.6 billion per day on average in 2020 (-13 per cent on 2019; Figure 14.1). The decrease mainly affected the general collateral segment (-23 per cent), which was used less by intermediaries for redistributing the liquidity in circulation; it affected the special repo segment to a lesser extent (-9 per cent).

BANCA D'ITALIA

The interest rates of very short-term Italian repos on gradually government bonds declined, reaching levels close to the Eurosystem's deposit facility rate. This decrease, which reflected the greater propensity of foreign operators to accept Italian government bonds as collateral, continued in the first quarter of 2021.

In April 2020, the new noncollateralized market for interbank deposits, MTS depo, was launched, where intermediaries can exchange liquidity. The market replaces the previous one, which was managed by e-MID SIM. Despite the increasing number of participants on the new platform, trading remains limited,



⁽¹⁾ Right-hand scale. Latest available data: 30 April 2021.

in a context of broad liquidity provided by the monetary authority's interventions.

Supply and demand for public sector securities. – In 2020, net issues of Italian public sector securities almost tripled compared with the previous year (from \in 50 to \in 145 billion), reflecting both the increase in liquidity needs caused by fiscal policy interventions to counter the pandemic and the increase made by the Treasury in the liquid balance (see Chapter 11, 'The public finances'). The average residual maturity of government securities rose slightly to 6.9 years, from 6.7 years in 2019, thanks to the greater average duration of newly issued securities. The amount of government bonds maturing in 2021 is around \in 390 billion (\in 250 billion between June and December).

In 2020, bond placement on the primary market continued smoothly. Demand was far higher than supply and their cover ratio was over 1.5 on average. Issuance continued smoothly in the early months of 2021 too, with the orderly placement of greater volumes than in the same period of the previous year.

Together with the decrease in the shares held by other investors, the share of Italian public sector securities held by the Bank of Italy in 2020, which represents more than 90 per cent of that of the entire Eurosystem, rose to 25.8 per cent (20.1 per cent in 2019; Figure 14.2). The increase was due above all to the considerable net purchases made under the new monetary policy measures adopted by the ECB Governing Council in March of last year (see Chapter 3, 'Monetary policy in the euro area').

The share of securities in Italian insurance company portfolios fell by more than one point, to 13.7 per cent. The shares of Italian investment funds, households and banks also contracted slightly, to 1.9, 5.3 and 16.7 per cent respectively. The latter, as in previous periods of tension, carried out a contrarian investment strategy, making net



Sources: Bank of Italy and estimates based on Assogestioni and ECB data.

(1) Shares calculated on data at market prices and net of securities held by general government in Italy. The data refer to a subset of holders. Latest available data: Q4 2020. – (2) Securities held by foreign investors net of those held by the Eurosystem (excluding the Bank of Italy) and by foreign managed portfolios and investment funds attributable to Italian investors.

purchases in the first half of the year, in times of market turbulence, and subsequently reselling part of the securities under more relaxed market conditions (see Chapter 13, 'Banks and institutional investors').

In the first half of 2020, tensions were accompanied by substantial net sales of Italian government securities by foreign investors, which came to a halt in the second half of the year (see *Financial Stability Report*, 2, 2020 and Chapter 10, 'Foreign trade, competitiveness and the balance of payments'). Between the beginning and the end of the year, the share of foreign investors' holdings declined by more than 3 percentage points, to 31.6 per cent. According to our estimates, excluding the securities held by both the Eurosystem (except for the Bank of Italy) and by individually managed portfolios and foreign investment funds attributable to Italian investors, this share fell by 2 points, to 23.7 per cent.

In the first three months of 2021, the share of securities held by the Bank of Italy increased further (by 0.7 percentage points to 26.5 per cent,) while that held by foreign investors declined, albeit only slightly (by 0.2 percentage points, to 31.4 per cent).

Yields on government securities. – In 2020 as a whole, the yield on ten-year government bonds fell by 87 basis points, reaching 0.54 per cent (Figure 14.3.a). Smaller decreases affected short- and medium-term securities (51 and 69 basis points on 3- and 5-year ones, to 0.29 and -0.01 per cent respectively). The yield on ten-year bonds fell to about 110 basis points, down from 160 at the end of 2019 (Figure 14.3.b).

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Figure 14.3 Yields and yield spreads on BTPs at different maturities (1) (daily data; percentage values and points) (a) Yields (b) Yield spreads with respect to the German Bund 4 4 (Å) (Ċ) (A) (C) (B) (B) (D) (D) 3 3 2 2 1 1 0 0 -1 -1 2019 2020 2021 2019 2021 2020 5 years -10 years 3 years

Source: Based on Bloomberg data.

(1) The black vertical dotted lines indicate: (A) the announcement of the PEPP (18 March 2020); (B) the announcement of the new eligibility criteria for collateral (22 April 2020); (C) the announcement of the Franco-German proposal for an economic recovery fund (18 May 2020); and (D) the European Council's ratification of the Next Generation EU programme (17 July 2020).

Yield dynamics were divided into two phases. Between mid-February and 20 March 2020, the increase in risk aversion, the deterioration in liquidity conditions and the fears for the economic outlook all pushed up sovereign risk premiums and the yields on government bonds in Italy and in most euro-area countries.

The ECB Governing Council's decisions in March and April led to the stabilization of market conditions, especially the announcement of the pandemic emergency purchase programme (PEPP) on 18 March 2020, which was followed by a sizeable decrease in volatility and an improvement in market liquidity (see the box 'The PEPP and the stabilization of financial markets', Chapter 3). In mid-May, further interventions by the fiscal and monetary authorities and the easing of the restrictions for countering the pandemic led to marked reductions in yields and the relative spreads. This trend heightened in the following months, thanks above all to the positive expectations engendered by the agreement reached by the European Council on the Next Generation EU in July. In autumn, the announcements about the effectiveness of the vaccines, further monetary policy and fiscal support, and the fading of the uncertainty over the outcome of the American presidential elections caused a further fall in the sovereign risk premium and a subsequent reduction in interest rates.

In the first five months of 2021, Italian government bond yields remained low: the boost from the rise in interest rates on US government bonds was offset by a reduction in the Italian sovereign risk premium at the beginning of February and subsequently by the decisions of the ECB Governing Council (see Chapter 3, 'Monetary policy in the euro area'). Around the end of the third week of May, the yield spread for ten-year bonds stood at about 123 basis points, and the yield on government bonds with the same maturity at 1.12 per cent.

Trading in public sector securities in the secondary market. - In March 2020, when the public health emergency was at its worst, the greater uncertainty of

market operators and the increase in the credit risk premium led to significant reductions in liquidity in relation to Italian government bonds traded on the MTS cash repo market.

Market makers were increasingly active from the second quarter of 2020, owing to both the greater supply on the primary market and the Eurosystem's purchases of Italian government bonds. These factors fostered an liquidity improvement in conditions the secondary in market; the bid-ask spread gradually narrowed to around 10 basis points and the daily quantities quoted reached €9 billion. Trading on the MTS cash market achieved new historic highs, standing at €7.2



Source: Based on MTS SpA data.

(1) Calculated as the daily average of the semi-sum of pending orders on the buy and sell side proposed by market makers in the first 5 best quotes. – (2) Right-hand scale.

billion daily on average in 2020, around double the figure for 2019. The growth in trading continued in the first four months of 2021 (Figure 14.4).

Corporate bonds and bank bonds

Issuance. – In 2020, Italian firms, motivated by the reduction in funding costs and by the Eurosystem's purchases of securities, increased their recourse to the bond market. Gross placements of securities with a maturity at issue of more than one year rose compared with 2019 (€23 billion against €21 billion), against a fall in redemptions from €25 to €15 billion. Net issues turned positive, contrary to what has been observed in the last few years (Table 14.1). As a share of GDP, the amount of bonds issued by firms increased slightly, to 9 per cent from 8 per cent on average in the last three years, also due to the contraction in economic activity over the year, though it still remained lower than the average for the euro area (13 per cent).

Italian banks continued to make net bond redemptions, which totalled $\in 19$ billion ($\in 2$ billion in 2019; Table 14.1), above all following a marked decrease in gross placements ($\in 68$ billion in 2020, from $\in 88$ billion in 2019), which particularly affected unsecured securities. At the end of the year, bonds issued by banks amounted to 26 per cent of GDP, lower than the euro-area average of 34 per cent.

In the first quarter of 2021, gross placements rose compared with the corresponding period of 2020, as did bond redemptions by non-financial corporations, albeit to a lesser extent; net issues were positive ($\in 6.3$ billion, $-\epsilon 3.5$ billion in 2020). The gross issuance of bank bonds instead declined, though less markedly than redemptions; net placements were negative ($-\epsilon 5.2$ billion, $-\epsilon 14.5$ billion in 2020).

Table 14.1

Medium- and long-term bonds of Italian banks and firms (1) (monthly values; millions of euros)							
	Net issues (2)			Stocks			% of GDP
	2018	2019	2020	2018	2019	2020	2020
Banks	-29,516	-2,048	-19,360	450,984	447,274	424,195	26
Other financial corporations (3)	15,554	25,762	5,602	220,607	245,497	249,874	15
Non-financial corporations	-4,548	-3,569	7,760	140,146	136,646	142,941	9
Total	-18,510	20,145	-5,998	811,737	829,417	817,010	50

(1) Bonds with a maturity at issue of more than one year, issued by companies resident in Italy and belonging to the sector indicated. The nationality and sector refer to the issuing company and not to its parent company. Stocks and the relative flows include issued and repurchased bonds. – (2) Difference between the nominal values of issues and redemptions. – (3) Includes insurance companies, other financial intermediaries, financial auxiliaries, moneylenders and captive financial institutions.

Yield spreads. – In the first quarter of 2020, the financing costs of Italian firms rose considerably, owing to the increase in the credit risk premium, at a time of a rebalancing of portfolios by operators towards financial assets considered safer. The widening of the spread between the average yield on Italian firms' bonds and that of a risk-free security (derived from the German Bund yield curve) was similar to what was observed on average for the euro area as a whole (Figure 14.5.a).



Source: Based on ICE Bank of America Merrill Lynch data.

(1) Option-adjusted yield spreads between euro-denominated securities and the risk-free security (derived from the German Bund yield curve), weighted by the market capitalization of individual securities issued by corporations.

Financing conditions for Italian firms improved in the following quarters, benefiting in particular from the launch of the PEPP, via which bonds issued by the non-financial sector are also purchased. The fall in corporate financing costs particularly concerned the telecommunications and transport sectors, thanks to the recovery in economic activity, and issuers with a lower credit rating. At the end of 2020,

the yield spreads on bonds issued by firms returned to levels in line with those prevailing prior to the pandemic, and then narrowed further in the first five months of 2021.

In the first quarter of 2020, the credit risk premium for Italian banks, measured by both bond yield spreads and the premiums on credit default swaps (CDS), grew more than that of euro-area banks (Figure 14.5.b). The greater compensation demanded by investors was due to the worsening expected in credit quality.

Following the most serious phase of the pandemic crisis, Italian banks' bond spreads narrowed considerably; at the end of May 2021, they returned to levels close to those observed prior to the public health emergency. At a time when investors' risk aversion had greatly diminished, the narrowing of yield spreads was higher on average for Italian banks than for euro-area banks; the capital strengthening of Italian banking and financial institutions was a strong contributory factor.

The equity market

Share price performance. – The Italian stock exchange index fell in 2020, penalized by the uncertainty over the course of the epidemic and by the recessionary effects on economic activity. The general index of the Italian stock market went down by 7 per cent, compared with a fall of 1 per cent on average in the euro area (Figure 14.6.a). The financial and energy sectors were among those most affected by the crisis, as they were penalized the most by economic contraction and by the decline in demand (see the box 'Share prices across the various segments during the pandemic').



Source: Based on Refinitiv data.

(1) For the three Datastream stock indices (for Italy, *Italy Total Market*, for the euro area, *EMU Total Market*, and for the United States, *US Total Market*), the ratio of the 10-year moving average of earnings per share to the value of the stock index is calculated (both at constant prices). From the resulting ratio, which is an estimate of the expected real return on the shares, the real return on inflation-indexed 10-year government bonds (treasury inflation-protected securities (TIPS) for the United States, and inflation-linked German securities for Italy and the euro area) is deducted to obtain an estimate of the equity risk premium.

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SHARE PRICES ACROSS THE VARIOUS SEGMENTS DURING THE PANDEMIC

The general Italian stock market index fell sharply in the weeks immediately after the onset of the public health emergency (by about 40 per cent between 21 February and 18 March), but it recovered most of its losses in the following months. Realized earnings per share decreased considerably, lower by 45 per cent at the end of 2020 compared with the previous year.

Price dynamics varied across equity segments (see the table), owing to the heterogeneous impact of the pandemic and the restrictive measures on demand and production in individual sectors.

									Table
Variations in the sectoral stock market indices in 2020 (per cent)									
		Italy			Euro area		U	nited State	es
	Price variations (1)	Variations in eamings (2)	Share of the sector (3)	Price variations (1)	Variations in earnings (2)	Share of the sector (3)	Price variations (1)	Variations in earnings (2)	Share of the sector (3)
Energy	-32	-102	13	-22	-73	6	-37	-104	3
Basic materials	-29	-58	1	7	-22	7	17	-17	2
Consumer services	-27	-156	1	2	-62	5	31	-31	10
Finance	-21	-32	29	-16	-40	21	-2	-20	38
Telecommunications	-19	-39	2	-10	-16	4	-11	-9	2
Industry	-4	-63	12	3	-43	17	17	-13	9
Public utilities	10	5	20	12	-4	7	-4	-1	2
Consumer goods	13	-77	15	5	-68	16	29	-3	6
Technology	27	-4	5	18	-1	10	44	7	18
Healthcare	29	9	2	-6	-7	8	10	2	9
Total index	-7	-45	100	-1	-39	100	18	-10	100

Source: Based on Refinitiv data.

In 2020 as a whole, stock prices recorded a particularly marked contraction in the energy (-32 per cent) and financial (-21 per cent) sectors, which are generally more exposed to the economic cycle; in the energy sector, the volatility of oil prices was also a significant factor, as it declined considerably in the first quarter of the year. Taken together, the two sectors account for around 40 per cent of the total capitalization of the Italian stock market index. Capitalization was instead relatively low in other sectors that experienced sizeable reductions in prices: basic materials, consumer services, which were particularly affected by the decline in tourism and leisure activities, and telecommunications (-29, -27 and -19 per cent respectively). There was also a decrease in industry, though less marked.

Table

⁽¹⁾ Percentage changes in the prices of the FTSE Italia All Share, FTSE Eurobloc and FTSE United States indices for Italy, the euro area and the United States respectively, between 31 December 2019 and 31 December 2020. – (2) Percentage changes in the real earnings per share between 31 December 2019 and 31 December 2020. – (3) Percentage share for each sector as at 31 December 2019 of the total capitalization of the indices.

Among the sectors with a significant share in the total stock market capitalization, there were positive performances in those of consumer goods (especially food, 13 per cent) and of public utilities (10 per cent), which both benefited from demand for their products holding firm during the pandemic. There was also a considerable growth in prices in the healthcare sector (29 per cent), although its share is modest, and in the technology sector (27 per cent).

The decrease in the Italian stock market index in 2020 was greater than the average for the euro area. The different composition of the general index also contributed to this trend: it can be inferred that, with the same composition, the fall in Italy's index would have been around 3 per cent. The high shares of the energy and financial sectors were particularly important, as was the low capitalization of the technology sector in Italy; the performance of the latter, albeit very positive, did not significantly boost the Italian stock market index because of its negligible share of the stock market.

In the first quarter of 2021, the improvement in the global economic outlook, helped by support from monetary and fiscal policy and the optimism generated by the start of the vaccination campaign, fostered a recovery in prices in the sectors that had suffered the greatest losses in 2020. Prices in the financial and energy sectors rose by 17 and 14 per cent respectively (by 11 and 8 per cent on average in the euro area), in contrast to a more limited increase in the general stock market index.

Having fallen by around 40 per cent following the introduction of the first measures to contain the epidemic, share prices began to rise in April, benefiting from the interventions by the fiscal and monetary authorities to support economic activity and liquidity, from the agreement on Next Generation EU and, over the summer, from the improvement in the epidemiological situation. The equity risk premium, which increased markedly between February and March, gradually decreased in the second quarter (Figure 14.6.b). In the final months of 2020, share prices rose again, buoyed by the optimism over the news of the effectiveness of vaccines and by the expectations for economic recovery, despite the resurgence of cases.

In the first five months of 2021, stock prices rose by 12 per cent in Italy, against 11 per cent on average in the euro area. The increase is attributable to the greater risk tolerance of investors and to the more favourable expectations of economic growth, despite episodes of volatility linked to the news of the spread of some variants of the virus, to delays in vaccine supplies and to the rise in long-term interest rates.

Supply of shares. – In 2020, the uncertainty over the duration of the health crisis contributed to the marked reduction in IPOs. There were 22 IPOs (down from 35 in 2019), for a total value of \notin 700 million, against \notin 2.5 billion in 2019. In the fourth quarter, placements recovered strongly, with 14 new companies being listed. Almost all of the IPOs (21) involved the Alternative Investment Market (AIM) Italia segment for small and medium-sized enterprises (Figure 14.7.a). The presence of firms in the high-tech, telecommunications, production and marketing of renewable energy, and e-commerce services sectors strengthened.

Figure 14.7



Sources: Based on Borsa Italiana SpA and ECB data.

(1) Includes both new capital raised through IPOs and capital increases by listed companies.

The average market capitalization of the 137 companies in the AIM Italia segment continued to be limited, standing at \notin 43 million in December 2020, against the \notin 2.7 billion of the electronic equity market (MTA), which includes more traditional and highly capitalized companies. The degree of liquidity – measured by the average, weighted by the free float, of the turnover velocity of individual firms – rose further for both segments compared with 2019.

In the first three months of 2021, the performance of the new listings returned in line with that observed in the first quarters of the years prior to the pandemic: there were five new entries, compared with only one in the same period in 2020.

Funding through the issue of new shares by listed Italian firms also decreased markedly in 2020, to \notin 2.8 billion, from \notin 4.9 billion in 2019; for non-financial corporations alone, funding remained largely unchanged (Figure 14.7.b).

During the first quarter of 2021, the total value of gross share issues by Italian firms remained limited, in line with the issues in the same period of the previous year.

Market infrastructure

In 2020, TARGET2-Securities (T2S) averaged close to 800,000 transactions per day, with a value of around \notin 1,200 billion; the levels remained similar in the first four months of 2021.

Monte Titoli SpA was confirmed as the most active operator on the platform, with 25.6 per cent of the amounts entered, equal to $\in 310$ billion per day, but down by 3 per cent on 2019 owing to the reduced activity in the MTS repo segment. In 2020, the average volume of transactions settled through Monte Titoli amounted to $\notin 301$ billion per day. The volume of transactions not settled owing to the non-delivery of securities or

cash within the allotted time frame (fails) increased by 0.4 percentage points, reaching 3.4 per cent of the orders entered. This share remained virtually unchanged in the early months of 2021 (Figure 14.8).



(1) Right-hand scale.

In 2020, the value collateralized by Cassa di Compensazione e Garanzia SpA (CC&G) fell by 10.5 per cent because of the tensions on the financial markets during the most acute phase of the public health emergency. These tensions led to a decrease in the amounts traded, especially on the bond market. The subsequent improvement in market conditions enabled the parameters used to calculate the margins on equity securities to be gradually reduced (they increased several times in the early months of 2020 due to high volatility) and those used on Italian public sector bonds to remain at low levels. The decrease in the parameters and, to a greater extent, in the collateralized value, led to a contraction of 8 per cent compared with the previous year in the total amount of the margins collected (Figure 14.9).



Source: Based on CCG data



In the first three months of 2021, the margins increased by 4 per cent compared with the previous quarter, though they remained much lower compared with the corresponding quarter of 2020 (-21 per cent).

At the end of April, Euronext completed its acquisition of the Borsa Italiana group, to which Cassa di compensazione e garanzia, Monte Titoli and MTS belong. Being part of and playing an important role in the pan-European group will allow Italian firms to continue improving the services provided to issuers, intermediaries and investors and to contribute to capital market development in Europe. **SPECIAL FEATURE**

15. CENTRAL BANKS, CLIMATE RISKS AND SUSTAINABLE FINANCE

Climate change is wide-ranging and poses risks to the economic and the financial system. The growing concern for these risks has increased the interest in environmental, social and governance (ESG) factors within the financial system. This had led to the rapid spread of sustainable finance, which takes into account these factors in making investment decisions.

The primary responsibility in the fight against climate change falls upon governments, which can intervene to facilitate the transition towards a sustainable economic development model by introducing incentives for 'green' investments, establishing carbon pricing systems, and adopting regulations to limit the activities that have the greatest environmental impact.¹

Climate risks are also relevant for central banks and their ability to meet their institutional objectives.² The analyses they conduct to quantify and manage the economic risks connected with climate change and evaluate the policies necessary to address these risks can be put at the service of the public at large. In their capacity as investors, central banks act as a benchmark for other institutions in risk analysis and management, in the adoption of investment decisions that are consistent with the decarbonization objectives, and in increasing savers' awareness.

The Bank of Italy plays an active role in this domain and participates in international forums such as the Network for Greening the Financial System (NGFS), established in 2017 by a number of the world's central banks and supervisory authorities to coordinate analyses, based on common objectives and lines of action, to strengthen the role of the financial system in managing climate risks and to redirect financial flows towards sustainable investment.³ Under Italy's G20 Presidency,⁴ the Bank of Italy has promoted, together with the Ministry of Economy and Finance, the creation of the Sustainable Finance Working Group, with the objective of incentivizing best practices in sustainable finance and fostering the transition towards greener, more resilient and inclusive economies and societies.

¹ I. Visco, 'Roundtable on Financing Carbon Neutrality', BOAO Forum for Asia, 20 April 2021.

² For further details, see E. Bernardini, I. Faiella, L. Lavecchia, F. Natoli and A. Mistretta, 'Central banks, climate risks and sustainable finance', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 608, 2021.

³ The NGFS currently has 90 members and 13 observers.

⁴ For further details, see Chapter 1, 'The global economic situation, economic policies and world trade'.

The ECB has included the issue of climate change in its monetary policy strategy review, which is currently underway.⁵

Climate risks to the economy and the financial system

Over the last decades, the Earth's surface temperature has risen at an unprecedented pace owing to greenhouse gas emissions connected to human activity. According to the most up-to-date climate scenarios, without a drastic reduction in emissions that results in bringing them to zero around the middle of the century, ever-rising temperature over the next decades will have critical implications for the world's ecosystems and for human health. According to a recent report by the World Economic Forum, investors consider the main global risks to be those connected to: (a) extreme weather and climate events; (b) the lack of concrete action to counter climate change; and (c) the environmental damage caused by human activity.⁶

Climate change poses two types of risk to the economic and the financial system. 'Physical risk' is connected to the occurrence of natural events stemming from climate changes. These may be chronic, such as the progressive divergence of temperature and rainfall patterns from their historical trends, or acute, such events that have a low probability of occurring but have a high potential impact (e.g. flooding or heatwaves). 'Transition risk', on the other hand, stems from the switch to new production technologies that make it possible to reduce greenhouse gas emissions. In this respect, the very policies adopted to counter climate change may also be a source of economic risk that must be considered: in fact, sudden or unexpected regulatory changes that are not well planned or harmonized at international level may result in the firms operating in the most exposed sectors being caught unprepared, with potential negative repercussions on their business and knock-on effects on the business of other firms.

Given its strong ties with all the sectors of the economy, the financial system is especially exposed to these risks. Moreover, owing to its role as an intermediary, the financial system is potentially capable of propagating and amplifying climate-related shocks. Therefore, it is crucial to have the ability to assess how these risks translate into financial risks and how adverse economic events can propagate across the financial system and become a risk to its stability.

Assessing the financial system's exposure to climate risks is complex. In order to quantify the amount of financial assets at risk for individual intermediaries, it is necessary to possess data broken down by geographical location and carbon content of the individual exposures;⁷ these data are, for the most part, missing. Furthermore, estimating the risk for the entire financial system requires knowledge of the propagation mechanisms. However, for assessing the latter, none of the climate or environmental patterns that emerged in the recent past are comparable to those currently forecast.

⁵ For further details, see the ECB's website, 'Strategy review'.

⁶ World Economic Forum, *The Global Risks Report 2021*, 19 January 2021.

⁷ The carbon footprint of a given credit exposure measures the amount of greenhouse gas emissions produced on average for every euro granted to a firm in a given sector. For further details, see I. Faiella and L. Lavecchia, 'The carbon footprint of Italian loans', *Journal of Sustainable Finance & Investment*, September 2020, pp. 1-19, also published in Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 557, 2020.

For Italy, there are now some preliminary estimates of the banking system's exposure to the credit risk associated with climate change: recent analyses provide an assessment of the exposure to physical risk of loans to households and firms, together with a measure of the exposure to transition risks based on the breakdown of loans to firms by economic sector.

At the end of 2019, the share of bank lending to households and firms located in provinces with high physical risk, defined as those for which the climate impact indicator is above average,⁸ was equal to 28 per cent. An earlier study had estimated that about one fifth of loans was granted to firms operating in areas at high risk of flooding.⁹ In the case of firms for which it is also possible to estimate exposure to transition risks, at the end of 2019, some 37 per cent of loans was exposed to transition risk only, 15 per cent to physical risk only, and 13 per cent to both (Table 15.1). These estimates are in line with the evidence available for other countries.

				Table 15.1	
Exposure to climate risks of Italian banks' loans to firms (per cent; data at 31 December 2019)					
		Transitio	n risk (1)		
		No	Yes	Total	
Physical risk (2)	No	34.9	37.3	72.3	
	Yes	14.5	13.2	27.7	
	Total	49.4	50.6	100.0	

Sources: Based on data from Eurostat and the Ministry of the Environment and the Protection of Land and Sea, and on supervisory reports.

(1) Amount of loans to the sectors most at risk in terms of emissions and credit, based on the relative contribution of each sector ('carbon critical sectors', CCrS, as defined in I. Faiella and L. Lavecchia, 2020, op. cit.). – (2) Amount of loans disbursed in provinces at high physical risk, defined as those for which the climate impact indicator has higher than average values.

For an assessment of the actual credit risk weighing on banks, the data on exposures must be combined with the estimated probability of extreme natural events occurring (in the case of physical risk) or of incisive and unexpected climate policies being adopted (in the case of transition risk), together with the resulting loss on individual exposures. Research is focusing on these issues, which are still characterized by a high degree of uncertainty, and especially on the development of economic models that take into account climate-related factors.¹⁰

From climate risk to sustainable finance

In the last five years, sustainable finance, which incorporates environmental, social and governance considerations in its investment decisions in the financial

⁸ For the further details, see the box 'The banking system's exposure to climate-related financial risks', *Financial Stability Report*, 2, 2020.

⁹ I. Faiella and F. Natoli, 'Natural catastrophes and bank lending: the case of flood risk in Italy', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 457, 2018.

¹⁰ For an analysis of the credit risk connected to climate change, see G. Capasso, G. Gianfrate and M. Spinelli, 'Climate change and credit risk', *Journal of Cleaner Production*, September, 2020.

sectors, has expanded significantly. According to a report by the Global Sustainable Investment Alliance (GSIA), in 2018 at least \$30.7 trillion (of which \$14 trillion in Europe and \$12 trillion in the United States) were used for sustainable financial investments, up by 34 per cent compared with 2016. Overall, these investments accounted for around one third of global professionally managed assets, a share rising to more than half in some jurisdictions.

Sustainable finance comprises investments in several types of financial instruments and is based on sustainability metrics that have become popular among market participants. One of these metrics is the environmental, social and governance (ESG)¹¹ scores attributed by specialized private firms to a broad range of financial instruments: equity, corporate bonds, investment funds, and market indices. The difficulty of obtaining reliable and consistent ESG scores is due to the fact that, for the three aspects considered, there are no shared rules on how to report the data or accepted classifications. The availability of data with limited coverage and heterogeneous quality and content entails risks, the most significant being the unwarranted attribution of sustainability labels (greenwashing). To mitigate this risk, it is essential to achieve a taxonomy of sustainable activities that is comprehensive and universally accepted.

Several national and supranational institutions are promoting the development of classifications that can serve as a benchmark for the markets. Between 2018 and 2020, a group of experts brought together by the European Commission put forward a harmonized taxonomy of sustainable activities, identifying criteria for defining an investments as environmentally sustainable.¹² Though at the moment still limited to the part regarding climate changes, this initiatives can contribute to the adoption of detailed taxonomies that are accepted at international level.

Firms resort to issuing debt explicitly linked to the funding of individual projects with specific sustainability features, in the form of both loans and bonds: among the latter, the most widespread are green bonds, whose earnings are conditional on the funding of projects that pursue environmental objectives or seek to mitigate the effect of climate change or adapt to it, or other projects with similar goals. Besides green bonds, a number of instruments specifically designed to combine climate objectives with other sustainability criteria are becoming more widespread (e.g. sustainability-linked bonds).

The volume of green bonds in circulation, while still very limited, grew sharply, surpassing \$1,000 billion at global level at the end of 2020: European issuers account for about one half. The issuance of green and social bonds to fund

¹¹ Based on information obtained from publicly available documents, questionnaires, data or news archives and other sources, some private-sector data providers calculate scores of firms relating to three areas not strictly connected with their economic and financial management, but rather with environmental, social and governance (ESG) aspects.

Regulation (EU) 2020/852 states that an investment is defined as sustainable if it meets the following requirements: (a) it contributes substantially to at least one of the six environmental objectives that were identified; (b) it does not significantly harm any of the other environmental objectives; and (c) is in compliance with some minimum safeguards relating to ethical and social aspects. Compliance with requirements (a) and (b) is verified on the basis of technical screening criteria defined by the European Commission in delegated acts.

the EU's SURE and NGEU programmes¹³ will contribute to the liquidity and depth of this market segments.

Among the main objectives of the funding obtained on the global markets through the issuance of green bonds are the improvement of the energy efficiency of energy production itself and of buildings (35 and 26 per cent respectively). As regards the breakdown by issuer, the financial sector claims the largest share (21 per cent), with a significant and growing role being played by sovereign issues. In 2021, Italy placed its first green bond issue. Early evidence does not point to substantial differences in the yields of green and traditional bonds;¹⁴ even without the benefits of higher yields, the possibility of issuing green bonds offers the opportunity to widen the investor base and increases the transparency of the funding of the projects planned to implement the carbon transition and to mitigate climate risks.

Central banks' initiatives

There are several reasons behind central banks' growing attention to climaterelated risks. Indeed, a threat to the stability of the financial system can stem from these risks. Very substantial macroeconomic effects can also ensue, thus making it harder for central banks to pursue their mandate and hindering an assessment of the outlook for prices and for economic activity. These possible risks may also affect the value of the financial assets held on central banks' balance sheets and, therefore, their capital adequacy and, ultimately, their independence.

The action of the NGFS bears witness to central banks' focus on climate change and the awareness of the need for a supranational approach to tackle this problem. The NGFS has published analyses and reports, among which a guide for supervisory authorities, two guides to sustainable investment, and a first set of standard climate scenarios, which central banks and supervisory authorities may use to design simulation exercises that are homogeneous and comparable.

In order to increase the availability and quality of statistical information on climate aspect, which at the moment is lacking and uneven, several initiatives are underway as part of the agenda of Italy's G20 Presidency, the NGFS and the European System of Central Banks (ESCB). Specifically, the Statistics Committee of the ESCB is working to increase and consolidate statistical cooperation in the construction and testing of climate-risk indicators.¹⁵

Central banks and regulators can tackle the issue of climate risks through: (a) the dissemination of knowledge acquired on the possible macroeconomic and financial effects of climate change and the opportunities afforded by

¹³ For further details, see Chapter 2, 'The economy and fiscal policies of the euro area'.

¹⁴ For further details, see the box 'The first BTP Green issue', *Financial Stability Report*, 1, 2021. see also R. Doronzo, V. Siracusa and S. Antonelli, 'Green bonds: the sovereign issuers' perspective', Banca d'Italia, Markets, Infrastructures, Payment Systems Series, 3, 2021.

¹⁵ The approach proposed by the Statistics Committee intends to improve data sharing by adding to some of the granular databases already available at the ESCB (e.g. data on lending or securities holdings statistics) with data that can be used to develop new climate risk indicators.

sustainable finance, e.g. by drawing up guidelines or taking action to provide information to banks, investors and retail savers and raise their overall awareness; (b) participation, together with the other supervisory authorities, in initiatives to set standards for the dissemination of information relating to ESG practices; (c) the promotion of specific transparency criteria for information disseminated by firms and financial intermediaries, such as those set by the Task Force on Climate-related Financial Disclosure (TCFD) established by the Financial Stability Board (FSB).

In its capacity as supervisory authority, a central bank may recommend to intermediaries that they follow certain practices relating to the management and dissemination of information regarding climate risk. The Single Supervisory Mechanism (SSM) has published non-binding guidance for directly supervised credit institutions,¹⁶ recommending that national supervisory authorities extend them to the other credit institutions. The European Banking Authority (EBA) will introduce climate risks in the Supervisory Review and Evaluation Process (SREP), thereby improving the data relating to these risks by the end of June of this year; moreover, the EBA has reserved itself the right to assess these micro-prudential interventions by mid-2025.

Central banks must not only assess the stability of an individual financial intermediary, but also that of the entire financial system, through tools such as 'climate stress tests', which seek to identify the major risk factors and their propagation channels. As regards climate-related stress tests, several central banks have conducted or are developing specific tests, often by adopting the scenarios outlined by the NGFS.

In their capacity as investors, central banks may include green instruments in their portfolios and, by doing so, set an example for the other market players by: (a) integrating ESG factors in their portfolio management strategy to improve the financial risk and sustainability profiles of their portfolios, as the Bank of Italy has done; and (b) publishing their own exposures and climate risk management strategies based on the TCFD guidelines, as in the case of the Bank of England or the Banque de France.

Several studies also suggest the possibility of adjusting monetary policy strategies by incorporating the implications that climate change has for macroeconomic developments. In the pursuit of their objectives, central banks may develop analyses and models to take into account both the impact of climate risks on economic activity and prices and the impact of the policies meant to mitigate them. The impact of these policies (e.g. the introduction of a carbon tax¹⁷ or the more widespread adoption of emission permits) is compounded by the impact that physical risk could have on credit, potentially one of the most significant transmission channels.¹⁸ A discussion is

¹⁶ The recommendations for climate risk management include their inclusion in credit rating assessment processes, the establishment of appropriate climate risk governance, the choice of specific metrics and indicators, and the use of scenario analysis and of climate stress tests. For further details, see ECB, 'Guide on climate-related and environmental risks. Supervisory expectations relating to risk management and disclosure', November 2020.

¹⁷ I. Faiella and L. Lavecchia, 'Households' energy demand and the effects of carbon pricing in Italy', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 614, 2021.

¹⁸ I. Faiella and F. Natoli, 2018, op. cit.

under way on the possibility of modifying some monetary policy instruments, or their composition, in order to contribute to the achievement of climate-related objectives.

Research conducted by the Bank of Italy has analysed: (a) the effects of an increase in the probability of natural disasters – including as a consequence of climate change – on precautionary saving, the equilibrium natural interest rate, and prices;¹⁹ (b) the effectiveness of a rebalancing of portfolios of private sector securities held for monetary policy purposes towards securities issued by firms with low greenhouse gas emissions;²⁰ and (c) the contribution of monetary policy interventions in the context of a transition towards carbon neutrality driven by fiscal policy.²¹

These issues are currently being analysed in greater depth within the Eurosystem. In the monetary policy strategy review launched in 2020, discussion is underway on how to incorporate the implications of climate change in the analytical and operational framework of monetary policy. Moreover, last February, a common position was reached on the application of sustainable and responsible investment principles to national central banks' portfolios not held for monetary policy purposes.

The Bank of Italy and sustainable finance

For some years now, the Bank of Italy has stepped up its analysis and action to measure and manage risks in accordance with sustainability criteria and is aware of their importance both for carrying out its institutional mandate and for managing its investments. With regard to the latter, the economic literature suggests that good business practices in terms of sustainability are generally associated with better economic and financial performance. Although there is no clear-cut evidence, most studies show that focusing on ESG profiles has positive effects on limiting firms' legal and reputational risks, on their operating results (thanks to process and product innovation), and on their perceived firm-specific risk.²² All of these factors help to reduce the risk premium and the cost of equity, bringing advantages in terms of financial performance.

Even faced with the recent turmoil in the financial markets in connection with the pandemic, investors' appetite for sustainable activities has not changed, but rather has strengthened.²³ As stock prices dropped sharply in March and April 2020, net capital inflows were recorded for equity funds characterised by ESG strategies while net outflows were recorded for traditional funds. According to a recent study, this

¹⁹ A. Cantelmo, 'Rare disasters, the natural interest rate and monetary policy', Banca d'Italia, Temi di Discussione (Working Papers), 1309, 2020.

A. Ferrari and V. Nispi Landi, 'Whatever it takes to save the planet? Central banks and unconventional green policy', Banca d'Italia, Temi di Discussione (Working Papers), 1320, 2021.

²¹ A. Ferrari and V. Nispi Landi, 'Toward a green economy: the role of central bank's asset purchases', Banca d'Italia, Temi di Discussione (Working Papers), forthcoming.

E. Bernardini, J. Di Giampaolo, I. Faiella and R. Poli, 'The impact of carbon risk on stock returns: evidence from the European electric utilities', *Journal of Sustainable Finance & Investment*, 11, 1, pp. 1-26, also published in Italian in Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 410, 2017.

²³ For a discussion on the implications of the pandemic for climate change and the transition towards a lowemissions economy, see developments in the first half of 2020, see I. Faiella and F. Natoli, 'The Covid-19 crisis and the future of the green economy transition', Banca d'Italia, *Note Covid-19*, 17 June 2020.

phenomenon is attributable not only to sectoral differences, but also indicates a preference for sustainable activities, which are considered less risky and less sensitive to market volatility overall.²⁴

In 2019, the Bank of Italy began to include sustainability criteria in its investment policy in order to improve the management of the associated financial risks and to signal its commitment to growth that is sustainable and mindful of society and of the environment. The new investment policy was initially applied to the equity segment, where ESG information is more readily available, and focused on the Italian and European markets. In 2020, the ESG strategy was extended to equity investments in the markets in the United States and in Japan and the management of corporate bonds; purchases of green bonds issued by supranational agencies were also launched.

The Bank of Italy regularly provides the general public with information on the results achieved in the *Report on Operations and Activities*, the *Environment Report*, and on its website.²⁵ In addition, the Bank continues to carry out analyses and research to support investment and the methodologies adopted, in part to overcome the problems of these assessments.²⁶ The Bank of Italy's experience of sustainable investment practices has been published in a dedicated NFGS guide²⁷ and in the subsequent progress report,²⁸ setting an example and acting as a benchmark for other investors.

The methods for integrating ESG profiles into equity portfolio management try to uphold as far as possible the principles of diversification and market neutrality that are typical of a central bank's investment policy. Taking account of the current evolution in the ESG rating methodologies, the Bank of Italy decided to proceed gradually, keeping benchmarks that are based on market capitalization.²⁹

Following the incorporation of ESG factors, at end-2019 the Bank of Italy's equity portfolio was characterized by carbon emissions that were 18 per cent lower than the equity market index used as a benchmark for the management of the portfolio, and 30 per cent lower compared with the previous portfolio at end-2018. Moreover, the energy and water consumption associated with the portfolio was 12 and 43 per cent lower than the benchmark and 34 and 16 per cent lower than in the portfolio at end-2018. These are significant reductions in terms of environmental impact, equivalent to the annual energy consumption of about 140,000 households and the water consumption of more

²⁴ F. Ferriani and F. Natoli, 'ESG risks in times of Covid-19', *Applied Economics Letters*, October, 2020, pp. 1-5, also published in Banca d'Italia, *Note Covid-19*, 15 June 2020.

For more information, see the Bank of Italy's website: 'The Bank of Italy values sustainability in its financial investments', 15 May 2019 and 'The Bank of Italy makes further progress towards the sustainability of its investments', 16 February 2021.

A. Lanza, E. Bernardini and I. Faiella, 'Mind the gap! Machine learning, ESG metrics and sustainable investment', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 561, 2020.

²⁷ NGFS, A sustainable and responsible investment guide for central banks' portfolio management, Technical Document, October, 2019.

²⁸ NGFS, Progress report on the implementation of sustainable and responsible investment practices in central banks' portfolio management, Technical Document, December, 2020.

²⁹ The Bank of Italy's management of its equity portfolio seeks to replicate market indices that are broadbased and diversified; it was deemed appropriate to exclude the equity of banks, financial corporations and insurance companies from the indices considered for the euro area; for the index relating to Italy, media companies were also excluded.

than 123,000 households. The reduction of greenhouse gases is also significant: the decrease corresponds to the emissions of 185,000 households. At the end of 2020, the carbon intensity of the equity portfolio was 13 per cent lower than the benchmark.

Over the last two years, the application of ESG criteria has made it possible to achieve risk-adjusted returns exceeding those of the benchmark index, most significantly during the phases of strong turbulence recorded in the financial markets in connection with the pandemic. In the coming weeks, the Bank of Italy will present its Responsible Investment Charter, which sets out its vision for sustainable finance, communicates the principles behind the management of its financial investment, and identifies the lines of action that will enable it to accomplish its commitment to sustainability.

Initiatives by Italy's G20 Presidency

In response to the need for international coordination in the fight against climate change and the pursuit of lasting and sustainable economic growth, Italy's G20 Presidency launched a series of initiatives within the Finance Track.³⁰ Of these, the most significant is the establishment of the Sustainable Finance Working Group (SFWG).³¹ The SFWG – which held its inaugural meeting remotely on 26 March 2021 – is co-chaired by China and the United States (which together account for more than 40 per cent of the world's greenhouse gas emissions) with the support of the United Nations Development Programme (UNDP).

The SFWG has launched a discussion to establish a multi-year plan to steer the G20's work on sustainable finance in the near future. By the end of this year, it will release a report to apprise the G20 of the progress achieved and of the main objectives for 2021, such as: (a) studying solutions for improving firms' sustainability accounting and reporting; (b) improving methods to identify sustainable investment (taxonomies); and (c) supporting international financial institutions' commitment to facilitating capital flows towards sustainable investment in emerging economies in order to achieve the objectives of the Paris Agreement. These issues will be discussed during several high-level meetings, including the G20 International Conference on Climate Change, to be held in Venice in July 2021.

Again as part of the G20's activities, the Bank of Italy and the Bank of International Settlements (BIS) Innovation Hub have organized an international contest, G20 TechSprint 2021, to identify possible technological solutions to help to overcome the main obstacles to a further expansion of sustainable finance.³²

³⁰ The Finance Track – made up of the meetings of G20 Finance Ministers and Central Bank Governors, of their Deputies, and of the Sherpas appointed by the ministries in charge of economic affairs and who are tasked with conducting the negotiations – focuses primarily on economic, financial, monetary and fiscal issues.

³¹ The SFWG originates from the Green Finance Study Group, which was created in 2016 during la China's G20 Presidency and ceased its activity in 2018. Italy's G20 Presidency decided to resume the work of this group, raising its status from study group to working group, in order to ensure it will become a permanent fixture within the Finance Track and its ability to provide recommendations to the Ministers and Governors.

³² For more details, see the Bank of Italy's website, 'Presentation event of the G20 TechSprint 2021 on sustainable finance', 7 May 2021.

ADMINISTRATION OF THE BANK OF ITALY AT 31 MAY 2021

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