BANCA D'ITALIA
EUROSISTEMA

Annual Report

Rome, 29 May 2020

126th FINANCIAL YEAR

2019

Financial Year 126th

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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*).

FOREWORD

The COVID-19 pandemic has profoundly changed the economic outlook for this and the coming years compared with what might have been expected based on 2019 developments.

Last year had seen a reduction in global growth, reflecting the slowdown in international trade, the weakness of certain industrial sectors and the halt on investment due to widespread uncertainty among firms. In the euro area, the ECB's Governing Council had eased monetary conditions to counter the worsening of the outlook for growth and the weakening of inflation. At the end of the year, there were signs that the international economy was stabilizing.

Following the spread of the epidemic, the outlook for 2020 is today profoundly different. According to the scenarios formulated by the International Monetary Fund, global GDP will record a sharp drop, instead of modest growth. After remaining practically stationary in 2019, and notwithstanding significant progress made on international competitiveness, corporate indebtedness, and the state of the banking system, forecasts for the Italian economy point to the strongest contraction since the end of the Second World War. The measures to contain the epidemic have had significant effects on the economic and financial conditions of households and firms.

The speed of the economic recovery will depend on the time frame of the public health emergency and the continuity of the economic policy response, which has so far been on an extraordinary scale in every country. All the scenarios indicate that the consequences of the pandemic for the world economy will, in any case, be significant and will extend beyond the short term.

To provide an account of the economic impact of the COVID-19 epidemic, the individual chapters of this Report devote a sizeable portion of their content to an analysis of the early months of this year. The special feature chapter at the end of the Report traces the evolution of the pandemic, describes the transmission channels to the real economy and the policy stances adopted, and provides some initial insights into the possible medium-term implications.

THE INTERNATIONAL ECONOMY

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

World economic growth fell to 2.9 per cent in 2019, affected by persistent international trade tensions and concerns about the arrangements for the United Kingdom's withdrawal from the European Union (Brexit). World trade barely increased, with a growth of less than 1 per cent.

According to the estimates formulated by the International Monetary Fund in January, growth was expected to strengthen this year to 3.3 per cent, reflecting the reduction in uncertainty following the signing of the phase-one trade deal between the United States and China, and of the agreement for the United Kingdom's withdrawal from the European Union.

According to the IMF's forecasting scenarios formulated in April, global GDP will instead contract by 3.0 per cent in 2020, with the fall mainly concentrated in the first half of the year. Developments in economic activity for the current year and for 2021 remain highly uncertain in the advanced economies, and even more so in the emerging ones.

With the spread of the COVID-19 epidemic at global level, many countries have adopted increasingly strict containment measures. This has led to a sharp fall in production, an increase of exceptional size in the number of unemployed workers, and a drop in demand. Oil prices have decreased markedly and suddenly owing to the collapse in demand and to growing storage difficulties. Financial market conditions have worsened rapidly.

The economic policy response has been swift and of extraordinary magnitude. Central banks have intervened to support market liquidity and credit by reducing the reference rates and launching sizeable programmes for the purchase of public and private sector securities. Governments have earmarked significant resources to fund healthcare spending as well as to support households' income and firms' liquidity.

The G20 has decided to suspend the servicing of the bilateral debts of the poorest countries towards official creditors in order to free up resources to be directed towards increased healthcare spending. This decision adds to the initiatives taken by the international financial institutions to support economies in difficulty.

The economic situation and macroeconomic policies

The main advanced economies. – In 2019, GDP growth in the major advanced countries slowed further, to 1.7 per cent (Table 1.1). The uncertainty caused by trade tensions and the fear of a non-orderly withdrawal of the United Kingdom from the European Union, together with specific factors (such as the stagnation of the auto industry in the euro area), curbed growth in production in the manufacturing sector and capital investment.[1] In contrast, growth was widespread in the service sector, partly boosted by private consumption.

Table 1.1

GDP and inflation in the main advanced and emerging economies
(percentage changes on previous period)

	GDP		Inflation (1)	
	2018	2019	2018	2019
Advanced countries	**2.2**	**1.7**	**2.0**	**1.4**
Japan	0.3	0.7	1.0	0.5
United Kingdom	1.3	1.4	2.5	1.8
United States	2.9	2.3	2.1	1.4
Emerging and developing countries	**4.5**	**3.7**	**4.8**	**5.0**
Brazil	1.3	1.1	3.7	3.7
China	6.7	6.1	2.1	2.9
India	6.8	5.3	3.9	3.7
Russia	2.5	1.3	2.9	4.5

Sources: IMF and national data.
(1) For Japan: the consumer price index (CPI); for the United States: the personal consumption expenditure (PCE) Deflator; and for the United Kingdom: the harmonized index of consumer prices (HICP).

GDP grew by 2.3 per cent in the United States, mainly driven by household consumption (Figure 1.1.a). In Japan, GDP grew by 0.7 per cent; it was held back in the last quarter by an increase in the consumption tax introduced in October and by the occurrence of natural disasters. In the United Kingdom, production was affected for most of the year by the uncertainty over the time frame and arrangements for Brexit.

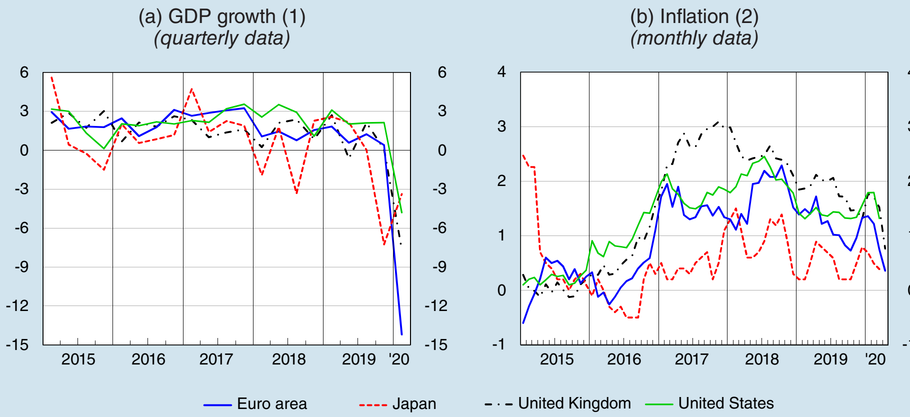
In the advanced countries as a whole, inflation fell below the objectives of the central banks (Figure 1.1.b). Given the intensification of downside risks to global growth, the Federal Reserve gradually lowered the federal funds rate to 1.50-1.75 per cent (Figure 1.2.a).

The situation seemed to be stabilizing towards the end of the year, thanks to the launch of the phase-one deal between the United States and China and the agreement on Brexit (see *Economic Bulletin*, 1, 2020), and to the first signs of recovery in the manufacturing and trade sectors.

[1] For an overview of measures of uncertainty, see L. Rossi, 'Indicators of uncertainty: a brief user's guide', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 564, 2020. For the relationship between uncertainty and productive investment following the global financial crisis, see I. Buono and S. Formai, 'Explaining weak investment growth after the Great Recession: a macro-panel analysis', in L. Ferrara, I. Hernando and D. Marconi (eds), *International macroeconomics in the wake of the global financial crisis*, Springer, 2018, 129-155.

Figure 1.1

GDP and inflation in the main advanced countries



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

The rapid spread of the epidemic at the beginning of 2020 suddenly changed the macroeconomic situation; it caused the governments of various countries to impose gradually stricter measures to contain the virus, to the point that production deemed non-essential came to a halt. This led to a general and profound worsening in economic activity in all the advanced countries.

Based on preliminary estimates, GDP declined by 4.8 per cent in the first quarter of 2020 in the United States: in April, the purchasing managers' indices (PMI) continued to worsen in the manufacturing sector and fell sharply in the service sector, which represents more than two thirds of total GDP. In just two months, the unemployment rate rose by more than 10 percentage points, reaching almost 15 per cent, well above the figure recorded during the global financial crisis. In mid-May, the weekly economic index, a synthetic index calculated by the Federal Reserve Bank of New York that measures economic activity in real time, indicated a decline in GDP equal to 12 per cent over twelve months.

In the United Kingdom, the measures to contain the virus led to an exceptional fall in the PMIs for the service sector and a less marked one in manufacturing. Based on preliminary estimates, GDP declined by 7.7 per cent in the first quarter of 2020.

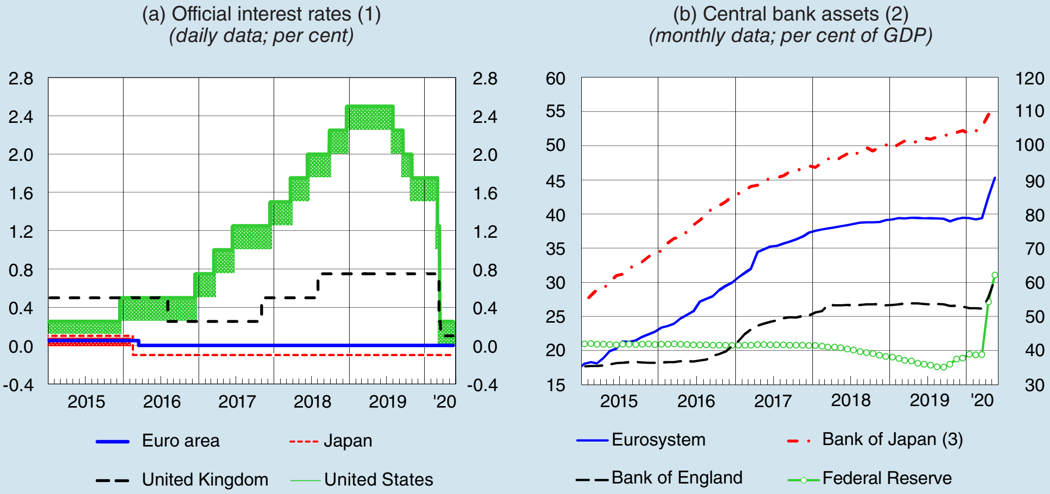
In Japan, where the epidemic initially spread less quickly, stricter measures on people's movement and on commercial activities were not introduced until April, and production was not interrupted. The confidence of manufacturing firms, as reported in the Tankan survey, worsened considerably, however, and investment plans were downsized.

The economic policy response has been robust in all the advanced countries. In March, the Federal Reserve and the Bank of England lowered their monetary policy reference rates. The Bank of Japan, which has not yet changed its rates, has announced possible future interventions. Its asset purchase programmes have also been strengthened.

The central banks of the main advanced countries have adopted exceptional measures to counter the marked tensions that emerged in various market segments in order to ensure liquidity to the financial system and to maintain the continuity of lending to the economy (see the box 'Central banks' response to the COVID-19 emergency'). Central banks' balance sheets have expanded: that of the Federal Reserve has reached 31 per cent of GDP, with an increase of almost 12 percentage points in just two months (Figure 1.2.b).

Figure 1.2

Official interest rates and balance sheets of the main central banks



Sources: ECB and national statistics.
(1) For the United States, federal funds target range; 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 euro area, rate on main refinancing operations; and for the United Kingdom, rate on commercial banks' reserve deposits with the Bank of England. – (2) For all central banks, values as a share of annual GDP in 2019. 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.

CENTRAL BANKS' RESPONSE TO THE COVID-19 EMERGENCY

The Federal Reserve. – The Federal Reserve has: (a) lowered the target range for the federal funds rate by 150 basis points to 0.00-0.25 per cent; (b) increased the provision of liquidity to counterparties through daily and weekly repos ($500 billion and $1,000 billion respectively); (c) reduced the cost associated with the use of discount windows and set the minimum reserve requirement ratios to zero; and (d) created the Primary Dealer Credit Facility, to extend credit collateralized by a wide range of financial assets to counterparties, such as mortgage-backed securities, asset-backed securities (ABS), corporate bonds and commercial paper.

In addition, the Federal Reserve has taken action to ensure the liquidity of specific markets and to support the flow of credit to households and businesses, with Treasury funds providing a partial hedge against credit risk.

To support liquidity in the money market, it has intervened both directly through the Commercial Paper Funding Facility and indirectly, through the Money

Market Mutual Fund Liquidity Facility (MMLF), providing counterparties with loans that are secured by the assets they purchase from money market mutual funds. In support of local government liquidity and for the first time in history, a specific Municipal Liquidity Facility has been created to directly purchase short-term notes issued by states, cities and counties for a total of $500 billion.

The Federal Reserve has also set up a series of facilities to make medium-term borrowing by households and businesses easier in a more direct way, for an overall total of $1,800 billion. Some $100 billion are earmarked for financing newly issued ABSs, using various forms of credit as underlying assets, including commercial, student and consumer loans (Term Asset-Backed Securities Loan Facility). The largest companies can benefit from purchases by the Federal Reserve of syndicated loans at issuance and of corporate bonds on primary and secondary markets for a total amount of up to $750 billion (Primary Market Corporate Credit Facility and Secondary Market Corporate Credit Facility). The possibility to intervene to support bonds and companies that, following the approval of these two measures, have been downgraded to high-yield status, marks an important break with the past. The Main Street Lending Program has set aside $950 billion for small and medium-sized businesses; two thirds of this sum is for purchasing from banks the loans guaranteed by the Small Business Administration and disbursed under the Paycheck Protection Program set up by the federal government (see the box 'The fiscal policy response to the COVID-19 emergency').

In order to meet the demand for US currency on the international market, the Federal Reserve has strengthened the existing dollar swap lines with other major central banks, and established new ones with those of nine other countries.[1] It has also allowed all other monetary authorities to access very short-term repos in dollars, against US public sector securities that they hold and deposit for safekeeping at the Federal Reserve itself (Foreign and International Monetary Institutions Repo Facility).

The Bank of England. – The Bank of England has reduced its bank rate from 0.75 to 0.10 per cent, its lowest level ever; it has expanded the Asset Purchase Facility by £200 billion to £645 billion, including non-financial investment-grade corporate bonds among its asset purchases. It has also reintroduced two facilities to provide loans to financial institutions, the first for 3-month loans backed by less liquid assets (Contingent Term Repo Facility), and the second for longer-term loans at rates equal to or close to the bank rate, the amounts of which are proportional to the lending provided to firms (Term Funding Scheme with additional incentives for SMEs). Finally, in support of the UK Government, the Bank of England has temporarily extended a short-term credit line that can be used to normalize central government cash flows and ensure the functioning of the markets; any drawings will have to be paid back by the end of the current year (Ways and Means Facility).

[1] The Bank of Canada, the Bank of England, the European Central Bank, the Bank of Japan and the Swiss National Bank already had active swap lines with the Federal Reserve; on 19 March 2020, temporary swap lines (lasting at least six months) were set up with the central banks of Australia, Brazil, Denmark, Mexico, Norway, New Zealand, Singapore, South Korea and Sweden.

The Bank of Japan. – As part of its yield curve control strategy, the Bank of Japan has indicated its intention to purchase the necessary amount of government bonds, removing the previous upper limit of ¥80,000 billion. In order to ensure liquidity in the markets and facilitate access to credit, it has increased the amount of commercial paper and corporate bond purchases up to ¥20,000 billion, and doubled the purchases of investment funds. It has also introduced special funds-supplying operations to support lending to households and firms, granting one-year interest-free loans to banks and remunerating the market value of the assets serving as collateral.

The central banks of emerging countries. – Central banks in the emerging countries have adjusted their reference rates from mid-February onwards. The liquidity of the local interbank markets has been sustained by increasing the frequency of open market operations, lengthening maturities and broadening the range of assets eligible as collateral. In addition, a number of jurisdictions have reduced the required reserve ratios. In order to facilitate foreign currency funding, a number of central banks have entered into agreements to establish liquidity swaps with the Federal Reserve.

The extraordinary nature of the current crisis has led the monetary authorities of some emerging countries, which traditionally avoid resorting to quantitative easing measures, to announce possible government bond purchases, and to reform laws that in some cases prohibited such purchases, as in Brazil and the Czech Republic.

The People's Bank of China has adopted a moderately expansionary monetary policy stance, which was reflected in the drop of 30 basis points in the Medium-Term Lending Facility rate and in that on the excess deposit reserves held at the central bank (for the first time since 2008). In order to mitigate the tensions on the interbank market, liquidity with varying maturities has been provided, the seven-day reverse repo rates have been lowered and the reserve requirement ratios have been reduced by 100 basis points (and by a further 100 points for some categories of intermediaries). The People's Bank of China has also launched instruments to support lending to firms, especially to those that are crucial for dealing with the public health emergency and to smaller firms. On the prudential level, the swap programme for perpetual bonds issued by banks has been reopened, with a view to strengthening their capital, to absorbing the potential deterioration in their asset quality and to bolstering their capacity to support the real economy. The mandatory loan-loss provisions have been reduced and banks have been given the option to extend the period of time beyond which the assets are classified as bad debt. Overall, these measures have facilitated credit supply and have made greater government and corporate bond issuance possible.

Governments have mobilized considerable resources to support the economy since mid-March: around 14 per cent of GDP in the United States, 22 per cent in Japan and 23 per cent in the United Kingdom. These resources are earmarked both for financing interventions with a direct and immediate impact on the public deficit (such as strengthening the health system and help for households and firms), and for granting loans and guarantees on lending to firms (see the box 'The fiscal policy response to the COVID-19 emergency').

THE FISCAL POLICY RESPONSE TO THE COVID-19 EMERGENCY

In the advanced economies hit hardest by the pandemic, the scale of interventions (in relation to GDP) has been larger than in the emerging economies; there has also been greater recourse to measures with no direct or immediate impact on the general government deficit (indirect measures), such as granting loans and guarantees (for the main euro-area countries, see the box 'The discretionary fiscal policies of the major euro-area countries in response to the COVID-19 emergency', Chapter 2).

In contrast, the emerging countries have made extensive use of direct measures (with an immediate impact on their budgets), as part of generally smaller interventions on average. In a context of capital outflows, followed by currency depreciation and widening sovereign spreads, many emerging countries are forced to tackle the pandemic with a reduced capacity to leverage the budget, especially given a higher public debt, as in the case of India, or with greater external financing needs, such as Argentina, Brazil and Turkey.

With regard to direct measures, support for firms has been implemented in almost all the major countries through the postponement of tax deadlines. Social safety nets have been strengthened in the advanced economies to a greater extent for workers and households, while in the emerging economies, where these mechanisms are less developed, transfers (Brazil) or food aid (India) have mainly been used.

The fiscal policies are of a considerable size. According to the IMF, in mid-April, the G20 countries had already announced direct measures amounting to 3.5 per cent of GDP, similar to the sum set aside overall between 2008 and 2010 in response to the global financial crisis.[1]

In the United States, the main package (Coronavirus Aid, Relief, and Economic Security Act, CARES) amounts to approximately $2,300 billion, together with around $700 billion from other legislation (totalling approximately 14 per cent of GDP). About one fifth of these resources are earmarked for the upgrading of hospitals, the expansion of the Medicare and Medicaid programmes and for local governments. The measures for personal income support, for which approximately $600 billion have been allocated, mainly involve two instruments: direct payments to people, with a maximum of $1,200 for the medium- to low-income groups (up to $75,000 in income per year) and the increase in unemployment benefits, which has been extended both in duration (an additional 13 weeks) and in the range of beneficiaries, which also includes the self-employed and those in the gig economy. Support for firms is provided via the postponement of some tax deadlines and, to a greater extent, through loans and guarantees. The Paycheck Protection Program has been set up for small and medium-sized firms, through which the Small Business Administration guarantees loans under favourable conditions to sustain operating costs, primarily wages and salaries. These loans are expected to be forgiven for businesses that do not reduce their workforce. The $350 billion in funds allocated under CARES for this programme, which had already been completely used up by mid-April, were

[1] IMF, *Fiscal Monitor*, April 2020.

supplemented by a further $310 billion from the government. Around $450 billion have been pledged as guarantees for loans that the Federal Reserve could grant to large firms (see the box 'Central banks' response to the COVID-19 emergency').

In the United Kingdom, some £500 billion worth of measures have been approved (almost 23 per cent of GDP), two thirds of which are to ensure the supply of credit to firms by means of three instruments: the COVID Corporate Financing Facility, managed by the Bank of England on behalf of the Treasury, which will be able to purchase commercial paper from large firms that were in sound financial health prior to the crisis. For small and medium-sized enterprises, there is the Coronavirus Business Interruption Loan Scheme, which provides guarantees for bank loans of up to £5 million, for 80 per cent of the amount agreed, and the Bounce Back Loan Scheme, which instead guarantees the full amount for loans of up to £50,000. Other measures have involved the granting of tax relief to companies and the suspension of VAT (for a total of nearly £50 billion) and support for workers and households in difficulty (around £100 billion). Some £10 billion have been allocated for strengthening the national health system.

The Japanese government has approved a plan amounting to approximately 22 per cent of GDP (¥117 trillion), of which almost half (¥45 trillion) will provide loans to small and medium-sized enterprises from public financial institutions, such as the Japan Finance Corporation, and provide guarantees for loans granted by private banks. The other resources will be used to finance tax breaks for firms (¥26 trillion), direct payments to households and businesses (¥15 trillion) and for the health system (¥2.5 trillion). Around one tenth of the package is dedicated to relaunching the economy in the post-emergency phase, through incentives in the food service, tourism and recreation sectors, as well as investment in infrastructure.

In China, the government had initially planned measures worth 2,600 billion renminbi, or 2.5 per cent of GDP. About half of the resources allocated have already been used, mainly for the health sector (prevention and containment of the COVID-19 epidemic, production of health equipment and investment in the sector). Furthermore, spending on unemployment benefits has been accelerated, the tax deadlines for households and businesses have been postponed and payments for pension contributions have been suspended. The other half of these resources is set aside for increasing investment in infrastructure. On 17 April, additional measures amounting to 3 per cent of GDP were announced, which will enhance automatic stabilizers and expand investment. The latter will be financed through resources entered directly in the general government balance sheet, unlike in 2008-09, when the broad stimulus measures were mainly implemented through off-balance sheet financial vehicles.

According to the estimates formulated by the IMF at the beginning of April, the measures adopted in response to the pandemic are expected to increase the public deficit by almost 10 percentage points in the United States and by more than 6 points in the United Kingdom. Taking account of the tax package adopted in December to counter the restrictive effects of the rise in the consumption tax (equal to 1.9 per cent of GDP), the resources allocated in Japan to the public health emergency will lead to an increase in the deficit of more than 4 percentage points.

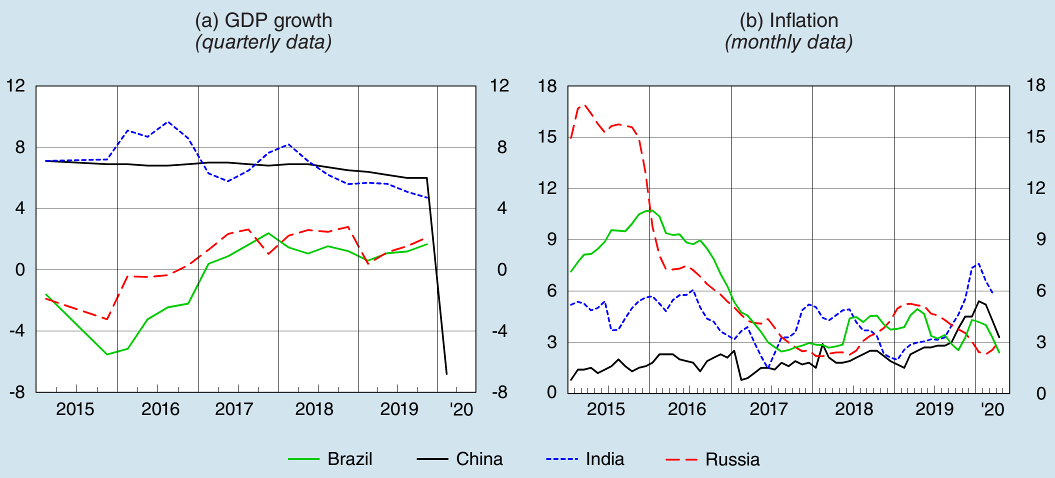
Despite the vigorous economic policy interventions, the IMF's forecasting scenarios from April, also prone to strong downside risks, show that the pandemic could cause a reduction of economic activity in the advanced countries of 6.1 per cent this year, with a recovery of only 4.5 per cent in 2021. GDP is likely to fall more markedly in the United Kingdom and in the United States, by 6.5 and 5.9 per cent respectively, and by just over 5 per cent in Japan. The debt-to-GDP ratio is expected to increase sharply everywhere, by more than 20 percentage points in the United States (to 131 per cent), and by more than 10 points in Japan and in the United Kingdom.

The main emerging economies. – In the emerging countries, the social and economic setbacks caused by both the domestic containment measures and the global repercussions are part of a context of greater fragility compared with the situation prior to the global financial crisis and could be deeper and more prolonged than those of that period. The gradual fading of the impetus for growth provided by trade integration has been flanked by a reduced drive for reform over the last decade, the fall in the price of raw materials and the greater indebtedness of firms, also in foreign currency. In 2019, weak growth had already led many countries to implement more expansionary monetary and fiscal measures, partly reducing the room for economic manoeuvre that was available when the crisis broke out.

Last year, GDP slowed to 6.1 per cent in China, barely above the minimum threshold for intervention, set by the government at between 6.0 and 6.5 per cent (Figure 1.3). This situation was not helped by the escalation of the trade war with the United States and the prudential measures introduced by the authorities to reduce firms' leverage and curb the expansion of the shadow banking system. The quality of smaller banks' exposures worsened, as they are more oriented towards lending to small and medium-sized enterprises. There were also some crises for intermediaries with limited assets and a growing number of defaults in the bond market.

Figure 1.3

GDP and inflation in the main emerging countries (1)

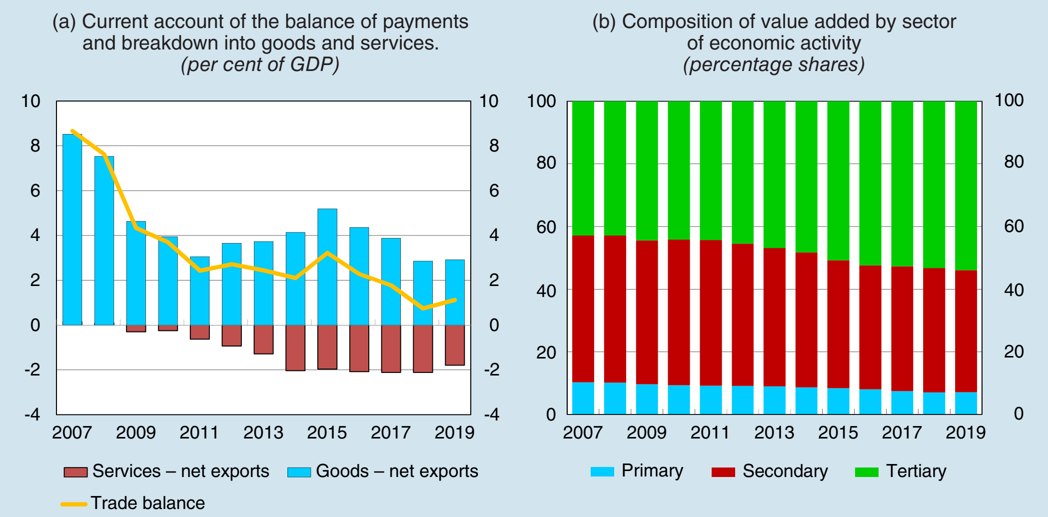


Source: National statistics.
(1) Year-on-year percentage change.

Economic activity continued to shift from manufacturing towards the service sector, which saw its share of GDP grow by nearly 1 percentage point (Figure 1.4). The steady reduction of the current account surplus reflects both the lower surplus in trade in goods and the greater deficit in that of services. This shift – which put China in second place in the world for imports of services, with a share of 8.6 per cent (above all because of the increase in outgoing tourist flows) – increased global exposure to the performance of Chinese demand.

Figure 1.4

Rebalancing of current account and supply in China



Sources: IMF and national statistics.

The rapid spread of the virus in January, coinciding with the beginning of the Chinese New Year, prompted the authorities to adopt exceptional containment measures, only in the epicentre city of Wuhan at first, and then gradually throughout the country. People's movement was limited, also via a reduction in public transport, and the closure of schools and non-essential production and retail activity was extended well beyond the time allotted for the New Year festivities. The Chinese authorities intervened across the board and swiftly on both the monetary and the fiscal fronts to support the economy.

In March, China slowly began to return to normal. Production was resumed above all in the industrial sector, especially electronic products and electrical machinery, while it remained more limited in services, with transport, food services and tourism hit heavily; these sectors account for around 10 per cent of total value added. GDP fell by around 6.8 per cent in the first quarter of 2020. According to IMF projections, GDP growth will come to a standstill at 1.2 per cent in 2020, the lowest figure since the launch of economic reforms in 1978.

In India, the growth rate fell to 5.3 per cent in 2019, affected by the weakness of private consumption and of investment. The first cases of the virus were recorded there at the beginning of March 2020, and increasingly stricter containment measures were introduced throughout the country. The Reserve Bank of India intervened with cuts to the reference rates, an easing of prudential requirements, purchases of public sector securities and support for the currency. The fiscal measures announced are intended to strengthen the health system and guarantee the population's access to basic necessities; tax incentives for small and medium-sized enterprises and public guarantees on bank loans are also envisaged. The IMF's latest estimates indicate that growth will slow to 1.9 per cent; the deficit should remain stable, while public debt will increase by 2.4 percentage points to 74.3 per cent. The impact of a large-scale spread of the coronavirus could be considerable in a country where, according to World Bank data, more than 80 per cent of the population work in the informal economy with no social welfare cover and around one fifth live in conditions of absolute poverty.

Growth in Brazil was moderate in 2019. The spread of the epidemic and the subsequent collapse of commodity prices have led to a deterioration in the outlook for the current year. The government announced interventions amounting to around 8 per cent of GDP, of which almost one fifth earmarked for cash transfers to 70 million informal and underemployed workers, who account for 40 per cent of the working-age population. The central bank has intervened repeatedly since March, also to sustain the exchange rate and with measures to increase liquidity equal to 17 per cent of GDP (around five times the amount injected after the global financial crisis). According to IMF estimates, GDP will shrink by 5.3 per cent in 2020.

In Russia, the outlook at the end of last year was moderately positive. Its economic policies, already accommodative in early 2020, became highly expansionary from March onwards in conjunction with the spread of the epidemic. The central bank first intervened to support the ruble, which was under pressure because of changes in oil prices, followed by liquidity injections, a cut to the reference rate and targeted regulatory measures. The government has adopted measures equal to 2.8 per cent of GDP. The collapse in the price of oil will have a strong impact on the country's finances, given that the oil sector accounts for about half of Russia's exports and tax revenues. According to IMF estimates, the public sector deficit will increase by 7 percentage points in 2020, to 4.8 per cent of GDP, and GDP will decrease by 5.5 per cent.

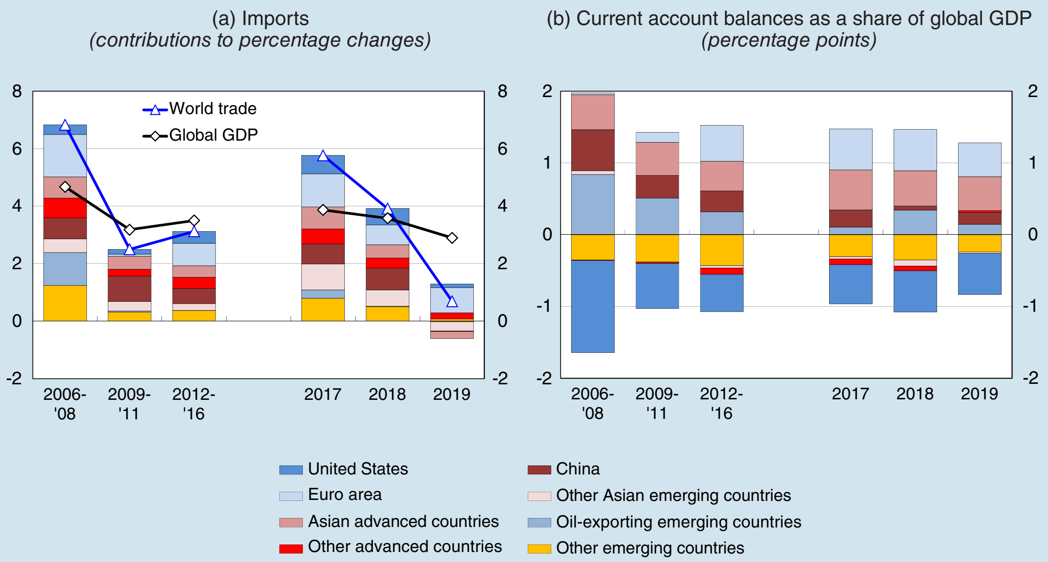
World trade

According to our estimates, trade in goods and services grew by less than 1 per cent in 2019, from 4.2 per cent in the previous year, affected by the slowdown in global economic activity and the heightened trade tensions between China and the United States. According to IMF data, the volume of trade in goods stagnated, reflecting the lower imports from the Americas and Asia (Figure 1.5) and a slight increase in trade in services. Current account imbalances as a share of global GDP subsided: while China's surplus increased, the euro area's surplus and that of oil-exporting countries decreased, as did the United States' deficit, albeit marginally.

The reaching of an initial trade agreement between the United States and China had increased optimism over the recovery of international trade. However, the economic crisis and the containment measures due to the spread of the COVID-19 epidemic have rapidly worsened the prospects for world trade in the current year. In the first quarter of 2020, exports of Chinese goods, valued at current prices in dollars, declined by more than 13 per cent compared with the same period in 2019.

Figure 1.5

International trade of goods and services by volume and current account balance in the main countries and areas



Source: Based on data from the IMF, *World Economic Outlook*, April 2020.

According to IMF estimates, world trade could shrink by 11 per cent overall in 2020. However, a high level of uncertainty persists over both the course of the pandemic and its effects on GDP and global trade, including the difficulties in making estimates in the event that global growth appears to be far removed from its long-term average.[2]

Given the nature of the shock, its effects will be heterogeneous in 2020. Trade in services will be hit hardest, especially the tourism sector, which accounted for about 7 per cent of total exports prior to the current crisis. Imports of energy products will also fall, as well as those with more complex value chains, such as technological and automotive products. Trade in medicines and medical products could increase; in 2019, they accounted for around 5 per cent of total exports and they were produced in a small number of countries: the top ten, which includes Italy, exported almost three quarters of the total. Germany, the United States and Switzerland covered 35 per cent of medicinal products exports and the first two countries plus China exported 40 per cent of personal protective equipment, such as masks, disinfectants and protective glasses.

Commodity prices and markets

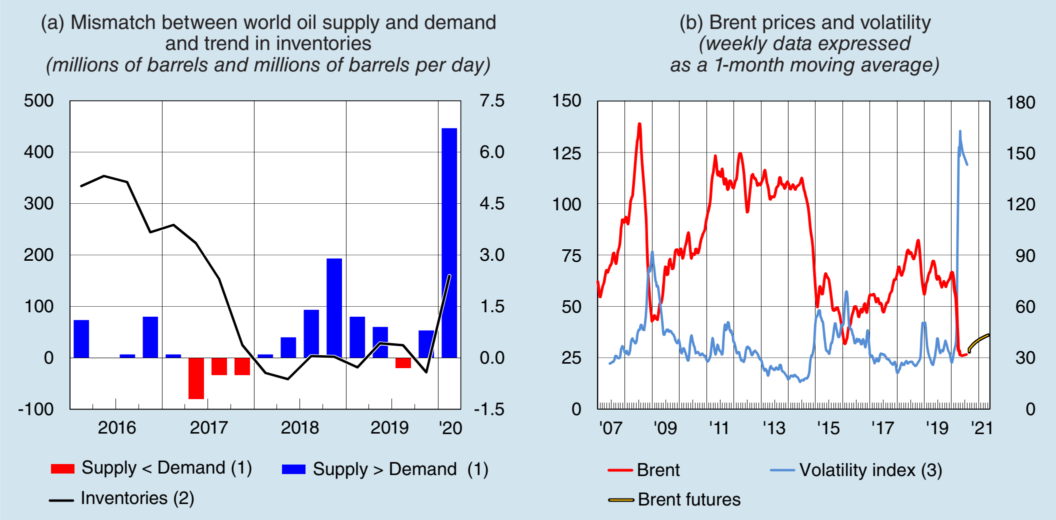
Oil prices. – Oil prices closed the year 2019 at $68 per barrel, with a rise of around 30 per cent in the year overall. According to the estimates of the International Energy Agency (IEA), the global demand for oil increased by 0.8 million barrels per day compared with 2018, while supply remained essentially unchanged, with a growth of

[2] A. Borin, V. Di Nino, M. Mancini and M. Sbracia, '*The cyclicality of the income elasticity of trade*', Banca d'Italia, Temi di Discussione (Working Papers), 1126, 2017; A.G. Gazzani, 'Can non-linearity of the income elasticity of trade be exploited for trade forecasting?', Banca d'Italia, Temi di Discussione (Working Papers), forthcoming.

just 0.2 million barrels per day, leading to a reduction in inventories (Figure 1.6.a). The relative weakness of demand was more than offset by the limiting of the supply, due in particular to the production cuts decided at the end of 2018 and then extended until March 2020 by OPEC countries and by other producers, including Russia (OPEC+).

Figure 1.6

Oil supply and demand and changes in price and volatility



Sources: Based on data from EIA, IEA and Refinitiv.
(1) Millions of barrels per day. Right-hand scale. – (2) Change compared with the average for the previous 5 years; millions of barrels. – (3) Implied volatility of futures (CBOEOVX); percentage points. Right-hand scale.

The oil market was, however, immediately affected by the crisis linked to the COVID-19 epidemic. The price of crude oil, which was already falling in February, tumbled in early March, coinciding with the failure of the OPEC+ negotiations for reviewing the production cuts. Global demand for oil has fallen markedly because of the drastic decrease in air traffic and the limited movement of people and goods. The IEA estimates, though with ample margins of uncertainty, that global demand for oil will contract by around 9 per cent in 2020 compared with the previous year. The price of oil fell by 67 per cent compared with the end of January, reaching $19 per barrel on 21 April, the lowest level in twenty years.

In April, OPEC+ reached an agreement to cut production by 9.7 million barrels per day, about 10 per cent of global production, in May and June, envisaging a subsequent and gradual reabsorption up until April 2022. The agreement avoids a battle between producers that could have further pushed down oil prices, but seems to be insufficient to boost prices, given the size of the drop in demand in the short term (20 million barrels per day in the second quarter of 2020 compared with 2019, according to the IEA's estimates).

The slope of the futures curve (given by the difference between the spot price and that of futures contracts with a one-year maturity) has inverted, turning positive with the spread of the epidemic and indicating an excess supply, as also shown by the rapid exhaustion of storage capacity. The volatility of futures contracts, a measure of the uncertainty of the oil market, which in March had reached unprecedented levels (Figure 1.6.b), subsequently remained at far higher levels than those recorded during the global financial crisis.

Such a rapid and intense fall in crude oil prices jeopardizes the profitability of a large part of the oil sector, also given the high costs of storing unsold crude oil. For oil-exporting countries in the Middle East and central Asia, whose budgets depend on crude oil prices, the fiscal breakeven price is higher than $60 per barrel in most cases, according to IMF estimates; in 2020, the budget deficit of these countries could therefore reach 10 per cent of GDP. Problems of financial sustainability are also emerging among companies that extract oil using unconventional technologies (shale oil), which are common in the United States, and are borrowing significantly from banks.[3] If oil, gas and coal prices stay at current levels, it could affect the process of transition towards a low-carbon economy that can be achieved by using alternative energy sources.

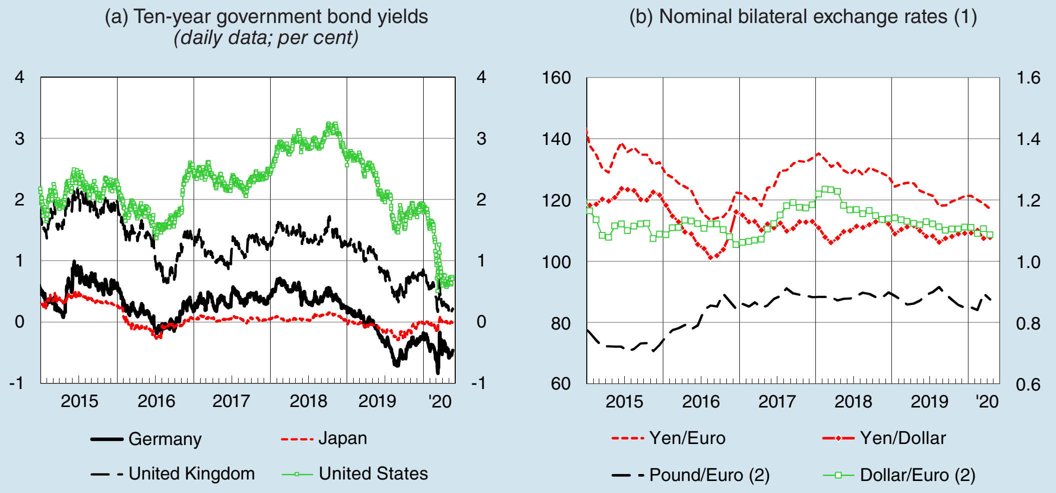
Other commodity prices. – The prices of other commodities, essentially stable in 2019, fell sharply following the pandemic in the early months of this year, mainly due to the weakening of global economic activity. In contrast, gold prices rose, confirming this metal's traditional role as a safe haven asset.

International financial markets

Over the course of 2019, the financial markets were affected by the further slowdown in global economic activity and by the uncertainty due to protectionist tensions, which resulted in occasional episodes of heightened volatility, particularly in the middle of the year. The more expansive stance of the Federal Reserve and of the other major central banks helped to keep conditions relaxed overall. The fall in long-term interest rates that began towards the end of last year continued (Figure 1.7).

Figure 1.7

Long-term interest rates and exchange rates in the main advanced countries



Sources: Refinitiv, the Bank of Italy and ECB.
(1) Units of the first currency per single unit of the second. – (2) Right-hand scale.

3 F. Ferriani, F. Natoli, G. Veronese and F. Zeni, '*Risk premium in the era of shale oil*', Banca d'Italia, Temi di Discussione (Working Papers), 1215, 2019.

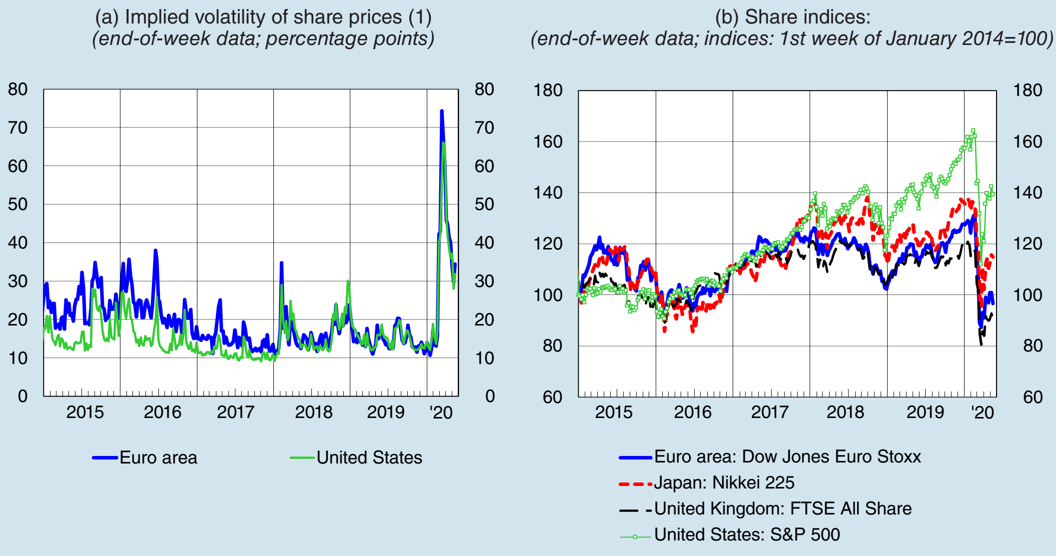
Risk premiums remained at historically low levels, including for corporate bonds with a lower credit rating. Stock prices recovered, reaching new highs, as the expectations of a resumption of the dialogue between the US and China and an agreement between the UK and the European Union gradually became more concrete.

In the emerging countries, last year ended with a rise in share prices, a moderate inflow of capital, a weakening of their currencies against the dollar and a reduction in the cost of sovereign debt (with the exception of Argentina, which launched a public debt restructuring in August).

This relaxed phase was brought to an abrupt halt by the spread of the epidemic, which resulted in a massive shift of investors' portfolios towards safer assets. The financial markets of advanced countries have seen all sectors hit by strong turbulence in a context of high risk aversion since the end of February: volatility has soared to above the levels reached during the global financial crisis (Figure 1.8). Share prices have accumulated losses in the order of 30 per cent in just a few weeks, with peaks of 50 per cent for securities in the most affected sectors, such as air transport and oil. In the United States, risk premiums on private sector bonds have increased rapidly, up to 11 percentage points for high yield securities and 5 percentage points for those with a higher credit rating. A significant proportion of the latter would lose their investment grade status if the main agencies reduced their rating, and would face significantly worse market access conditions.

Figure 1.8

Implied volatility and share indices in the main advanced countries



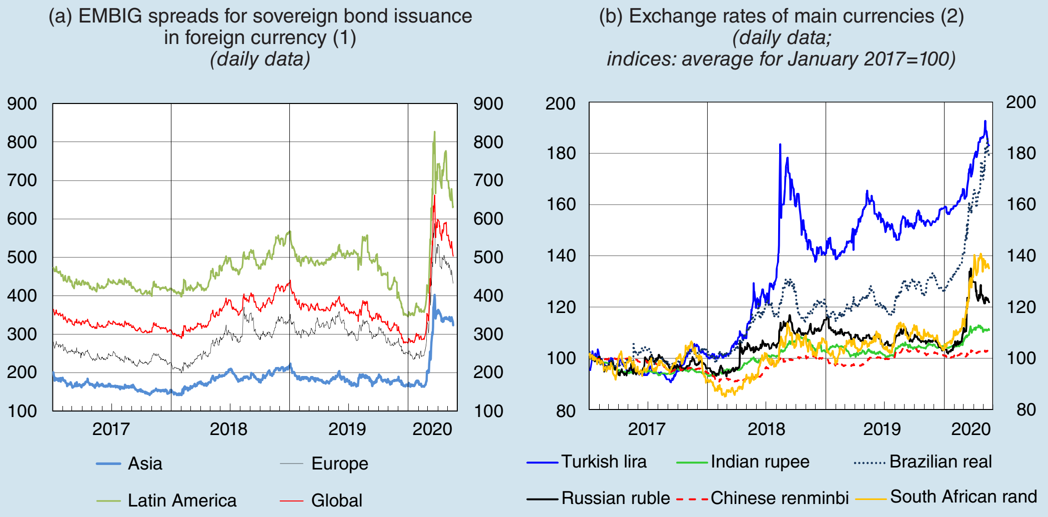
Source: Refinitiv.
(1) Stock market indices: VSTOXX for the euro area and VIX for the United States.

The marked increase in demand for liquidity has also had repercussions for several money market segments, undermining the ability of firms to finance their operations (in particular by issuing commercial paper) and of investment funds to cope with the peaks in investors' redemption requests. The US Treasury securities market has also experienced difficulties for instruments other than those with the shortest maturities. The increase in demand for liquidity has also been very strong on the international market for the dollar, which has appreciated rapidly against the other currencies, making dollar funding more expensive for companies and intermediaries from other countries.

The financial markets of the emerging economies have been severely hit by the sudden drop in the risk tolerance of international investors.[4] This has resulted in a general decline in share prices, an increase in sovereign spreads and a strong depreciation of currencies (Figure 1.9). The repercussions have been particularly severe for economies that export raw materials, including Brazil, Colombia and Mexico, and for countries with a greater need for external financing, such as Turkey and South Africa.

Figure 1.9

Sovereign spreads and exchange rates in the emerging countries



Sources: Based on IMF and Refinitiv data.
(1) J.P. Morgan Emerging Market Bond Index Global (EMBIG); the spread measures the difference between the yields on sovereign bond issues in foreign currency in the main emerging countries and the yields on US public sector bonds. – (2) Exchange rate against the dollar; an increase in the index signals a depreciation.

In the first quarter of this year, the emerging economies recorded the largest ever outflow of capital, almost $100 billion, or 0.4 per cent of their GDP. In countries with flexible exchange rate regimes, currency movements had initially helped to absorb the global shock.[5] Given the rapid deterioration of their economic fundamentals and the high exposure to foreign currency, some of these economies eventually had to intervene on the exchange market to limit excessive decreases, thereby eroding part of their foreign exchange reserves. The swap agreements and the repos activated by the Federal Reserve have increased the availability of dollars to the central banks of beneficiary countries, thus mitigating the pressures on currencies. However, foreign exchange markets remain tense, in particular in economies with

4 F. Ferriani, 'Portfolio flows to emerging markets in periods of stress: an event study perspective', Banca d'Italia, Temi di Discussione (Working Papers), forthcoming.

5 A. Ciarlone and D. Marconi, 'Financial spillovers to emerging economies: the role of exchange rates and domestic fundamentals', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 571, 2020.

lower currency reserves and more foreign currency debt. This weakness is exacerbated by considerable increases in the cost of debt.

Central bank and government interventions since the end of March have helped to ease the tensions on global financial markets (see the box 'Central banks' response to the COVID-19 emergency'). However, the improvement has only been partial, given the marked deterioration in the underlying conditions and the uncertain prospects for the recovery of the world economy.

The measures adopted by the international financial institutions. — The leading international financial institutions have responded promptly to the public health emergency by adopting measures to give immediate economic support to the countries affected. The IMF has extended the recourse to loans envisaged in emergency situations, such as natural disasters and conflicts, which are not conditional on the adoption of an economic adjustment programme. The financing ceilings have been increased, commensurate with the IMF shares subscribed by individual countries, in relation to the Rapid Financing Instrument (RFI), which can benefit all members, and to the Rapid Credit Facility (RCF), which is reserved for low-income member countries and has favourable lending conditions. Since the outbreak of the pandemic, more than 100 countries have applied to the IMF, and a total of over $20 billion in funding has been allocated to more than 50 of them.

The IMF's Executive Board has also approved the Short-term Liquidity Line (SLL), a new precautionary short-term funding line for countries with strong fundamentals, designed to address the risk of capital outflows to which emerging economies are especially subject during this phase.

The current allocation of resources by the IMF's Poverty Reduction and Growth Trust (PRGT) — for subsidized loans (including those granted via the RCF) to low-income countries — could prove insufficient, and negotiations are under way to strengthen it. To provide further support to the poorest economies, the IMF has eased the eligibility criteria for the Catastrophe Containment and Relief Trust (CCRT), through which 29 countries will be able to benefit from the suspension of debt servicing payments to the Fund, for a maximum of up to two years.

In order to increase official reserves at global level, the IMF has also proposed a new $500 billion special drawing rights allocation, €16 billion of which would go to low-income countries. The United States has been opposed to this up until now.

An important measure to support low-income countries, promoted by the World Bank and the IMF and endorsed by the G20, provides for the suspension of debt service payments until the end of 2020 by all official bilateral creditors. The beneficiaries are countries with no outstanding debts with the Fund and the World Bank that have applied for funding from the IMF through the RFI and the RCF.

Multilateral development banks have pledged $200 billion to address the health emergency, broaden social safety nets and provide liquidity and guarantees for loans to firms; the total amount is more than double compared with the average financial commitments borne over the last five years.

In addition to expressing its full support for all the measures adopted by the international financial institutions, in April, the G20 approved the Action Plan to deal with the health and economic emergency in a coordinated way; the Plan will be constantly updated as the crisis unfolds.

THE EURO-AREA ECONOMY

2. THE ECONOMY AND FISCAL POLICIES OF THE EURO AREA

In 2019, the euro area's GDP grew by 1.2 per cent, which was well below the forecasts formulated one year earlier; the slowdown occurred across all the major countries. The industrial sector weakened, especially in Germany, where economic activity registered an abrupt fall, particularly in the automotive sector. The main factor contributing to the slowdown in GDP was the performance of foreign trade.

Since late February of this year, the COVID-19 epidemic has progressively spread to all the euro-area countries. The resulting decline in households' and firms' spending and the adoption by many governments, starting in March, of measures to contain the epidemic has led to a sharp contraction in economic activity, at a time when a slowdown had already begun in late 2019. The available indicators point to a further, widespread drop in the spring. Employment has also been affected, declining in all the major countries.

Consumer price inflation decreased to 1.2 per cent in 2019 as a whole, owing to the sharp deceleration in energy prices; the core component remained stable at 1.0 per cent for the second consecutive year. Inflation has weakened further since March 2020 in connection with the marked drop in demand.

Individual countries have launched sizeable fiscal interventions to contain the impact of the pandemic and support households, workers and firms. According to the European Commission's forecasts, published on 6 May, net borrowing will reach 8.5 per cent of GDP for the euro-area countries on average in 2020 (0.6 per cent in 2019). The debt-to-GDP ratio is expected to increase by almost 17 percentage points on average compared with 2019, to above 100 per cent.

The European institutions have expanded the room for manoeuvre in individual countries' public budgets, making the use of Structural Funds and the rules on State aid more flexible and permitting temporary deviations from the common fiscal rules. Furthermore, new credit lines for Member States have been introduced. These are worth €340 billion under a temporary support instrument to mitigate the unemployment risks connected to the emergency and an additional, enhanced precautionary credit line provided by the European Stability Mechanism. A guarantee fund to mobilize resources for firms (€200 billion) has also been introduced by the European Investment Bank. Lastly, the European institutions have agreed to work on the establishment of a recovery fund intended to provide an adequate response to the crisis.

Cyclical developments

GDP grew by 1.2 per cent in 2019, slowing compared with the previous year in all the main economies (Table 2.1). Industrial activity contracted, mainly owing to the sharp decline in Germany.

Table 2.1

GDP in the major euro-area countries (1)
(percentage changes on previous period)

	2017	2018	2019	2019				2020
				Q1	Q2	Q3	Q4	Q1
Euro area (2)	2.5	1.9	1.2	0.5	0.1	0.3	0.1	-3.8
France	2.3	1.7	1.3	0.4	0.3	0.3	-0.1	-5.8
Germany	2.5	1.5	0.6	0.5	-0.2	0.3	-0.1	-2.2
Italy	1.7	0.8	0.3	0.2	0.1	0.1	-0.3	-4.7
Spain	2.9	2.4	2.0	0.6	0.4	0.4	0.4	-5.2

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.

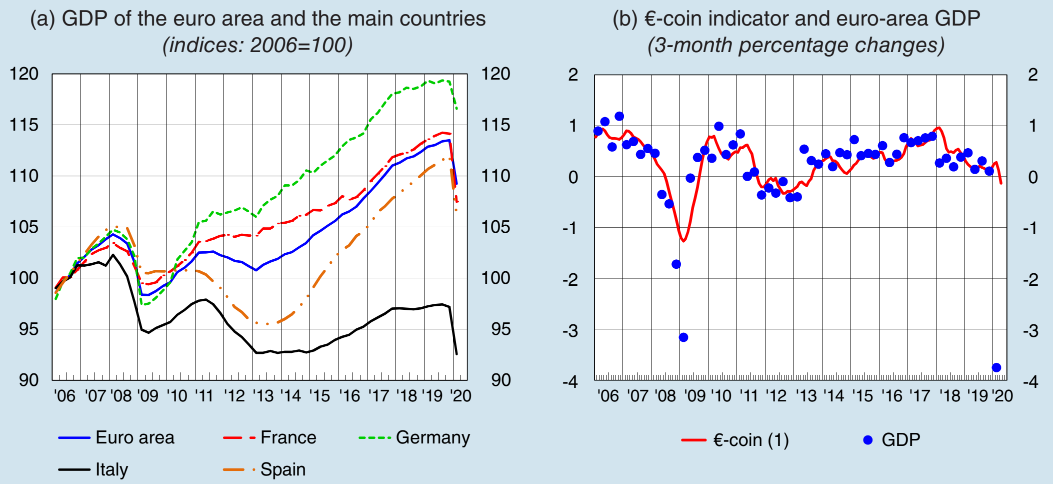
In the euro area as a whole, gross fixed investment rose, with France and Germany recording the greatest increases among the main economies. Household consumption also grew, benefiting from the increase in disposable income. GDP was held back by the performance of international trade, which subtracted 0.5 percentage points to growth, whereas in 2018 its contribution was positive by 0.4 points. In 2019, as imports accelerated, exports eased to 2.5 per cent, from 3.3 per cent in 2018, owing to the continuing trade tensions.

In the first quarter of 2020, economic activity suffered the effects of the spread of the epidemic, recording a contraction of 3.8 per cent, the largest since the launch of the Economic and Monetary Union. The fall affected all the major countries. The halt in economic activity across numerous sectors was also determined by the measures taken by governments to contain the spread of the virus. This led in March to a 0.1 per cent reduction in employment in Germany and in Italy (where it was somewhat mitigated by the operation of wage supplementation schemes; see Chapter 8, 'The Labour Market'), and to a fall of 1.8 per cent in Spain (where there was a further decline of 3.6 per cent in April). Employment fell by 0.2 per cent in the euro area as a whole on average in the first three months of the year.

The data for April indicate that the outlook for the second quarter is very negative. The Bank of Italy's €-coin indicator, which provides a monthly estimate of GDP growth in the euro area (net of short-term volatility) has declined considerably, from 0.28 in February to -0.13 (Figure 2.1.b). The purchasing managers' indices (PMIs) fell to their lowest levels since the beginning of the time series in manufacturing and in services, for which the decline was especially marked. According to the European Commission's surveys, the composite indicator of household and business confidence (ESI), calculated on incomplete data, fell drastically in the euro area as a whole. In France, the household and business confidence indicators published by INSEE declined. In Germany, the ZEW indicator, which aggregates the sentiment of about 300 experts in economics and finance, after falling in March to its lowest level since December 2011, picked up in the following two months, although it is still recording a sharp deterioration in the assessments of the current economic situation. The IFO indicator, which measures business confidence for German firms, fell to historical lows. The European Commission's Employment Expectations Indicator (EEI), which reflects firms' hiring plans, recorded a sharp drop both in the euro area on average (-30.1 percentage points) and in the major countries (-22.6 points in France and -14.8 points in Germany).

Figure 2.1

Euro-area GDP and the €-coin indicator



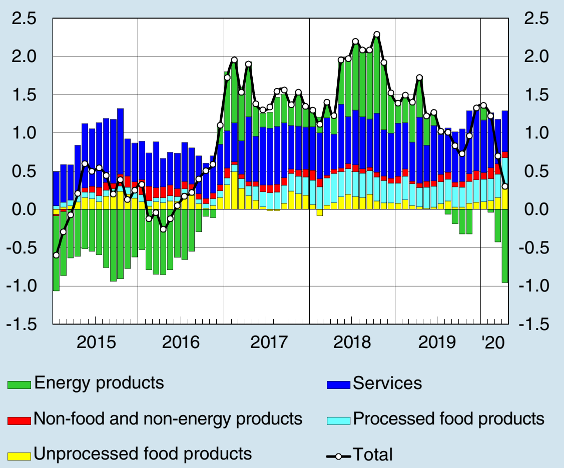
Sources: Bank of Italy and Istat.
(1) See the section dedicated to the €-coin indicator for April 2020 on the Bank of Italy's website, '€-coin: April 2020'.

Prices and costs

In 2019, consumer price inflation in the euro area fell to 1.2 per cent, from 1.8 per cent the previous year. In all the main economies, the growth in prices was lower than in 2018, reaching 1.4 per cent in Germany, 1.3 per cent in France and 0.6 per cent in Italy. Net of the most volatile components, inflation remained modest at 1.0 per cent, as in the two previous years. The growth in service prices remained more resilient at 1.5 per cent (Figure 2.2), as opposed to virtual stagnation for non-energy goods (0.3 per cent). The energy component slowed considerably, from 6.4 per cent in 2018 to 1.1 per cent.

Figure 2.2

Euro-area inflation and contributions of its components (1)
(monthly data; 12-month percentage changes and percentage points)



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

Inflation declined sharply in early 2020, to 0.7 per cent in March and 0.3 per cent in April. The collapse of oil prices since the beginning of the year, which intensified in March and April, was a contributing factor (see Chapter 1, 'The global economic situation, economic policies and world trade') as was the sudden drop in demand caused by the spread of the epidemic. In April, core inflation stood at 0.9 per cent and energy prices fell by 9.7 per cent. The almost total shutdown in many countries of a number of segments in the service sector, such as hotel, restaurant and transport services, together with difficulties encountered by most of the statistics offices in collecting data on prices, suggest caution in interpreting the inflation figure for April.

The health emergency impacted inflation expectations. Those formulated for 2020 by the analysts surveyed by Consensus Economics fell from 1.1 per cent in March to 0.3 per cent in May, while those reported by the analysts interviewed for the European Central Bank's Survey of Professional Forecasters declined from 1.2 per cent in January to 0.4 per cent in May. Stronger indications may be inferred from the financial markets by looking at the long-term maturities: in the first week of May, the inflation expectations as implied by inflation swap yields over the two-year horizon stood at 0.3 per cent, those over the five-year horizon at around 0.5 per cent.

The financial markets

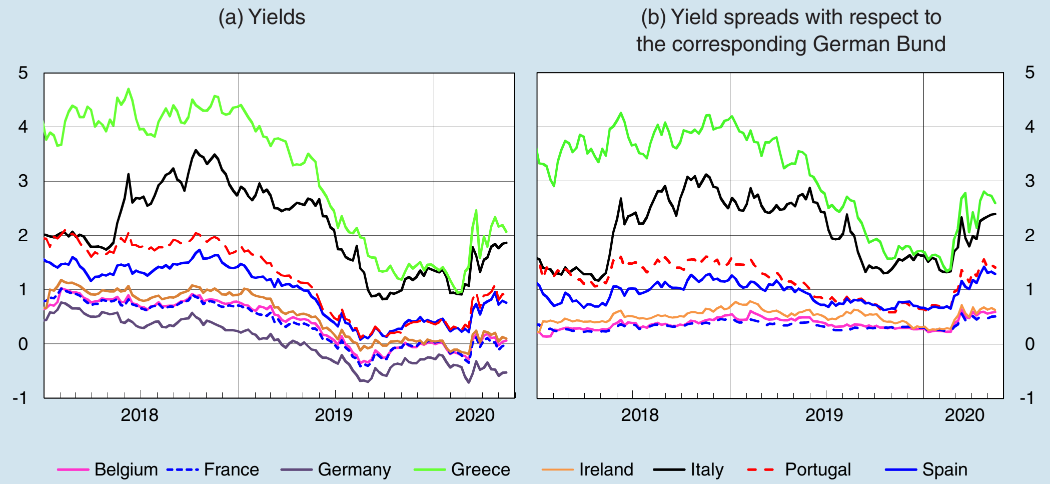
In 2019, the euro-area financial markets benefited substantially from the easing of monetary conditions in the main advanced economies, aimed at tackling signs of an economic slowdown and a weakening of the domestic inflationary dynamics. Persistent uncertainty over the trade relations between the United States and China and over the process of the United Kingdom's withdrawal from the European Union (Brexit) has led to temporary increases in investor risk aversion which, at times of peak tension, have sparked a rebalancing of portfolios towards financial assets considered safer. The yields on German ten-year government bonds declined; they have been negative since the spring of last year, although they rose slightly in the autumn (Figure 2.3.a). Sovereign credit risk premiums decreased significantly, benefiting, among other things, from the ECB's monetary policy (Figure 2.3.b). Risk premiums on corporate bonds fell as well, in both the investment grade and high-yield segments. The euro area's general stock market index rose by about 20 per cent, compared with 8 per cent for that of the banking sector.

In the first four months of 2020, financial market conditions worsened considerably with the spread of the COVID-19 epidemic, which led to a rapid downward revision of the macroeconomic outlook.

An initial phase of severe market tensions began at the end of February, as the public health emergency spread rapidly across Europe and measures to contain the epidemic were gradually adopted. Investors' preferences were directed towards safe-haven assets, leading to an appreciation of currencies considered safer, such as the yen and the Swiss franc. The volatility of government bond yields increased rapidly and sovereign credit risk premiums rose markedly in all euro-area countries (see the box 'The financial markets' reaction to the spread of the pandemic' in Chapter 14).

Figure 2.3

Government securities yields and spreads
(end-of-week data; percentage points)



Source: Based on Bloomberg data.

Market tensions have intensified since the second week of March, despite the launch of the first measures to support the economy. Market participants continued to liquidate their higher-risk financial assets, creating a downward spiral of sell-offs and illiquidity, which amplified the fall in prices. In the most critical phase, the sales extended to assets considered safer, against the backdrop of high volatility and market participants' urgent need for liquidity. This led to a sharp increase in government bond yields. There was an unprecedented fall in share prices: in the euro area, between 21 February and 18 March the general stock market index fell by 36 per cent and the banking index by 48 per cent. The volatility implied in share index options reached the highest levels recorded during the 2008-09 global financial crisis. Firms' financing costs increased rapidly, reflecting a marked rise in corporate credit risk premiums.

Market tensions decreased significantly as a result of the measures taken by governments and the Eurosystem to counter the recessionary effects of the pandemic, preserve the monetary policy transmission mechanism and stabilize the financial markets. The exceptional scale of these interventions made it possible to reabsorb part of the increase in euro-area sovereign spreads, also fostering a recovery in share prices and a reduction in the volatility and spreads of private sector bonds.

In April and May, the prices of financial assets in the euro area continued to show strong fluctuations, triggered by sudden increases in investor risk aversion, caused in turn by the release of markedly negative data on the economic situation in the euro area and globally. There was heightened uncertainty surrounding the prospects for the containment measures in the advanced countries and the implementation of a common budgetary response at euro-area level in support of the economy.

Between the beginning of 2020 and 19 May, the euro area general stock market index fell by 22 per cent, and that for the banking sector by 47 per cent. The yields on ten-year government bonds fell by 28 basis points in Germany and to a lesser extent in the Netherlands and France (by 17 and 13 basis points respectively), while those in the most vulnerable countries rose (by 40 basis points in Greece, 32 in Portugal, 22 in Italy and 17 in Spain).

Response to the COVID-19 emergency by the European institutions

In order to mitigate the economic effects of the COVID-19 pandemic, the European institutions have intervened by strengthening existing instruments and introducing new ones. These interventions are in addition to the fiscal measures adopted by the Member States (see the box 'The discretionary fiscal policies of the main euro-area countries in response to the COVID-19 emergency') and to the monetary policy measures decided by the Governing Council of the ECB, including the new pandemic emergency purchase programme (PEPP; see Chapter 3, 'Monetary policy in the euro area') and the measures introduced by the Single Supervisory Mechanism (SSM; see Chapter 13, 'Banks and institutional investors').

THE DISCRETIONARY FISCAL POLICIES OF THE MAIN EURO-AREA COUNTRIES IN RESPONSE TO THE COVID-19 EMERGENCY

The main emergency measures adopted in Germany, France and Spain[1] following the COVID-19 outbreak aimed to strengthen national health services, support the income of workers and households, and alleviate firms' cash-flow problems (for a description of the action taken in Italy, see Chapter 11, 'The public finances'). Overall, these measures, most of which enable higher expenditure, are expected to increase general government net borrowing in 2020 by more than 4.5 per cent of GDP in Germany,[2] almost 2 per cent in France and more than 3 per cent in Spain (4.5 per cent in Italy). Governments have also strengthened the system of public guarantees on credit to the economy with measures which, in terms of GDP, amount overall to about 25 per cent in Germany, 14 per cent in France and over 9 per cent in Spain (over 30 per cent in Italy).

Germany. – The Bundestag approved an increase in the federal deficit for 2020 of more than €150 billion, of which about €30 billion due to lower revenues. Together with the macroeconomic deterioration, these measures would bring this year's deficit to around 7 percentage points of GDP, against a surplus of nearly 1 percentage point estimated in the autumn. The main measures include: (a) increased expenditure for managing the pandemic, including health expenditure (€55 billion); (b) one-off grants to small firms and self-employed workers, with a maximum individual amount of €15,000 (€50 billion); (c) an increase in unemployment benefits and the introduction of transfers to cover housing and heating costs (a total of €7.5 billion); (d) increased expenditure

1 The data on GDP and those relating to the measures adopted and their impact on net borrowing are taken from the respective Stability Programmes for 2020 of the countries concerned.

2 The reported value essentially relates to the effect of the discretionary measures adopted by the federal government.

on the development of a vaccine and for the purchase of personal protective equipment (€3.5 billion).

Public guarantees have been expanded by over €800 billion,[3] both those being granted by the federal states (*Länder*) (€63 billion) and those provided by the federal government through guarantee banks, the *Kreditanstalt für Wiederaufbau* state-owned development bank (more than €350 billion), and the new Economic Stabilization Fund (€400 billion). The latter fund was set up also to finance programmes to acquire shares in companies (up to €100 billion) and to guarantee loans (up to €100 billion).

France – The French Parliament has approved measures that increase net borrowing by €42 billion. In light of the worsening in the macroeconomic situation and of the measures adopted, the government's estimate for this year's deficit is 9 per cent of GDP (against around 2 per cent estimated in autumn 2019). The main measures include: (a) a wage subsidy scheme for employees in the event of reduced working hours, with total coverage for salaries up to 4.5 times the minimum wage (€24 billion); (b) additional expenditure in the healthcare sector for the purchase of equipment and for staff remuneration (€8 billion); and (c) the establishment of the *Fonds de solidarité* for aid of at least €1,500 for micro-businesses and self-employed workers who have suffered a fall in turnover of at least 50 per cent (€7 billion).

Allocations for state participation in some strategic companies (€20 billion) were also increased, as was the endowment for the *Fonds de développement économique et social* for loans to firms in difficulty (€1 billion).

Lastly, the French government introduced three state guarantee schemes: two of these involve Bpifrance (a development bank) for, respectively, commercial loans and credit lines for firms with up to 5,000 employees; the third relates to new funding granted to all types of firm. Overall, these schemes provide €300 billion of state guarantees on loans to firms.

Spain. – As a result of the measures adopted and the sharp contraction of GDP, the government estimates that net borrowing for the current year will rise to just over 10 percentage points of GDP (up from around 2 percentage points last autumn). The measures put in place increase net borrowing by around €35 billion and are mainly aimed at: (a) supporting the income of workers by allocating about €23 billion, to a large extent by strengthening wage supplementation instruments; (b) increasing the resources available to the healthcare system by more than €4 billion; (c) strengthening aid to the most vulnerable households (€1.1 billion), including subsidies for rent and mortgages. The discretionary measures have led to a fall in revenues of around €6 billion, partly because of the increased flexibility in tax collection and tax relief.

[3] This sum also includes some guarantees that require a provision to be made, and this will therefore have an effect on the deficit regardless of whether they are called or not. These provisions are equal to €1.6 billion.

Overall, the state guarantees that were introduced amount to approximately €105 billion, of which €100 billion in loans from financial institutions to small and medium-sized enterprises and to self-employed workers.

With a first package of measures (Coronavirus Response Investment Initiative, CRII),[1] the European Commission allowed for more flexibility in the use of European Structural Funds[2] and mobilized the Solidarity Fund to provide financial assistance to the countries most affected by the public health emergency. At a later stage, this package was complemented by additional measures (Coronavirus Response Investment Initiative Plus, CRII+) intended, among other things, to make transfers between programmes and regions more flexible and to allow Member States to ask for projects linked to the COVID-19 emergency to be fully funded by the European Union in the budget year 2020-21.

As part of State aid regulation, the Commission adopted on 19 March a Temporary Framework[3] to increase the space available to governments to meet firms' financing needs under less restrictive conditions than those in force.[4]

As the outlook worsened, the European Commission recognized that the conditions existed for activating the general escape clause of the Stability and Growth Pact, which permits temporary deviations from the medium-term budgetary objective or from the adjustment path toward it and a redefinition of the terms, recommended by the EU Council, for correcting the deficit or excessive debt situations.[5] On 23 March, the EU Council endorsed the Commission's assessment.[6]

At its meeting on 23 April,[7] the European Council endorsed the agreement on a package of three measures: (a) a temporary support instrument to mitigate unemployment risks in an emergency (SURE); (b) the EIB Guarantee Fund for business

1 Regulation (EU) 2020/460 of the European Parliament and of the Council of 30 March 2020 amending Regulations (EU) No 1301/2013, (EU) No 1303/2013 and (EU) No 508/2014 as regards specific measures to mobilize investment in Member States' health systems and other sectors of their economies in response to the COVID-19 epidemic.

2 In particular, the European Commission has decided that countries will not be obliged to refund unspent pre-financing received in 2019. It also provided for the Structural Funds to be used to mitigate the effects of the pandemic, including by funding healthcare expenditure, supporting the working capital of firms and providing aid to households.

3 European Commission, 'Communication from the Commission, Temporary Framework for State aid measures to support the economy in the current COVID-19 outbreak', 2020/C 91 I/01, 2020.

4 Under the Temporary Framework, the European Commission has increased the maximum total amount of direct grants and loans (the latter at zero interest rate) up to a nominal value of €800,000 per company. It has also provided for guarantees with up to 100 per cent coverage. Moreover, it has also extended the scope of the Temporary Framework twice: on 3 April, the changes were, among other things, aimed at preserving jobs and speeding up research and development activities in relation to COVID-19; then, on 8 May, it also allowed public sector interventions aimed at recapitalizing firms in difficulty or providing them with subordinated debt.

5 European Commission, 'Communication from the Commission to the Council on the activation of the general escape clause of the Stability and Growth Pact', COM(2020) 123 final, 2020.

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

7 European Council, 'Conclusions of the President of the European Council following the video conference of the members of the European Council, 23 April 2020', press release, 23 April 2020.

financing; (c) a new precautionary credit line to deal with the pandemic emergency (Pandemic Crisis Support) provided by the European Stability Mechanism (ESM) for public expenditure directly or indirectly linked to countering the pandemic. EU Heads of State and Government called for the package of the three safety nets to be in force as of 1 June. The loans available under SURE and Pandemic Crisis Support total €340 billion, while the EIB Guarantee Fund can mobilize up to €200 billion.

On 19 May, the EU Council adopted SURE. By means of this instrument, EU countries will be granted loans under favourable terms to help finance expenditure incurred from 1 February 2020 in relation to temporary wage supplementation schemes or equivalent measures, including for self-employed workers (see Chapter 8, 'The labour market'). The Fund will have a maximum capacity of €100 billion, which the European Commission will obtain by raising funds on capital markets, benefiting from the EU's credit rating. The loans will be backed by the EU budget and by guarantees provided by Member States in proportion to their gross national income. The total amount of guarantees will be €25 billion and the financial assistance, granted by the Council on a proposal from the Commission, will become available after all Member States have provided their guarantees. The instrument will be operational until the end of 2022, with a possible extension if the Commission considers that the economic impact of the epidemic persists.

On 16 April 2020, the EIB Board of Directors approved the establishment of a €25 billion guarantee fund financed by the Member States according to their shares in the capital of the EIB and from external contributions (from the EU budget, for example). The Fund will be operational as soon as a group of Member States, accounting for at least 60 per cent of the EIB's capital, have made the necessary commitments. It will mainly be able to guarantee loans provided by financial intermediaries, mobilizing up to €200 billion, to companies that are high-risk, but potentially profitable in the long run, and facing liquidity problems relating to the COVID-19 pandemic. This guarantee fund is in addition to a package of emergency measures (guarantee schemes and liquidity facilities for banks, as well as asset-backed securities purchasing programmes) announced last March by the EIB Group, which includes the European Investment Fund (EIF). These measures will mobilize up to €40 billion of financing for SMEs and mid-caps affected by the crisis. In addition, the EIB has earmarked around €6 billion for investment in the health sector; it expects to contribute €5 billion to the response to COVID-19 outside the European Union.

The ESM Pandemic Crisis Support, operational since 15 May, is available to Member States upon request. The only requirement to access these funds is that they will be used to finance the direct and indirect costs of healthcare, treatment and prevention connected with the pandemic. Each country may borrow up to 2 per cent of its 2019 GDP. Therefore, the maximum amount that can be provided in total is around €240 billion. At its meeting on 8 May,[8] the Eurogroup agreed that the loans granted through this credit line, available until the end of 2022, would have an average maturity of no more than ten years and an interest rate that incorporates, besides the financing cost of the ESM, an additional payment of around 13 basis points per year. The loans will not be

[8] The Council of the European Union, 'Eurogroup statement on the Pandemic Crisis Support', press release, 8 May 2020.

conditional on adopting economic policy measures. Monitoring, which will be limited to the allocation of the resources used, will be carried out as part of the European Semester.

At its meeting on 23 April, the European Council agreed to continue to work on the establishment of a fund to finance the expenditure necessary to support economic recovery in EU countries (the Recovery Fund). To this end, it mandated the Commission rapidly to present a proposal that could provide an adequate response to the crisis, targeting the hardest hit sectors and geographical areas, and clarify how this will link in with the Union's multiannual financial framework.

Fiscal policies

Budget outturns. – In 2019 the average deficit of euro-area countries increased slightly by 0.2 percentage points of GDP, to 0.6 per cent: the 0.4 percentage point reduction of the primary surplus in relation to GDP was partly compensated by the decline in interest expenditure, which diminished by 0.2 percentage points, benefiting from the expansionary monetary policy.

According to the latest European Commission estimates, the euro-area fiscal policy stance, measured as the change in the cyclically adjusted primary surplus, was slightly expansionary, against the backdrop of a positive output gap. In Germany and the Netherlands, where the debt-to-GDP ratio is below the 60 per cent threshold, the fiscal stance was neutral; it was restrictive in Italy.

The debt-to-GDP ratio declined by 1.8 percentage points to 86 per cent, continuing a trend begun in 2015. In addition to the primary surplus, the decrease was basically due to the effect of the differential (about 1 percentage point) between nominal GDP growth and the average cost of the debt. Among the largest economies in the euro area, Italy was the only country where nominal GDP growth was significantly below the cost of debt (-1.3 per cent; see the box 'The spread between the average cost of the debt and nominal GDP growth: recent trends and outlook', Chapter 11, *Annual Report for 2018*, 2019).

The COVID-19 pandemic and the European Commission's forecasts of fiscal variables. – In the latest European Commission forecasts, released on 6 May, the combined effect of the sharp contraction in GDP and the expansionary measures adopted by the various countries brings euro-area public debt to 102.7 per cent of GDP in 2020, up from 86.0 in 2019. The increase is seen across all the euro-area economies, reflecting the global nature of the public health emergency. The rise in the debt-to-GDP ratio is around 16 percentage points in Germany, 18 in France, 20 in Spain and 24 in Italy. The mechanical effect stemming from the decrease in GDP, the denominator in the ratio, accounts for less than 20 per cent of the increase in Germany, 40 per cent in France, and about 50 per cent in Spain and in Italy.

To mitigate the consequences of the COVID-19 pandemic, governments have approved significant measures to boost national health services, to support the income of workers and households, and to alleviate the cash-flow problems of households and firms (see the box 'The discretionary fiscal policies of the main euro-area countries in response to the COVID-19 emergency').

Climate change commitments

There is ample scientific evidence of the effects of climate change, which has significant economic repercussions. According to some studies,[9] the spread and the social costs of pandemics could be worsened by the environmental pollution arising from the use of fossil fuels. Therefore, given the current health crisis, it is even more important to reduce greenhouse gas emissions.

Since the ratification of the Kyoto Protocol in 2002, the European Union has been committed to implementing policies to counter climate change. The first integrated package of measures, which entered into force in 2009, aimed to reduce greenhouse gas emissions by 20 per cent by 2020 compared with 1990 levels, with a 20 per cent increase in the share of renewable energy and a 20 per cent improvement in energy efficiency. According to the latest report of the European Environment Agency (EEA),[10] Italy is one of the few EU countries to have reached all three of these goals. The second package, adopted in 2014,[11] set more ambitious goals to be achieved by 2030, bringing the targets to 40, 32 and 32.5 per cent respectively.

Last December, the European Commission presented the European Green Deal, which further raised its greenhouse gas emission reduction target for 2030 to at least 50 per cent and announced the commitment to reduce it to zero by 2050. In keeping with these objectives, last January the Commission presented the European Green Deal Investment Plan[12], with the aim of using public resources and unlocking private funds through European guarantee facilities to mobilize at least €1 trillion in sustainable investments over the next decade; these funds will be supplemented by those provided by the EIB.

In its April forecasts,[13] the International Energy Agency (IEA) expected greenhouse gas emissions to fall by almost 8 per cent in 2020 compared with 2019. This is the largest ever reduction since the end of the Second World War and greater than that recorded in 2009, which had been the largest to that date and also one that followed a deep recession. However, the reduction in emissions will be permanent only to the extent that production systems – and the energy sector in particular – achieve greater structural sustainability. Contributions to this development will come from the wider use of renewable energy and better energy efficiency, the deployment of new working practices (teleworking and videoconferencing) and the promotion

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[9] D.E. Bloom, D. Caderette and J.P. Sevilla, 'Epidemics and Economics', *Finance & Development*, 55, 2, 2018, 46-49; R. Jordan, 'How does climate change affect disease?', Stanford Earth, School of Earth, Energy and Environmental Sciences, Stanford, 2019; Xiao Wu et al., 'Exposure to air pollution and COVID-19 mortality in the United States: A nationwide cross-sectional study', medRxiv.org, 2020.

[10] EEA, *Trends and Projections in Europe 2019. Tracking progress towards Europe's climate and energy targets*, EEA Report, 15/2019.

[11] European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. A policy framework for climate and energy in the period from 2020 to 2030, COM (2014) 15 final, 2014.

[12] European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Sustainable Europe Investment Plan European Green Deal Investment Plan, COM(2020) 21 final, 2020.

[13] IEA, *Global energy review 2020. The impacts of the Covid-19 crisis on global energy demand and CO2 emissions*, Flagship report, April 2020.

of public investment in the digital technologies sector to extend the geographical reach of existing infrastructures in order to guarantee access to the most vulnerable communities and to enable a redefinition of the way energy is produced and used. Last April, the World Bank, in cooperation with the International Telecommunication Union (ITU), presented an immediate action plan to develop digital technologies.[14] In the same month, in a speech on coordinated EU action to combat the pandemic and its consequences, the President of the European Commission stressed the importance of steering the recovery towards a greener and more digital Europe.

[14] World Bank, ITU, GSMA and World Economic Forum, 'Digital Development Joint Action Plan and Call for Action, COVID-19 Crisis Response', 2020.

3. MONETARY POLICY IN THE EURO AREA

In 2019, the ECB Governing Council eased monetary conditions to counter the weakening of the outlook for growth and inflation. It adopted a broad package of measures, including a reduction in the key interest rates, the resumption of net asset purchases under the expanded asset purchase programme (APP), and the introduction of a new series of targeted longer-term refinancing operations (TLTRO III).

Since March 2020 the ECB Governing Council has intervened decisively, introducing new measures intended to deal with the serious risks to economic activity posed by the spread of the COVID-19 epidemic and to guarantee the orderly transmission of monetary policy in all the euro-area countries. To support lending to households and firms, the ECB stepped up refinancing operations: it reduced TLTRO III rates (from already negative levels), it increased the overall amount of funds that may be borrowed (up to about €3,000 billion), and it introduced new longer-term refinancing operations on particularly favourable terms. To counter the risk of segmentation and ensure accommodative monetary conditions, it strengthened the APP, increasing its envelope until the end of the year; it introduced the new pandemic emergency purchase programme (PEPP), which allows flexible and decisive intervention in the different markets and countries, moving beyond the self-imposed limits on asset purchases set in previous years and considering the widening in sovereign spreads as a risk to be countered in order to guarantee the effective transmission of monetary policy. These two programmes mean that overall asset purchases for more than €1,000 billion will be made over the course of 2020.

The Council has announced that, if necessary, the amount and composition of the PEPP will be reviewed in order to make it more effective; it reiterated that it stands ready to make further use of the other instruments at its disposal to ensure that all sectors of the economy, including the public sector, can benefit from accommodative borrowing conditions and an ample availability of funds. This action, which is complementary to that of the national governments and the EU institutions (see the box 'The discretionary fiscal policies of the main euro-area countries in response to the COVID-19 emergency', Chapter 2), will remain oriented to alleviating the economic consequences of the epidemic and to enabling a swift and decisive recovery in growth and inflation once the emergency has come to an end.

Monetary policy action

The macroeconomic outlook for the euro area deteriorated over the course of 2019. The ECB Governing Council therefore extended the phase of ample monetary accommodation. In its March and June 2019 meetings, it revised its forward guidance, extending the minimum time horizon in which it expects to keep the key interest rates unchanged. It also announced TLTRO III operations, to be conducted on a quarterly basis between September 2019 and March 2021, with pricing that, like the previous programme, serves as an incentive to banks to lend to households and firms.

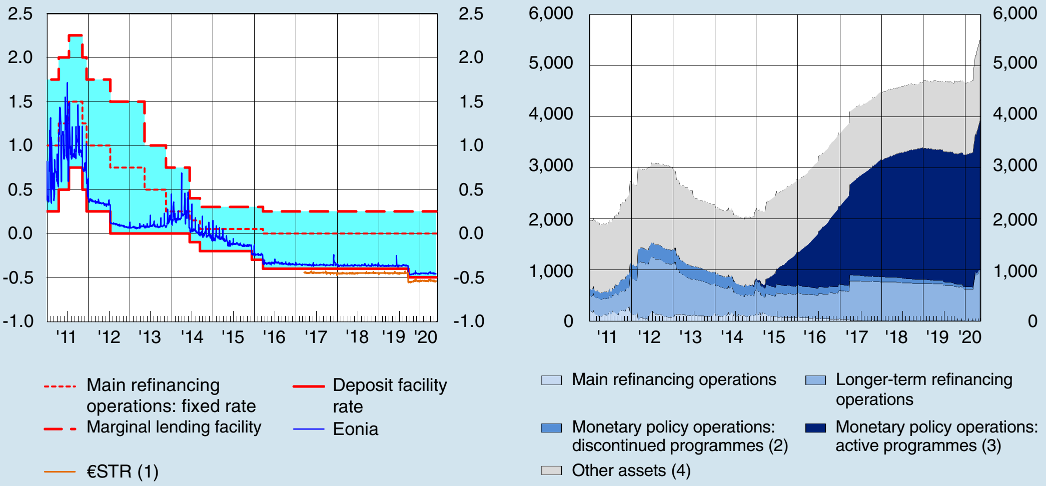
During the summer, signs of deterioration in the euro-area's macroeconomic outlook intensified; there was an increased risk of a permanent reduction in medium- and long-term inflation expectations to levels not consistent with the definition of price stability. In line with its commitment to act with the same determination whether deviations in inflation are above or below its aim by taking a symmetric approach to achieve price stability, the Governing Council adopted a broad package of expansionary measures.

In September, the Governing Council lowered the Eurosystem deposit facility rate by 10 basis points, to -0.50 per cent (Figure 3.1.a), and announced that it expected the key interest rates to remain at their present or lower levels until the inflation outlook converged robustly to a level sufficiently close to 2 per cent. It decided to restart net purchases under the APP at a monthly pace of €20 billion for as long as necessary. It reduced the interest rate on TLTRO III operations and extended their maturity. The Governing Council also introduced a two-tier system for remunerating banks' reserves, exempting a part of their holdings from the Eurosystem's negative deposit facility rate. This latter decision was taken to mitigate the risk that negative key interest rates could, beyond a certain level, have the undesired effect of hindering banks' ability to supply credit to the economy.

Figure 3.1

Official interest rates in the euro area and the Eurosystem's consolidated balance sheet

(a) Official and money market rates *(daily data; per cent)* | (b) Eurosystem consolidated balance sheet: assets *(weekly data; billions of euros)*



Sources: ECB and Refinitiv.
(1) As of 2 October 2019, the €STR is a new overnight benchmark rate for the euro-area money market. For the period prior to 2 October, the figure shows the pre-€STR rate. Starting on 2 October and until the end of 2021, the Eonia is calculated as the €STR plus a fixed spread of 8.5 basis points. – (2) The first and second covered bond purchase programmes (CBPP and CBPP2) and the securities markets programme (SMP). – (3) 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, starting on 26 March 2020, the pandemic emergency purchase programme (PEPP). – (4) Marginal lending facility, gold and other assets denominated in euros and foreign currency.

Taken together, these decisions had a positive effect on lending conditions and on the euro area's macroeconomic environment (see the box 'The impact of the measures adopted by the ECB'). At the same time, the Governing Council reiterated the need for fiscal policy to provide better targeted support for aggregate demand, which would also buttress the expansionary effect of monetary policy.

THE IMPACT OF THE MEASURES ADOPTED BY THE ECB

In response to the weakening in the economic outlook that began in 2019 and the abrupt deterioration triggered at the start of this year by the spread of the COVID-19 epidemic, the ECB Governing Council introduced new measures to sustain the flow of credit to households and firms, preserve the transmission of monetary policy across the euro area, ensure the functioning of financial markets and support economic activity.

Since March 2020, the ECB Governing Council has increased the envelope of net purchases of securities, which it had resumed in November 2019 under the expanded asset purchase programme (APP). It has also introduced a new pandemic emergency purchase programme (PEPP) for public and private sector securities; it has launched new longer-term refinancing operations (LTROs) and pandemic emergency longer-term refinancing operations (PELTROs) on very favourable terms; and it has improved the conditions of current and upcoming longer-term refinancing operations (TLTROs).[1]

These instruments were immediately effective.[2] The impact of the resumption of the net purchases under the APP and of the rate cuts decided last autumn was felt as early as mid-June 2019, when the Governing Council's announcements pointed to greater monetary accommodation. During the summer, the yields on long-term public and private sector securities fell substantially; the ten-year overnight indexed swap rate decreased by more than 30 basis points; long-term inflation expectations (five-year, five years forward, implied by inflation swaps) rose by about 20 basis points to 1.3 per cent.

The impact of the PEPP, introduced on 18 March 2020, on financial markets was even greater: following its announcement, the yields on long-term government securities fell significantly across the euro area. The yield spreads of ten-year sovereign bonds against the corresponding German Bund fell for all euro-area countries; for Italian bonds, the spread returned to values below 200 basis points on average in the last ten days of March, from levels that were about 50 basis points higher around the middle of the month. The reduction in yields caused by the strengthening of the APP and the launch of the PEPP can be attributed above all to the compression of term premiums (see the figure). Over the same period, the general Italian stock market index recovered approximately 10 per cent; the euro weakened against the

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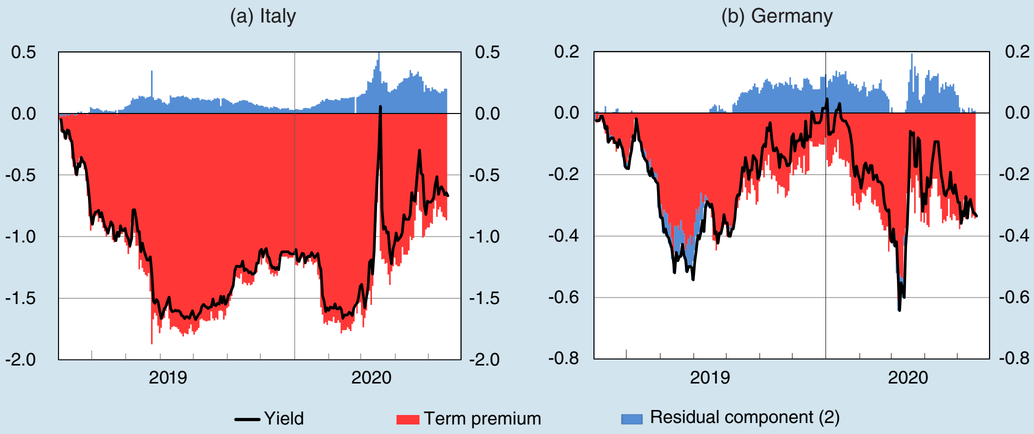
[1] For an overview of the measures adopted in March 2020, see the box 'The monetary policy measures adopted by the ECB in March 2020', *Economic Bulletin*, 2, 2020.

[2] For more details see also 'The euro-area economy and the recent monetary policy decisions', speech by Ignazio Visco, Governor of the Bank of Italy, Giornate di economia 'Marcello De Cecco', Lanciano (Italy), 28 September 2019.

dollar (-2.1 per cent), partly as a result of the strong demand for the US currency in connection with worsening financial market turbulence.

Figure

Cumulative change in Italian and German ten-year government bond yields starting from the Governing Council meeting of June 2019 and components of the change (1)
(daily data; per cent)



Sources: Based on Bank of Italy and Deutsche Bundesbank data.
(1) Estimates made using the model proposed in T. Adrian, R.K. Crump and E. Moench, 'Pricing the term structure with linear regressions', *Journal of Financial Economics*, 110, 1, 2013, 110-138. – (2) Includes all factors other than term premiums, such as the component for expectations about short-term interest rates and liquidity risk.

The effectiveness of these instruments in recent years is confirmed by the studies conducted by the Bank of Italy and the ECB. There is evidence that government bond purchases significantly reduce term premiums. In addition, when nominal short-term interest rates reach their effective lower bound, the impact of asset purchases is greater the higher the volatility of long-term yields.[3]

Other studies show that the corporate sector purchase programme (CSPP), announced in March 2016, has led to a widespread improvement in the euro-area's bond market: econometric estimates based on corporate bonds issued between the start of 2016 and the end of 2018 suggest that the CSPP led to a decrease of equal size in the spreads of yields at issue for both eligible and ineligible bonds. This suggests that there were also indirect effects at play in this dynamic, transmitted from eligible bonds to their closest substitutes through the portfolio rebalancing channel.[4]

Analyses carried out by the Bank of Italy and the Eurosystem show that TLTROs have contributed to supporting credit access conditions for households and firms

[3] G. Grande, A. Grasso and G. Zinna, 'The effectiveness of the ECB's asset purchases at the lower bound', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 541, 2019; F. Eser, W. Lemke, K. Nyholm, S. Radde and A.L. Vladu, 'Tracing the impact of the ECB's asset purchase programme on the yield curve', European Central Bank, Working Paper Series, 2293, 2019.

[4] A. Zaghini, 'The CSPP at work: yield heterogeneity and the portfolio rebalancing channel', *Journal of Corporate Finance*, 56, 2019, 282-297; T. Mäkinen, F. Li, A. Mercatanti and A. Silvestrini, 'Effects of central bank holdings of corporate bonds', Banca d'Italia, Temi di Discussione (Working Papers), forthcoming.

throughout the euro area and in Italy.[5] These operations (including the new LTROs and PELTROs introduced starting last March) are particularly important at this stage, when there is a growing risk that banks, households and firms do not have sufficient liquidity to cope with the financial challenges posed by the spread of the epidemic and by the resulting containment measures (especially the restrictions on mobility and the partial interruption in production).

All the studies agree that in recent years the measures taken by the Governing Council have contributed greatly to supporting the economy and prices. According to the ECB's estimates, between 2015 and 2019 the average annual contribution of these measures to the euro area's GDP growth and inflation was about 0.5 and 0.3 percentage points respectively.[6]

The Governing Council, in response to the emergency sparked by the pandemic, reiterated that it is fully prepared, if necessary, to do everything within its mandate, including increasing the size of its asset purchase programmes and adjusting their composition and distribution between market segments to ensure the smooth transmission of its monetary policy in all jurisdictions of the euro area.[7]

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5 M. Benetton and D. Fantino, 'Competition and the pass-through of unconventional monetary policy: evidence from TLTROs', Banca d'Italia, Temi di Discussione (Working Papers), 1187, 2018; D.C. Andreeva and M. García-Posada, 'The impact of the ECB's targeted long-term refinancing operations on banks' lending policies: the role of competition', European Central Bank, Working Paper Series, 2364, 2020; L. Esposito, D. Fantino and Y. Sung, 'The impact of TLTRO2 on the Italian credit market: some econometric evidence', Banca d'Italia, Temi di Discussione (Working Papers), 1264, 2020.

6 See 'The monetary policy toolbox: evidence from the euro area', speech by Philip R. Lane, Member of the Executive Board of the ECB, at the 2020 US Monetary Policy Forum, New York, 21 February 2020.

7 ECB, 'ECB announces €750 billion Pandemic Emergency Purchase Programme (PEPP)', press release, 18 March 2020.

In early 2020, the spread of the COVID-19 epidemic sparked a rapid and severe deterioration in the growth outlook and triggered strong financial market turbulence. In March and April, the Governing Council adopted a comprehensive set of new measures to promptly mitigate the serious economic consequences of the health crisis and to counter risks to the smooth functioning of the monetary policy transmission mechanism in all the euro-area countries.

First, it strengthened measures to support bank lending to households and firms. To this end, it further reduced the cost of TLTRO III operations to -1 per cent for banks that reach the lending threshold set by the incentive mechanism, and increased the amount that counterparties can borrow from 30 to 50 per cent of their stock of eligible loans, corresponding to approximately €3,000 billion. It also announced the new longer-term refinancing operations (LTROs), at a cost equal to the average deposit facility rate and maturing in June 2020, coinciding with the settlement of the fourth TLTRO III operation. Subsequently, at its April meeting, it decided to launch from the end of May a new series of pandemic emergency longer-term refinancing operations (PELTROs), maturing in the third quarter of 2021 and with an interest rate 25 basis points below the average rate applied in the main refinancing operations. To allow intermediaries to take full advantage of these operations, the Council also eased, until the end of September 2021, the eligibility criteria and the risk mitigation measures for assets used as collateral. It also took steps to limit the impact on collateral availability of potential downgradings of public and private sector securities by rating agencies.

Second, to counter market turbulence and to preserve favourable funding conditions for households, firms, banks and governments, it decided on an additional envelope of €120 billion for further net purchases under the APP. Subsequently, during an extraordinary meeting, it introduced the pandemic emergency purchase programme (PEPP), which shall remain in effect until the emergency comes to an end and in any case until the end of 2020. The PEPP has an overall envelope of €750 billion to carry out purchases of public and private sector securities, including commercial paper of sufficient credit quality, in a flexible manner over time, across asset classes and among jurisdictions. Under the programme, the Governing Council will consider revising its self-imposed limits on the purchase of securities, in particular its issue and issuer limits, when necessary. It pointed out that the widening in sovereign spreads is a risk to the transmission of monetary policy. If needed, the allocation of purchases across jurisdictions may deviate from the ECB capital key. The announcement and implementation of the programme had an immediate, significant impact, restoring less tense financial market conditions (see the box 'The impact of the measures adopted by the ECB').

The set of measures adopted is an attempt to counter the impact of the spread of the epidemic and the resulting containment measures on the economy and to ensure more favourable borrowing conditions for households, firms, banks and general government, which must raise the financial resources to manage the crisis.

The Governing Council is fully prepared to increase the size of the PEPP and to adjust its composition by as much as necessary and for as long as needed. It confirmed that it stands ready to intervene further using all the instruments available and, within its mandate, to take the actions necessary to support the euro-area economy and to restore inflation to levels that are in line with the price stability objective.

On 5 May, the Governing Council took note of the decision of the German Federal Constitutional Court, which partially upheld certain challenges brought by individuals regarding purchases made by the ECB under the PSPP. The Council clarified that it remains fully committed to doing everything necessary within its mandate to ensure that inflation returns to levels consistent with its own medium-term aim and that the monetary policy actions adopted are transmitted to all parts of the economy and to all jurisdictions of the euro area. It noted that the Court of Justice of the European Union ruled in December 2018 that the ECB is acting within its price stability mandate.[1]

Monetary policy operations

The Eurosystem has continued to provide liquidity to banks through fixed-rate tenders with full allotment of the amounts requested. At the end of 2019, the funding

[1] ECB, 'ECB takes note of German Federal Constitutional Court ruling and remains fully committed to its mandate', press release, 5 May 2020; Court of Justice of the European Union, Judgment of the Court of 11 December 2018, Case C-493/17.

provided through refinancing operations amounted to €624 billion. Faced with the pandemic emergency, euro-area credit institutions made greater recourse to these operations, mainly through the additional LTROs (Table 3.1); liquidity provided rose by €325 billion, to €949 billion at the end of April (see Figure 3.1.b). In March, the ECB and the other major central banks engaged in a coordinated action to enhance the provision of liquidity in dollars, making the standing US dollar liquidity swap line arrangements with the Federal Reserve more attractive; at the end of April, euro-area counterparties had requested funding of about $140 billion.

Table 3.1

Funds allotted through TLTRO III and the additional LTROs
(billions of euros)

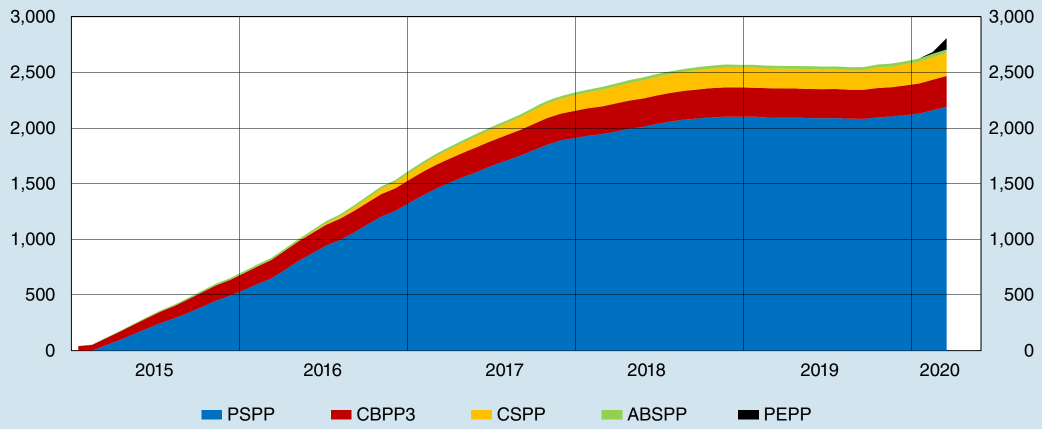
TYPE OF OPERATION AND SETTLEMENT DATE	Euro area		Italy	
	Gross amount	Net amount (1)	Gross amount	Net amount (1)
TLTRO III September 2019	3.4	-28.4	0.4	-2.9
TLTRO III December 2019	97.7	-49.1	32.6	-18.9
TLTRO III March 2020	115.0	22.4	35.1	0.4
Additional LTROs (2)	312.2	–	63.7	–

Sources: ECB and Bank of Italy.
(1) The net amount of the funds allotted is calculated taking into account voluntary repayments made by counterparties under TLTRO II. – (2) Total allotted through the weekly operations carried out between 18 March and 30 April, with maturity date of 24 June 2020.

Since last November, when net purchases under the APP resumed, the Eurosystem has purchased securities under this programme amounting to approximately €160 billion. It has also continued to reinvest in full the principal payments from maturing securities. Between its launch on 26 March and 30 April, the amount of public and private sector securities purchased under the PEPP amounted to €119 billion (Figure 3.2).

Figure 3.2

Developments in the portfolios of assets purchased under the APP and the PEPP
(monthly data; billions of euros)



Source: ECB.

At the end of April the book value of the portfolio of public and private sector securities purchased under the APP alone totalled €516 billion and €2,189 billion respectively; of these, €61 billion and €343 billion were held by the Bank of Italy (Table 3.2). In March and April, Italian government securities were purchased at a rate of more than €10 billion a month under the APP (Table 3.3); there were further purchases for even more significant amounts under the PEPP.[2]

Table 3.2

Securities held for monetary policy purposes under the APP (1)
(billions of euros)

	Eurosystem		of which: Bank of Italy	
	31 Dec. 2019	30 Apr. 2020	31 Dec. 2019	30 Apr. 2020
CBPP3	263.6	277.7	39.2	40.2
ABSPP	28.4	30.9	0.0	0.0
PSPP	2,102.9	2,189.3	315.5	342.9
CSPP	184.5	207.1	19.8	21.0

Sources: ECB and Bank of Italy.
(1) At amortized cost. Under the PEPP, the stocks of public and private securities purchased by the Eurosystem equalled €119 billion at 30 April 2020.

Table 3.3

Italian government securities purchased through the PSPP (1)
(billions of euros)

	Cumulative net purchases (2)	Monthly net purchases (3)
January 2020	368.3	4.6
February 2020	370.6	2.3
March 2020	382.5	11.9
April 2020	393.4	10.9

Source: ECB.
(1) Includes purchases made by the Bank of Italy and by the ECB (equal on average to 90 and 10 per cent of the total respectively). The breakdown by country of purchases made under the PEPP will be published bimonthly on the ECB's website. – (2) Total net purchases at the end of the month. – (3) Difference between the acquisition cost of all purchase operations and the redeemed nominal amounts.

Overall, the excess liquidity held by the banking system at the end of April 2020 amounted to €2,053 billion (€1,712 billion at the end of 2019); that of Italian intermediaries was €110 billion.

Interest rates and the euro exchange rate

Short-term interest rates remained close to the negative deposit facility rate; they fell further after the cut in the official rates in September 2019 (see Figure 3.1.a). The launch in October 2019 of the two-tier system for banks' reserve remuneration led to a more homogeneous redistribution of liquidity across jurisdictions and

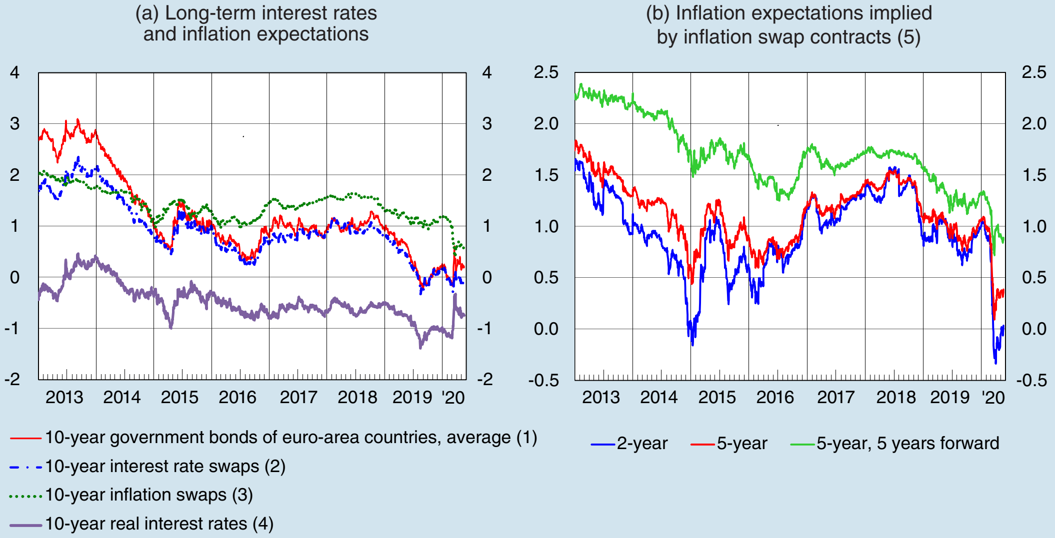
[2] The breakdown by country of purchases under the PEPP will be published bimonthly on the ECB's website.

across banks. The greater incentives for intermediaries seeking higher returns on their excess liquidity to engage in trades did not lead to tensions on money market rates.[3]

In 2019, the deterioration in the growth and inflation outlooks resulted in a marked reduction in nominal long-term yields, which in the second part of the year reached historically low levels. In March of this year, financial market tensions connected to the spread of the COVID-19 epidemic led to a sharp increase in the yields on public and private sector securities, including those with higher credit ratings, heightening the risks to a smooth transmission of monetary policy stimulus. Tensions eased somewhat after the launch of the PEPP; the yields on ten-year government bonds averaged 0.2 per cent in the main euro-area countries on 19 May 2020 and long-term real interest rates reached -0.7 per cent on the same date (Figure 3.3.a).

Figure 3.3

Long-term interest rates and inflation expectations in the euro area
(daily data; per cent)



Sources: Based on Bloomberg and Refinitiv data.
(1) Average yields on the benchmark 10-year government bonds of Austria, Belgium, Finland, France, Ireland, Italy, the Netherlands, Portugal, Spain and Germany, weighted by GDP at constant 2019 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.

Inflation expectations implied by euro-area inflation-linked swap contracts, after a gradual decline in the first half of 2019, stabilized in the remainder of the year, partly as a result of monetary policy measures. With the spread of the epidemic in early 2020, inflation expectations once again fell sharply, reaching in mid-March their lowest levels since 2004, when these types of contracts were first listed. At 19 May, the expectations over the two- and five-year horizons stood

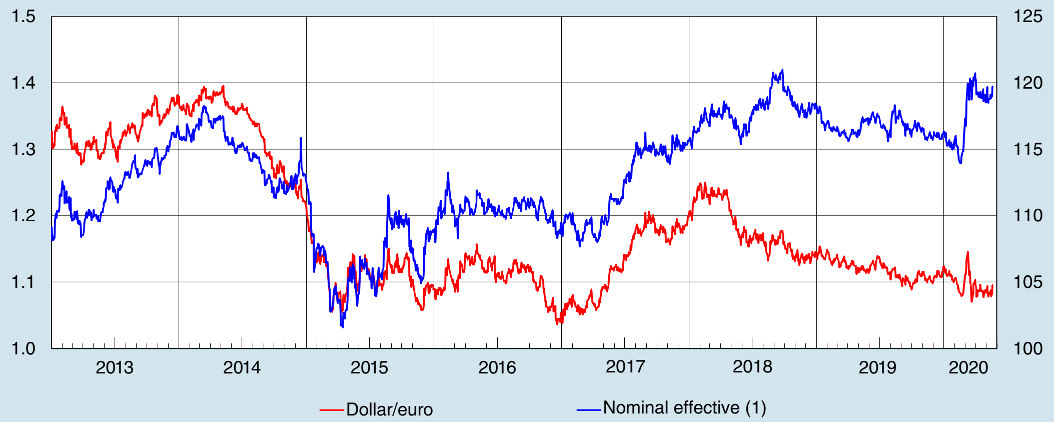
[3] A. Secchi, 'A two-tier system for remunerating banks' excess liquidity in the euro area: aims and possible side effects', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 534, 2019.

at 0.0 and 0.4 per cent respectively; the five-year, five years forward expectations stood at 0.9 per cent (Figure 3.3.b).

Over the course of 2019 the euro depreciated, reflecting the risks of a slowdown in the euro-area economy. Since the beginning of this year, it has fluctuated widely against the US dollar; it has strengthened rapidly in nominal effective terms, affected by the substantial depreciation of the currencies of some emerging economies (Figure 3.4).

Figure 3.4

Dollar/euro exchange rate and nominal effective exchange rate of the euro
(daily data)



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

Money and credit

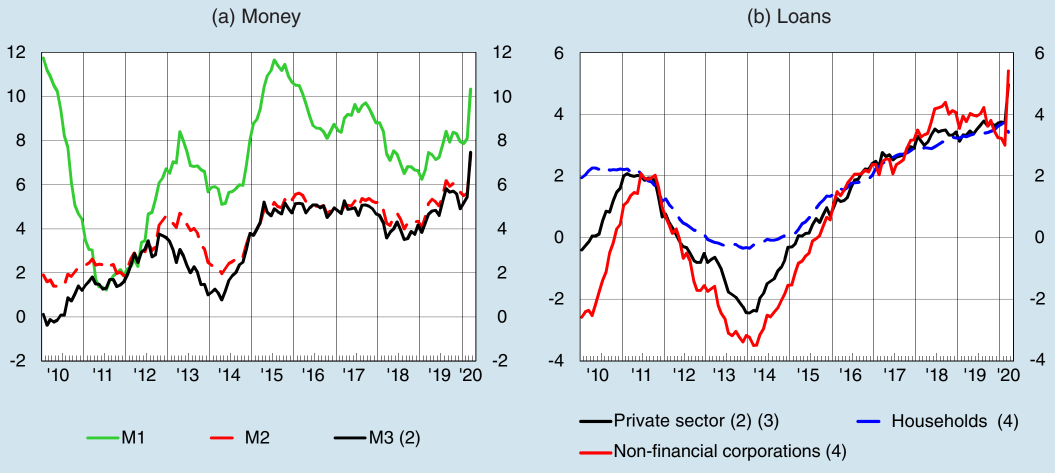
In 2019 and the first two months of 2020, M3 growth became stronger, buoyed mainly by the low opportunity cost of holding more liquid assets. In March, it grew even more robustly (7.5 per cent year-on-year; Figure 3.5.a), reflecting the expansion in lending by banks to the private sector.

Last year and in the early months of 2020, before the effects of the pandemic became apparent, the growth in bank loans to the private sector picked up slightly (3.7 per cent in the twelve months ending in February 2020, from 3.4 per cent in December 2018; Figure 3.5.b). The increase in new loans to households continued to be solid; lending to firms has decreased since September, owing to the slowdown in economic activity.

In the short term, the spread of the COVID-19 epidemic has increased demand for credit by firms, whose need for liquidity has risen as a result of the measures taken to contain the pandemic and the consequent decline in revenue. In the euro area, the twelve-month growth rate of loans to non-financial corporations rose to 5.4 per cent in March; in Italy, the increase, similar to that of all the major countries, was 1.6 per cent, from -1.1 per cent in February (Figure 3.6.a). By contrast, lending to households slowed (to 3.4 per cent in the euro area, from 3.7 per cent in February).

Figure 3.5

Monetary and credit aggregates in the euro area (1)
(monthly data; 12-month percentage changes)

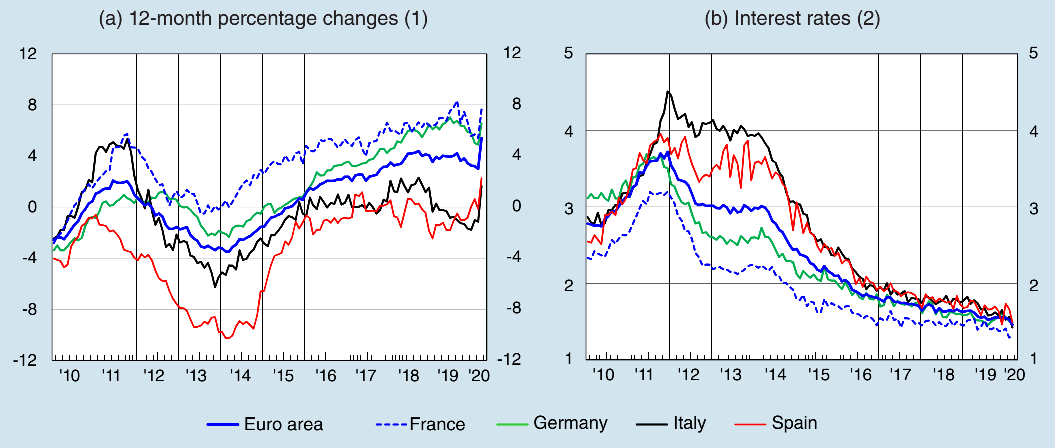


Source: ECB.
(1) Changes calculated on data adjusted for seasonal and calendar effects. – (2) From June 2010 onwards, the data do not include repos with central counterparties. – (3) Loans in euros and other currencies granted by monetary financial institutions (MFIs), adjusted for the accounting effects of securitizations. 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. – (4) Loans in euros and other currencies granted by MFIs, adjusted for the accounting effects of securitizations.

The effects of the expansionary measures adopted by the ECB Governing Council in 2019 were transmitted to the cost of borrowing, which fell further. The average interest rates on new loans were at historical lows in March 2019 for both loans to households for house purchase (to 1.4 per cent, from 1.8 per cent in December 2018) and to firms (to 1.3 per cent, from 1.5 per cent in December 2018; Figure 3.6.b).

Figure 3.6

Loans to non-financial corporations in euro-area countries
(monthly data)



Source: ECB.
(1) Loans in euros and other currencies granted by MFIs, adjusted for the accounting effects of securitizations. – (2) Weighted average of interest rates on new short-term and medium/long-term loans, with weights equal to the 24-month moving average of new disbursements; includes current account overdrafts.

Tensions on the financial markets following the spread of the epidemic signalled more costly borrowing conditions for banks: yields on bank bonds on the secondary market and the spreads on bank credit default swaps (CDS) rose in all the euro area's main countries. The enhancement of the APP and the launch of the PEPP partially lowered the risk and liquidity premiums that emerged in these markets. New refinancing operations, which the Eurosystem is conducting on more favourable terms, have also helped to contain banks' funding costs.

According to the findings of the bank lending survey for the first quarter of 2020, the rapid spread of the epidemic caused an increase in firms' demand for loans to meet their higher liquidity needs. The impact on supply conditions was limited overall, as compared with the global financial crisis and the sovereign debt crisis, thanks in part to the swift monetary policy response.

THE ITALIAN ECONOMY

4. OVERVIEW

2019. – GDP slowed last year, posting 0.3 per cent growth (Table 4.1). Investment increased by 1.4 per cent, considerably less than in 2018 (when it had risen by 3.1 per cent): it was held back by the uncertainty that spread among firms following the slowdown in the global economy and persistent protectionist tensions. Household consumption was affected by the limited growth in disposable income.

Table 4.1

Sources and uses of income in Italy
(per cent)

	% of GDP in 2019 (1)	2018			2019		
		Changes		Contri-bution to GDP growth (3)	Changes		Contri-bution to GDP growth (3)
		Volumes (2)	Defla-tors		Volumes (2)	Defla-tors	
Sources							
GDP	–	0.8	0.9	–	0.3	0.9	–
Imports of goods FOB and services (4)	28.9	3.4	2.6	-0.9	-0.4	-0.2	0.1
of which: goods	22.7	3.3	3.3	-0.7	-0.8	-1.0	0.2
Uses							
National demand	97.1	1.1	1.1	1.1	-0.2	0.7	-0.2
Spending of resident households (5)	60.4	0.9	0.9	0.5	0.4	0.5	0.2
General government expenditure	18.8	0.1	2.3	..	-0.4	0.8	-0.1
Gross fixed investment	18.0	3.1	0.7	0.5	1.4	1.0	0.3
Plant, machinery, armaments and cultivated biological resources	6.9	4.0	0.4	0.3	0.3	1.2	..
Intellectual property products	3.1	2.1	0.6	0.1	0.8	0.9	..
Construction	8.1	2.8	0.9	0.2	2.6	0.9	0.2
Change in stocks (6)	–	–	–	-0.1	–	–	-0.6
Exports of goods FOB and services (7)	31.7	2.3	1.8	0.7	1.2	0.5	0.4
of which: goods	25.6	1.9	1.9	0.5	0.7	0.5	0.2
Net foreign demand	–	–	–	-0.3	–	–	0.5

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.

Despite the significant weakening of world trade, Italian firms largely retained their market shares: growth in exports remained positive, supported by sales of goods in markets outside of the euro area, which benefited from the gains in firms' price competitiveness. This was reflected in a widening of the current account surplus, which reached 3.0 per cent of GDP, driven among other things by the improvement in the tourism surplus; at the end of 2019, Italy's net international investment position was close to balance (-1.7 per cent of GDP).

As a share of gross disposable income, the national saving rate remained at 20.9 per cent, around the same level as in 2018 (Table 4.2). The ratio of gross investment to national income declined a little and, especially in the construction sector, remains at historically low levels. It stayed just below the national saving rate. The current account balance was markedly positive, registering an expansion compared with the previous year.

Table 4.2

Saving and gross investment in Italy
(per cent of gross national disposable income)

	Average 1981-1990	Average 1991-2000	Average 2001-2010	2015	2016	2017	2018	2019
General government saving	-6.6	-3.3	0.7	1.0	0.5	1.0	0.9	1.6
Private sector saving	28.8	24.6	19.5	17.9	19.8	19.6	19.9	19.3
of which: consumer households (1)	20.0	14.0	7.8	5.5	5.5	5.2	5.2	5.3
Gross national saving	22.3	21.3	20.2	18.8	20.3	20.7	20.8	20.9
Gross investment	23.2	20.5	21.4	17.4	17.7	18.1	18.3	18.0
Memorandum item:								
Balance on current transactions with the rest of the world	-0.9	0.9	-1.3	1.4	2.6	2.5	2.5	2.9

Source: Based on Istat data.
(1) Includes non-profit institutions serving households.

As regards the geographical breakdown, in 2019 economic activity increased in the North, while it remained stable in the Centre and in the South and Islands.

Employment continued to rise, albeit at a slower pace than in 2018 (0.6 per cent, against 0.8 per cent). The rate of expansion, which was stronger in the first half of the year, subsequently faltered as a result of the cyclical weakening. The unemployment rate declined to 10.0 per cent on average in 2019 (against 10.6 per cent in 2018).

Consumer price inflation fell to 0.6 per cent in the year as a whole (from 1.2 per cent in 2018). There was a sharp decrease in energy prices in addition to weakness in the core component.

The fiscal policy stance, as measured by the cyclically adjusted change in the primary surplus, was slightly restrictive; it had been expansionary in the five previous years. Thanks to the positive trend in revenue and the reduction in interest expense, net borrowing fell to 1.6 per cent of GDP; the debt-to-GDP ratio was unchanged at 134.8 per cent.

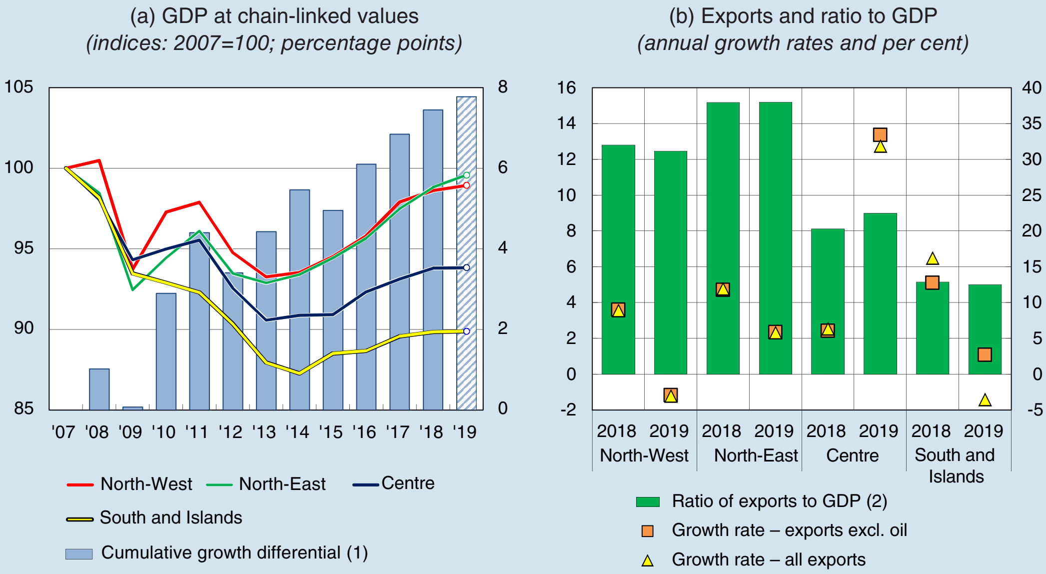
The early months of 2020. – Since the end of February, the spread of the COVID-19 epidemic has had a strongly negative impact on economic activity. According to preliminary estimates released by Istat, in the first quarter of 2020 Italy's GDP fell by 4.7 per cent, the largest contraction recorded since the time series began; based on our estimates, the reduction appears to have been more pronounced in the northern regions (see the box 'Regional trends').

REGIONAL TRENDS

2019. – The pandemic has affected an already weak macroeconomic outlook. Based on the Bank of Italy's quarterly indicator of regional economic activity in Italy (ITER),[1] in 2019 GDP is estimated to have grown by 0.8 per cent in the North-East, by 0.3 per cent in the North-West, and to have stagnated in the rest of the country (see panel (a) of the figure). Last year the level of economic activity throughout Italy was still below what it was in 2007, prior to the outbreak of the global financial crisis. Compared with 2007, our calculations show that in 2019 GDP was lower by around 2 percentage points in the Centre and North and by 10 points in the South and Islands. In terms of per capita GDP, the difference between the two areas of the country is less marked owing to the different population trends, with stronger growth in the Centre and North. Last year, per capita GDP in the South and Islands was around 55.9 per cent of that of the Centre and North (57.7 per cent in 2007).

Figure

GDP and exports



Sources: For panel (a), based on data from Istat's Regional Accounts up to 2018 and ITER estimates for 2019; for panel (b), 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 time t. Percentage points; right-hand scale. – (2) Based on data for 2017 and 2018. Per cent; right-hand scale.

[1] 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.

In 2019, exports at current prices declined by roughly the same amount in the South and Islands and in the North-West, while they increased in the North-East and, to a greater extent, in the Centre (see panel (b) of the figure). Export growth from regions in the Centre is primarily attributable to the fashion sector in Tuscany and to the chemical-pharmaceutical sector in Lazio. The decline in exports from the South and Islands is entirely ascribable to refined oil products, which are concentrated in the Islands; excluding this component, exports from the area expanded by 1.1 per cent.

Istat's labour force survey shows that last year employment rose by 0.8 per cent in the Centre and North and by 0.2 per cent in the South and Islands, where the number of those in employment is still 4.4 percentage points below what it was in 2007. In both areas, employment growth was mainly driven by increases in payroll employment. The unemployment rate fell by 0.6 and 0.8 percentage points respectively in the Centre and North and in the South and Islands, where it remains nevertheless more than twice what it is elsewhere in the country.

The first quarter of 2020. – In the first three months of 2020, the ITER indicator shows a contraction in economic activity throughout Italy. Compared with the first quarter of 2019, GDP fell by around 6 per cent in the North-West, by around 5 per cent in the North-East, and by 4 per cent in the Centre and in the South and Islands. This reflected the measures taken to limit the spread of the pandemic, including the temporary suspension of non-essential activities introduced in March (see Chapter 6, 'Firms').[2]

It is estimated that the sectors where activity was suspended in April account, both directly and indirectly through sectoral interdependencies, for around 35 per cent of value added in the Centre and North and a little under 30 per cent in the South and Islands.[3] When the possibility of remote working is factored in, the suspension is estimated to have affected around 28 per cent of value added in the Centre and North and around 24 per cent in the rest of the country.

In terms of persons in employment, the suspension of non-essential activities primarily concerned the northern regions, where about 37 per cent of workers are employed in these sectors, compared with approximately 30 per cent in the Centre and South (see Chapter 8, 'The labour market').[4] Based on calculations by the National agency for active labour policies (ANPAL), between the end of February and April this year, new hires declined in all areas of the country, more markedly in the Centre and North.

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2 The non-essential sectors are those identified in the Prime Minister's Decrees (DPCMs) of 9 March 2020, 11 March 2020 and 22 March 2020, amended by the Decree of 25 March 2020 issued by the Italian Ministry of Economic Development.

3 Nationwide, the figure is estimated at 33.9 per cent; the sole direct effect of the suspension of activity in the sectors identified in the decree amounts to around 29 per cent in the Centre and North, and to 23 per cent in the South and Islands (27.7 per cent for the country as a whole). The estimates are based on the most recent geographical breakdown of data available at sectoral level, which refer to 2017.

4 The estimates are based on data from Istat's labour force survey referring to 2019.

It is estimated that the main contributory factor to the contraction in GDP was the sharp fall in household expenditure, especially in some service segments and on purchases of motor vehicles and of household and personal goods. The downward revision of firms' investment plans is also expected to have contributed, though to a lesser extent. Since March, foreign trade has been affected by the fall in global demand and the suspension of non-essential economic activities introduced by the Government in the Prime Minister's Decree (DPCM) of 22 March 2020 to counter the spread of the epidemic.

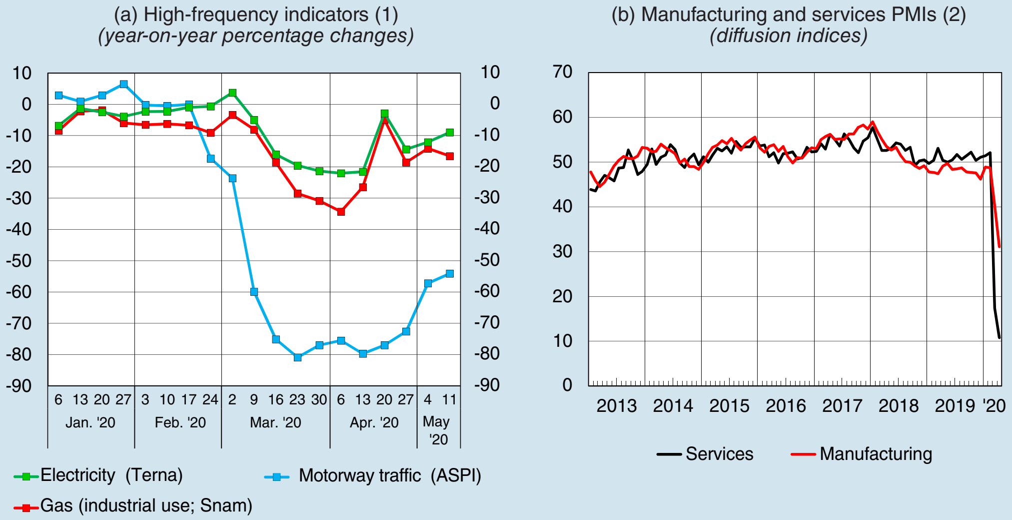
The available indicators signal a sharp drop in GDP for the second quarter as well (see the box 'The impact of the COVID-19 pandemic on the Italian economy').

THE IMPACT OF THE COVID-19 PANDEMIC ON THE ITALIAN ECONOMY

After falling 4.7 per cent in the first quarter of 2020 (according to Istat's preliminary estimates), owing in part to the effects of the measures to contain the epidemic, the cyclical indicators suggest that the downturn in GDP is even steeper in the second. Between mid-March and mid-April, motorway traffic was about 80 per cent lower than in the corresponding period a year ago; in early May, the decrease slowed somewhat, to around 60 per cent (see panel (a) of the figure). The consumption of gas for industrial use and of electricity, which contracted by as much as 30 and 20 per cent respectively, are still far below the levels recorded prior to the outbreak of the epidemic, despite the resumption of many activities as of 4 May. In recent months, the purchasing managers' indices (PMI) have been at the lowest levels recorded since the start of the surveys (see panel (b) of the figure).

Figure

Cyclical indicators
(per cent)



Sources: ASPI data available on Atlantia's website; based on data from Snam, Terna and Markit.
(1) Weekly data; year-on-year changes compared with the same week of 20 April reflect the impact of Easter falling on 21 April of last year.– (2) Monthly data.

The firms interviewed by the Bank of Italy between 29 January and 14 May (see the box 'The impact of the COVID-19 pandemic according to business surveys', Chapter 6) expect turnover to decrease this year, with the decline concentrated in the first half (26 per cent compared with the same period in 2019).

Productive activities deemed 'non-essential' and suspended by the Prime Minister's Decree (DPCM) of 22 March 2020 represented about one third of total value added, with percentages of up to around two thirds for the accommodation and catering services component and almost 100 per cent for recreational activities (see Chapter 6, 'Firms'). Starting in early May, as subsequent laws are enacted,[1] the share of activities suspended should gradually shrink to zero. For some sectors, such as manufacturing, it is possible that the output lost during the period of application of the containment measures will be partially recovered in subsequent months, with the consequent easing of the overall effects for the year; this scenario is, however, less likely for most of the service sector.[2]

The timing and strength of the recovery will depend on several factors that are difficult to predict: the duration and geographical spread of infection; developments in the global economy; the impact on uncertainty and on confidence and hence on household spending and firms' investment decisions; possible financial repercussions. The effectiveness of economic policies will also play a decisive role.

In these circumstances, economic forecasting becomes extremely challenging;[3] macroeconomic simulations have to rely mainly on scenario analysis based on the assessment of the impact of alternative, for the most part inevitably arbitrary, epidemiological and economic assumptions. The range of forecasters' estimates for Italian GDP growth in 2020 and 2021 is indeed exceptionally wide: the output fall projected for this year ranges between -6 to -18 per cent, the recovery in 2021 from 1 to 15 per cent.[4] Uncertainty is similarly high in the other euro-area countries.

An assessment of the possible effects of the epidemic on the Italian economy was published in a note by the Bank of Italy on 15 May.[5] It was based on illustrative scenarios that will be updated as part of the Eurosystem staff macroeconomic projection exercises to be published on 5 June.

1 Prime Minister's Decree (DPCM) of 26 April 2020 and Decree Law 34/2020 ('Relaunch Decree').

2 Lifting containment measures too quickly could also have counterproductive economic effects, under the assumption that a resurgence in the contagion would place greater pressure on healthcare systems, put workers' health at risk and necessitate the reinstatement of restrictions. See. M. Bodenstein, G. Corsetti and L. Guerrieri, 'Social distancing and supply disruptions in a pandemic', CEPR Discussion Paper, 14629, 2020; M. Eichenbaum, S. Rebelo and M. Trabandt, 'The macroeconomics of epidemics', NBER Working Paper, 26882, 2020; C. Gros, R. Valenti, L. Schneider, K. Valenti and D. Gros, 'Containment efficiency and control strategies for the Corona pandemic costs', mimeo, 2020.

3 A. Locarno and R. Zizza, 'Forecasting in the time of coronavirus', Banca d'Italia, *Note Covid-19*, 11 May 2020.

4 Based on the estimates of analysts surveyed by Consensus Economics in May.

5 'The impact of the COVID-19 pandemic on the Italian economy; illustrative scenarios', Banca d'Italia, *Note Covid-19*, 15 May 2020.

A central scenario is based on the hypothesis that: (a) the loosening of the containment measures introduced in May will proceed at a gradual pace, and with this the easing of the economic repercussions; and (b) that the pandemic will be mostly kept under control in the coming quarters – in Italy, Europe and worldwide – allowing an exit from the recession and the relatively quick resumption of economic activity.[6] Under these assumptions, Italian GDP should decline by 9.0 per cent on average in the current year and then increase by 4.8 per cent in 2021 (see the table), broadly in line with the mean of the range of estimates by the main forecasters.

Table

Central macroeconomic scenario for Italy published on 15 May
(percentage changes)

	2019	2020	2021
GDP	0.3	-9.0	4.8
Household consumption	0.4	-8.8	4.6
Gross fixed investment	1.4	-12.4	3.2
Exports	1.4	-15.4	8.0
Imports	-0.2	-17.3	9.7
Employment (full-time equivalents)	0.3	-9.8	5.0
Employment (persons)	0.6	-3.8	2.7
Consumer price inflation (HICP)	0.6	-0.1	0.0

Source: 'The impact of the COVID-19 pandemic on the Italian economy: illustrative scenarios', Banca d'Italia, *Note Covid-19*, 15 May 2020.

The fall in economic activity in 2020 is a consequence both of a steep decline in foreign demand and in international tourism, and of a significant drop in domestic demand, due to the nationwide lockdown measures to limit the spread of the virus and their repercussions on employment and household income. Starting in the second half of the year, GDP is assumed to recover mostly as a result of the dissipation of the lockdown effects. In contrast, the impact of the epidemic on foreign demand, tourism flows and on the behaviour of households (see the box 'Italian households' assessments and expectations during the current public health emergency', Chapter 5) and firms is assumed to be more long-lasting, slowing the return of economic activity towards pre-crisis levels. Consumer price inflation is expected to be essentially nil this year and the following, affected by the fall in oil prices as well as by the sharp decline in capacity utilization. Employment, measured by full-time equivalents,[7] would drop by almost 10 per cent this year, and then recover half of this fall in 2021. The number of persons in employment would, however, decrease to a lesser extent, by around 4.0 per cent in 2020, thanks to extensive recourse to the wage supplementation scheme (*Cassa integrazione guadagni*).

[6] In this scenario, it is assumed that the share of economic activities suspended by law in order to contain the spread of infection (representing around one third of value added in April) declines to around 10 per cent in May and further decreases in June, and that economic activity goes back to normal relatively quickly in the second half of the year. It is further assumed that: global trade falls by 12 per cent in the current year, in line with the estimates of most forecasters, and only partially recovers in 2021; arrivals of foreign tourists are negligible for the remainder of the year and gradually increase in 2021; the indicators of firms' confidence, already substantially down, record a comparable decline to that observed during the global financial crisis.

[7] Full-time equivalent is a unit to measure the volume of work performed in all jobs. It is obtained by converting the unit value of part-time jobs and temporary agency jobs to full-time equivalent positions.

The fiscal policy measures that directly support domestic demand included in Decree Law 18/2020 (the 'Cure Italy' decree) and in Decree Law 34/2020 ('Relaunch Decree') will help to limit the drop in GDP this year. Based on the typical fiscal multipliers, their contribution to GDP growth is assessed at around 2 percentage points this year. Some measures, such as the moratorium on outstanding bank loans and the public guarantees on new loans, are also crucial to prevent potentially very serious and nonlinear negative developments, averting a liquidity crisis, keeping firms' credit lines open, and responding to the financial needs brought about by the crisis (see Chapter 7, 'The financial situation of households and firms').

The same note also posits a second, more severe, scenario to illustrate the implications of less favourable assumptions. More adverse developments could result from: the protraction of the epidemic and the associated need to counter new outbreaks, with repercussions on confidence, spending decisions and investment plans; a more marked decline in world trade and extensive disruptions in global supply chains; a further worsening of financial conditions, which would amplify the effects of the crisis on economic activity. By way of example, the following technical assumptions are considered: (a) world trade falls by more than assumed in the first scenario; (b) the measures to contain the epidemic are in effect for longer; (c) there is an increase in long-term yields and a tightening of credit supply conditions.[8] These three assumptions result in additional declines of -1.5, -1.3 and -1.2 percentage points in GDP for the current year, with a consequent fall in GDP that would be 4 points larger than in the first scenario, and a more gradual recovery in 2021. Still, this scenario stops short of incorporating the non-linear and difficult-to-quantify effects that could stem from widespread insolvencies among the firms, which could seriously affect the economy's productive capacity, and from further waves of the pandemic.

Adverse scenarios for the euro area have been investigated by other institutions. According to an ECB staff study published at the beginning of May, in a more severe scenario, GDP in the euro area could contract this year by 12 per cent (compared with 8 per cent in the central scenario). The European Commission reported the results of two alternative simulations, of rising intensity, in which GDP loss in 2020 would be of the order of 10 and 15 percentage points, respectively.[9] These scenarios do not include extreme assumptions, such as a new global pandemic wave or a serious deterioration in financial stability.

[8] More specifically, the scenario assumptions are: a reduction in world trade of around 20 per cent in 2020; stricter containment measures in the second half of this year, with a more protracted impact on GDP, though still less than that of the measures introduced in March and April; an increase of 100 basis points in long-term bond yields and a tightening of credit conditions, about half as much as during the global financial crisis.

[9] N. Battistini and G. Stoevsky, 'Alternative scenarios for the impact of the COVID-19 pandemic on economic activity in the euro area', ECB, Economic Bulletin 3, 2020, 5-30; European Commission, *Spring 2020 Economic Forecast*, May.

Since March, the public health emergency has led to a reduction in the number of people in employment, above all among fixed-term employees; overall, in the first quarter, the reduction was equal to 0.4 per cent compared with the last three months of 2019. The fall in jobs was partly mitigated by the freezing of layoffs for financial reasons and the boosting of the wage supplementation scheme, which supported workers with permanent contracts. The deterioration in labour market conditions may prove to have been more pronounced in the spring months, especially in the fixed-term employment segment.

Inflation was particularly moderate in the first quarter (recording an annualized rate of 0.2 per cent) while in April it was barely above zero (0.1 per cent), principally owing to the sharp fall in energy prices. The core component has nonetheless remained at very low levels. Both the inflation expectations recorded in the euro-area financial markets and Italian firms' plans regarding their own prices for the next 12 months have been revised downwards. These trends point to widespread fears that the effects of the public health emergency will lead primarily to a marked downturn in aggregate demand.

The outlook for the public finances has been drastically changed by the emergency. According to the official assessments, the deficit-to-GDP ratio for 2020 and 2021 is expected to be higher by 8 and 4 percentage points respectively, compared with the figures announced during the last budget session, reflecting both the marked deterioration in the macroeconomic outlook and the measures taken by the Government to strengthen the health system and support households, workers and firms. The steep drop expected in GDP and the higher borrowing requirement will have roughly the same impact on the debt-to-GDP ratio which, according to the official forecasts, is expected to rise by more than 20 percentage points this year, reaching 155.7 per cent. In 2021, the debt-to-GDP ratio should fall thanks to the economic recovery.

The impact of the pandemic on the global economy will linger for quite some time, also considering how long it will take to identify possible vaccines or an effective treatment for the disease. A return to growth for the Italian economy in the next ten years is possible provided there are adequate increases in labour market participation, employment, investment, and productivity (see the box 'Growth in Italy after COVID-19: long-term assessments').

GROWTH IN ITALY AFTER COVID-19: LONG-TERM ASSESSMENTS

Against the backdrop of the COVID-19 pandemic, medium- and long-term economic scenarios are subject to ample margins of uncertainty. A number of indications of possible developments this year and next are provided in the box 'The impact of the COVID-19 pandemic on the Italian economy'. Some assessments for the following decade can be inferred from a growth accounting exercise, whereby the possible trends in labour and productivity in the coming years are compared with developments in the Italian economy in recent periods of its history.

In the ten years prior to the global financial crisis, coinciding almost exactly with the initial stages of the Economic and Monetary Union, Italy's economy grew by an average of 1.5 per cent per year (see the table). Between 2008 and 2019, partly owing to the lasting effects of the double-dip recession, economic activity declined on average by 0.3 per cent; the contribution of employment was negative, that of labour productivity almost nil.

Table

The determinants of growth in the Italian economy
(changes and percentage points; average values in the periods indicated) (1)

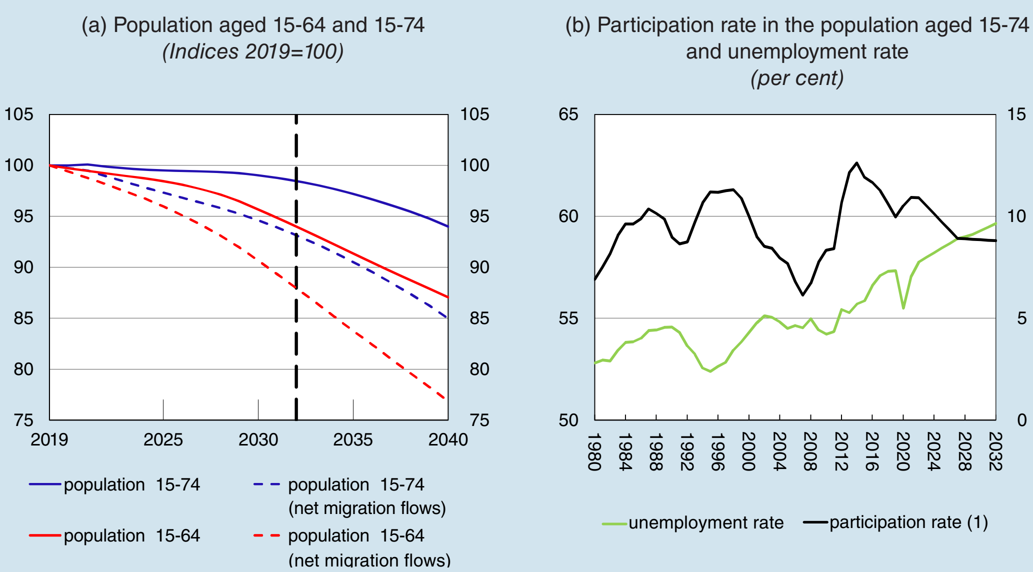
	GDP	Employment (total hours worked)	Labour productivity	*of which*: Contribution of capital intensity	TFP	*Memorandum items*: Capital/GDP	Investment/GDP
1986-1995	2.1	0.1	2.0	0.7	1.3	3.0	19.8
1996-2007	1.5	1.0	0.5	0.3	0.2	3.1	20.6
2008-2019	-0.3	-0.4	0.1	0.2	-0.1	3.5	18.4
				Scenario for the next decade			
2020-2022 (1)	-0.6	-0.7	0.2	0.2	0.0	3.6	17.1
2023-2032	1.5	0.7	0.8	0.1	0.7	3.3	20.7

Sources: Based on Bank of Italy and Istat data.
(1) The assumptions for the period 2020-22 are based on the central scenario shown in the box 'The impact of the COVID-19 pandemic on the Italian economy'.

In the next few decades, the Italian economy will have to cope with a marked decline in the working-age population. According to the latest Eurostat projections, by 2032 the number of persons in the 15-64 cohort will fall by 6 per cent (2.3 million); the population aged 15-74 will decline to a more moderate extent (-1.5 per cent; 700,000; see panel (a) of the figure), due to the sustained increase in the 65-74 cohort (24 per cent).[1] The fall will continue, and steepen,

Figure

Demographic trends and labour input in the long term



Sources: Based on Eurostat and Istat data. For the participation and unemployment rates in the years after 2019, Bank of Italy estimates.

[1] These projections incorporate net migration flows of around 230,000 people a year until 2032 (270,000 in the following seven years).

in the subsequent decades. The contraction of the working-age population will be associated with a progressive increase in its average age.

The negative impact of demographic developments on the labour input may be mitigated by the closure of the unemployment gap and the continuation of the recent positive trends in labour supply observed among the main demographic groups (defined by age, gender, level of education and nationality), as well as by a further, gradual extension of working lives. These developments could enable the participation rate of the population aged between 15 and 74 to reach 60 per cent in 2032,[2] up from 57.3 per cent last year (see panel (b) of the figure). Around half of this increase should come from the extension of the pension age envisaged under current legislation.

Assuming that hours per worker return to 2019 levels and that the unemployment rate declines gradually to just below 9 per cent, in the decade 2023-32 the number of total hours worked would make a sizeable contribution to GDP growth, in the order of 0.7 percentage points on average per year (see the table).

In this context, to bring back the average rate of GDP expansion in the decade considered to the level of 1.5 per cent recorded in the ten years prior to the global financial crisis, labour productivity would need to rise by around 0.8 per cent per year between 2023 and 2032. This result could be achieved with an average annual rise in total factor productivity (TFP) of around 0.7 per cent, together with a recovery in investment which, by raising capital intensity, would bring the ratio of investment to GDP back to the levels recorded in the ten years 1996-2007 (to around 21 per cent on average over the period).

The projected rise in TFP represents an intermediate step between the very positive trend observed on average in the years 1986-95 and the much more modest one recorded in the ten years that followed (see the table). The actual achievement of faster TFP growth, even beyond what is hypothesized here, could be facilitated if the strengthening of investment favoured the components with the most direct impact on operational quality and efficiency by stimulating, for example, a recovery of the current gap in digitalization and the revival of spending on schools and research.[3]

Economic growth rates similar to those projected would also permit a faster reduction in the ratio of public debt to GDP from the high levels that will be reached this year owing to the consequences of the epidemiological crisis. This effect would be more marked if, at the same time, inflation returned towards the monetary policy objective.

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2 F. D'Amuri, M. De Philippis and E. Guglielminetti, 'Potential labour input: a unified approach based on demographics, three-state labour market flows and the NAIRU', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), forthcoming.

3 The interdependencies between capital accumulation and TFP are not considered directly under this scenario, insofar as it is based on a standard model in which technical progress evolves independently of the conditions of production. For an examination of the link between the two variables in Italy, see A. Mistretta and F. Zollino, 'Recent trends in economic activity and TFP in Italy with a focus on embodied technical progress', Banca d'Italia, Temi di Discussione (Working Papers), 1204, 2018.

It can be estimated that the share of debt relative to GDP could come down by around 2 percentage points a year in the decade considered under the following conditions: average economic growth of around 1.5 per cent, inflation back below, but close to, 2 per cent, a gradual recovery in the primary surplus starting half way through the period to 1.5 per cent of GDP and a reduction in the long-term yield spread between Italian government bonds and the German Bund to around 100 basis points (a level that appears consistent with the fundamentals; see Chapter 14, 'The money and financial markets').[4]

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[4] The reduction in the differential would translate into a fall in the average cost of the debt in the order of 0.5 percentage points, taking account of the possible, gradual increase in interest rates linked to the projected recovery of inflation.

5. HOUSEHOLDS

Households' disposable income grew by 1.1 per cent in 2019, slowing compared with the previous year. This reflected the deceleration in payroll employment earnings, while the increase in social benefits had the opposite effect, following the introduction of the new minimum income scheme (*Reddito di cittadinanza* or RdC).

The growth in household consumption slowed owing to changes in disposable income as well as the progressive weakening in confidence indicators, in part due to the less favourable assessments of the economic situation and of labour market conditions. The propensity to save rose slightly, though it remains low in historical terms and by international standards.

Over the course of this year, labour earnings will be heavily impacted by the public health emergency. The contraction is expected to be sharper for households with lower employment income, among which there is a higher share of households with limited financial resources available for sustaining consumption. These effects are expected to be mitigated by the social safety nets and the provisions that strengthened them and extended them to categories not previously covered.

For the first half of 2020, mainly owing to the suspension of business activities, the available indicators signal a significant contraction in spending, particularly in some service segments and on the purchase of cars and of household and personal goods, while spending on food products increased. Trends in cash withdrawals and point-of-sale (POS) terminal payments also point to a sharp drop in consumption.

Income and income distribution

In 2019, the disposable income of consumer households, measured at current prices, grew at a slower pace compared with the previous year (Table 5.1), owing both to the slowdown in labour earnings, mainly due to smaller growth in payroll employment, and to the contraction in property income. Disbursements under the new minimum income scheme (*Reddito di cittadinanza* or RdC) and the adoption of measures introducing greater flexibility in retirement age (*quota 100* early retirement scheme) have led to a sizeable increase in social benefits; the gradual decline in inequality in household labour income that began in 2014 has continued.

In the first quarter of 2020, disposable income was affected by the drop in labour earnings brought about by the public health emergency. According to our estimates, which are consistent with the expected economic developments in the various sectors (see the box 'Economic activity in the first quarter of 2020', *Economic Bulletin*, 2, 2020) and based on assumptions regarding the cyclical sensitivity of the different types of

Table 5.1

Household gross disposable income and savings rate (1)
(at current prices, unless otherwise indicated)

	% of households' gross disposable income in 2019	2017	2018	2019
		Percentage changes		
Payroll employment income	62.9	2.5	3.3	2.1
Income per full-time equivalent payroll worker	–	0.6	2.1	1.7
Self-employment income (2)	25.4	0.9	1.3	0.9
Income per full-time equivalent self-employed worker	–	2.7	1.5	0.9
Net property income (3)	21.6	2.8	-0.5	-1.1
Social benefits and other net transfers	32.9	1.6	1.9	3.6
of which: net social benefits	–	1.6	2.1	3.5
Net social security contributions (-)	24.0	2.5	4.0	3.0
of which: paid by employers	–	2.6	4.7	2.8
Current taxes on income and wealth (-)	18.7	1.1	0.7	3.2
Gross disposable income	**100.0**	**2.1**	**1.8**	**1.1**
In real terms (4)	–	1.0	0.8	0.6
In real terms, adjusted for expected inflation (4) (5)	–	0.0	0.3	1.8
In real terms, adjusted for past inflation (4) (6)	–	0.6	0.7	1.2
		Percentage ratios		
Average propensity to save (7)	**–**	**7.5**	**7.5**	**7.7**
Calculated on income adjusted for expected inflation	–	6.4	5.8	7.1
Calculated on income adjusted for past inflation	–	6.8	6.6	7.4

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.

employment, the decrease appears to have been significant for payroll employees and, to an even greater extent, for self-employed workers,[1] though with marked differences that reflect the uneven impact of the restrictions on economic activity. Overall, self-employed workers are more highly concentrated in the sectors that were impacted by the business suspension measures adopted in March and which could be affected by persistently weak demand in the coming months (see the box 'Italian households' assessments and expectations during the current public health emergency'). The share of people employed in the sectors in which restrictions were introduced, or in jobs that can less easily be carried out remotely, appears to have been higher for households with the lowest levels of

[1] The projections are based on data from Istat's labour force survey for the fourth quarter of 2019. The survey does not include self-employment income, which was imputed 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*, December 2019, also published as Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 503, 2019. Developments in labour earnings were estimated assuming a reduction in hours worked that is consistent overall with that expected in value added at sectoral level and greater among fixed-term employees whose contract is nearing expiry. Estimated trends in self-employment income also consider fixed costs, attributed to each worker according to their distribution in the various sectors of activity.

equivalized labour income (Figure 5.1).[2] All in all, for the households that, prior to the health emergency, were in the lowest quintile of the distribution, the reduction in income appears to have been twice that suffered by the households in the highest quintile.

Figure 5.1

Impact on households of the suspension of economic activity (1)
(percentage points)

Source: Based on Istat's labour force survey.
(1) Based on households whose head is under the age of 64, comprising at least one worker and with no pension income. The distinction between employees and self-employed workers is based on the main income in the household. The definition of workers employed in sectors in which economic activity was suspended is in accordance with the provisions of the Prime Minister's Decree (DPCM) of 11 March 2020. The workers employed in jobs that can less easily be carried out remotely are identified based on the definitions provided in T. Barbieri, G. Basso and S. Scicchitano, 'Italian workers at risk during the Covid-19 epidemic', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), forthcoming.

In the first quarter of 2020, the inequality in the distribution of net equivalized labour income, measured by the Gini index for households whose head is under the age of 64 and in which there is no pension income (58 per cent of total households) appears to have risen by 2 percentage points, to 37 per cent, its highest level since the time series began in 2009 (see the box 'Labour income inequality across households', Chapter 5, *Annual Report for 2018*, 2019). The impact on households as a whole should be mitigated by the inclusion of households with pension earnings, which are basically stable.[3]

To mitigate the fall in income, social safety nets have been strengthened significantly. In March, Decree Law 18/2020 ('Cure Italy' decree) extended wage supplementation to almost all private sector payroll employees (the number of potential beneficiaries went from about 11 million to 13.5 million). The same decree introduced a temporary net payment of €600 to seasonal workers in the tourism sector and, regardless of the suspension or curtailment of business activity, to full-time workers in agriculture and to self-employed and quasi-subordinate workers (see Chapter 8, 'The labour market'). These measures were extended by Decree Law 34/2020 ('Relaunch Decree'), which introduced a further temporary support scheme (*Reddito di emergenza*) for households experiencing hardship that are not

[2] Equivalized labour income is obtained by dividing the overall labour earnings 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.

[3] Pension income is not included in Istat's labour force survey (see F. Carta, 2019, op. cit.).

beneficiaries of other subsidies. In April, one million households received payments averaging €540 under the new minimum income scheme (*Reddito di cittadinanza* or RdC; *Pensione di cittadinanza* for pensioners).

According to our assessments, the social safety nets should be able to significantly reduce the increase in inequality in the distribution of labour income caused by the health emergency: assuming that all the potential beneficiaries of the social safety nets have actually utilized them, the Gini index, calculated including transfers, would decrease to 35 per cent. In the medium term, however, there is the risk that the COVID-19 emergency might accentuate inequality, owing to the higher share of low-income workers in the sectors at greater risk of contagion and with less scope for remote working, and because social safety nets are providing temporary support, while the repercussions on the earning capacity of the most affected workers are potentially long-lasting (see the box 'The impact on workers of a fall in demand or a reduction in lending: evidence from the 2008-09 recession', Chapter 8).

Consumption

In 2019, consumption grew by 0.5 per cent, reflecting stagnation in the purchases of goods and an increase in those of services (0.9 per cent; Table 5.2). The slowdown in household spending compared with the previous year, which was greater than that in disposable income, likely also reflected the gradual decline in consumer confidence indicators due to the less favourable assessments of Italy's economic situation and of labour market conditions (Figure 5.2).

Table 5.2

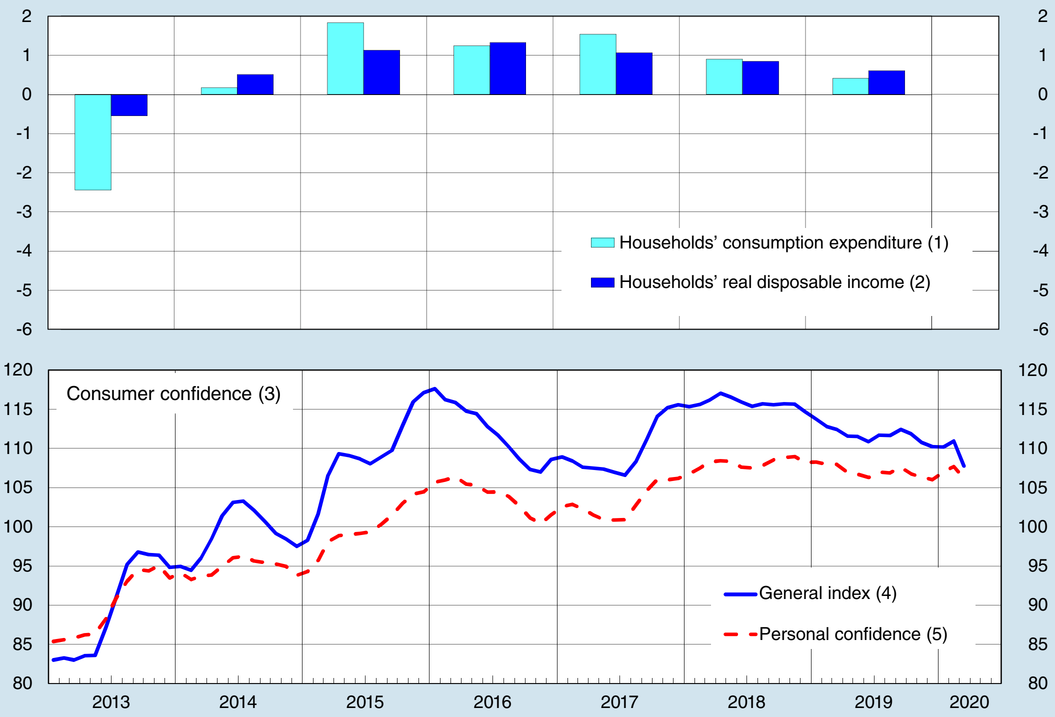
Household expenditure (1)
(per cent and percentage changes)

	% in 2019 (volumes at previous year's prices)	2016	2017	2018	2019
Goods	47.4	1.3	1.8	1.1	0.1
Non-durable goods	30.5	0.5	0.5	0.1	0.1
of which: food and non-alcoholic beverages	14.2	1.2	1.0	- 0.1	0.4
Semi-durable goods	8.7	1.0	1.8	2.0	- 2.3
of which: clothing and footwear	5.9	0.1	1.4	2.3	- 2.7
Durable goods	8.2	5.1	7.0	3.5	2.7
Services	52.6	1.2	1.3	0.9	0.9
of which: hotels and restaurants	10.3	1.7	2.9	0.5	1.0
education	0.9	2.6	1.0	4.2	0.5
Total domestic expenditure	**100.0**	**1.2**	**1.5**	**1.0**	**0.5**
Spending abroad by Italian residents (2)	..	4.5	10.0	4.8	4.8
Spending in Italy by non-residents (2)	..	2.4	6.4	5.3	6.0
Total national expenditure	**..**	**1.3**	**1.5**	**0.9**	**0.4**
Memorandum item:					
National consumption deflator	..	0.1	1.1	0.9	0.5

Source: Istat's national accounts.
(1) Chain-linked values. – (2) In 2019, spending abroad by Italian residents and in Italy by non-residents came to 2.0 and 4.1 per cent of national expenditure, respectively.

Figure 5.2

Consumption, real income and consumer confidence
(growth rates and indices)



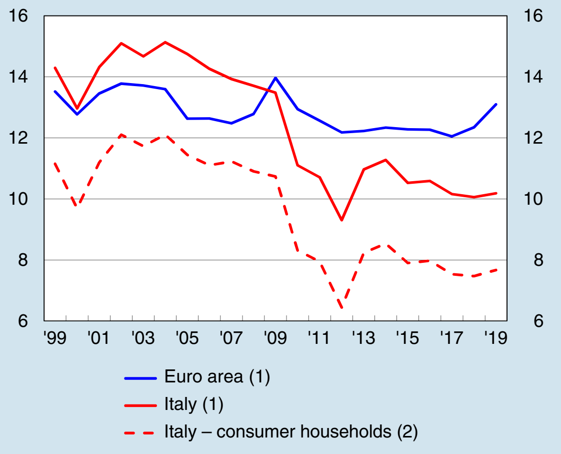
Source: Based on Istat data.
(1) Spending of consumer households and non-profit institutions serving households; chain-linked values; percentage changes on the previous year. – (2) Disposable income of consumer households and non-profit institutions serving households, deflated using the consumption 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).

The propensity to save rose slightly, to 7.7 per cent (Figure 5.3), remaining low in historical terms and by international standards. According to Istat's surveys, the share of households that decided it was advisable to save continued to dominate (about 90 per cent).

At the beginning of this year, developments in consumption were affected by the COVID-19 epidemic. The latest cyclical indicators point to a significant contraction in spending. In the first quarter, Istat's retail sales indicator fell by 5.9 per cent; the food products component instead rose, as suggested, among other things, by Nielsen data on purchases of everyday consumer goods (see Chapter 12, 'Business activity regulation and the institutional environment'). According to Confcommercio's consumption indicator, in the three months from February to April, expenditure on goods and services fell by 25.5 per cent on average compared with the corresponding period in 2019; the drop was especially sharp in April (-47.6 per cent; Figure 5.4). Demand declined more steeply for accommodation services (-50.3 per cent between February and April and -92.6 per cent in April) and is expected to remain very weak until the end of the summer, a forecast confirmed by the sharp fall in bookings on the Airbnb platform for the period between April and August. According to the findings of a special survey conducted by the Bank of Italy between the end of April and the beginning of May, one in two households intend to reduce leisure expenses even after the lifting of restrictions (see the box 'Italian households' assessments and expectations during the current public health emergency'). In the first three months of this year, new car registrations fell by around 32 per cent compared with one year earlier; in April, the contraction reached 97.5 per cent. The data on ATM withdrawals and payments via point-of-sale (POS) terminals also indicate a strong decline in consumption in March and April (Figure 5.4).

Figure 5.3

Households' saving ratio
(annual data; per cent)



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 5 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.

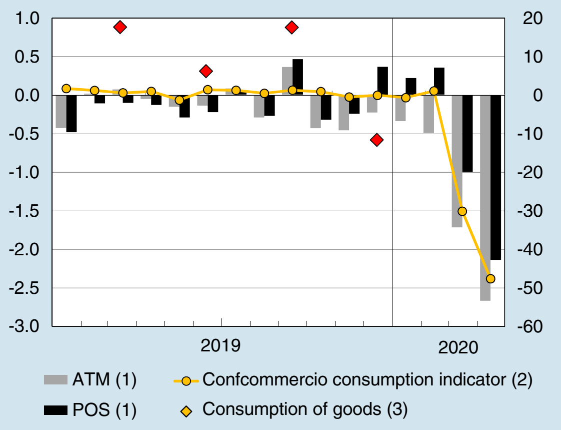
Property wealth and the housing market

According to our estimates, the wealth held by consumer households in the form of real assets (almost exclusively houses) declined by 0.5 per cent in 2018 and recorded a further slight decrease in 2019. Total wealth, which includes net financial assets and refers to consumer and producer households as a whole, appears to have risen by 1.9 per cent (see Chapter 7, 'The financial situation of households and firms').

Last year, the contraction in house prices slowed (-0.1 per cent; Figure 5.5); based on data from the Revenue Agency's Property Market Observatory (OMI), house sales grew by 4.3 per cent on average in 2019.

Figure 5.4

ATM withdrawal and POS payment amounts and consumption expenditure
(annual growth rates)



Sources: Based on data from the Bank of Italy, Istat and Confcommercio.
(1) Data obtained from the BI-COMP multilateral clearing system; right-hand scale. For more details, see the Bank of Italy's website, 'BI-COMP and CABI: retail payments systems'. – (2) Right-hand scale. – (3) Final consumption expenditure of resident and non-resident households on the economic territory; current prices; the series are calendar adjusted.

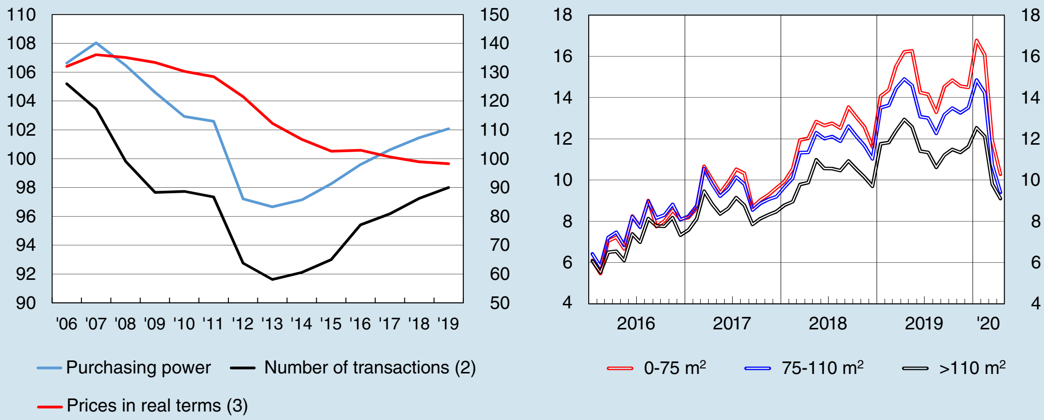
There is early evidence of the impact of the COVID-19 epidemic on the property market. The restrictive measures taken by the Government and the ensuing limitations on people's mobility, as well as uncertainty about the outlook, had immediate repercussions on the volume of transactions. According to our calculations, based on an ample dataset regarding notices of houses for sale on the Immobiliare.it website, in the two months March and April, the number of new homes offered for sale fell by more than 50 per cent compared with the same period in 2019. Online searches by prospective buyers, measured by the average number of visits per day, decreased significantly, especially for smaller homes (Figure 5.5), for less expensive ones, and for those located in Northern Italy.

Figure 5.5

Residential property market

(a) Prices, number of transactions and purchasing power of households (1)
(index numbers: 2000=100)

(b) Average number of daily viewings by size class of the houses (4)



Sources: Based on data from the Revenue Agency, the Bank of Italy and the Immobiliare.it website.
(1) Quarterly data. – (2) The series are adjusted for seasonal and calendar effects. Right-hand scale. – (3) House prices deflated using the consumer price index. Right-hand scale. – (4) Monthly data.

ITALIAN HOUSEHOLDS' ASSESSMENTS AND EXPECTATIONS DURING THE CURRENT PUBLIC HEALTH EMERGENCY

Between the end of April and the beginning of May, the Bank of Italy conducted a special survey on a sample of over 3,000 individuals to collect a broad range of qualitative data on their economic situation and their expectations.[1]

The public health emergency and the provisions suspending business activities that were adopted to contain it have led to a marked deterioration in the economic conditions of households as a whole. About two thirds of households with a least one member who was previously employed have experienced episodes of reduction in their working activity; the share is over 80 per cent when the head of household is self-employed or a fixed-term employee (see Chapter 8, 'The labour market'). Despite the transfers and subsidies provided by the Government, this has translated into a reduction in overall household income for half of households.

[1] The survey was conducted by administering the same questionnaire using three different techniques, each applied to one third of the sample: telephone interviews, online questionnaire, and administration of the survey using specific remote devices.

Half of those interviewed expect a worsening in the income conditions of their household one year after the survey; the share rises to over 70 per cent among the self-employed (see panel (a) of Figure A), likely reflecting concerns about the impact of the pandemic on business in the hardest hit sectors (especially non-food retail, tourism, and personal services), which have a higher share of small and medium-sized enterprises.

Some 85 per cent of the respondent households consider that, over the next 12 months, their income will be sufficient to meet their expenses; however, the households hardest hit by the public health emergency declared that they are having difficulty paying existing loan instalments and fear they will have to take on new debt or draw heavily on their savings to meet their expenses (see Chapter 7, 'The financial situation of households and firms').

The responses show that, once the COVID-19 epidemic and the connected restrictions imposed by the Government are over, households plan to change their consumption patterns, with a very sharp drop in 'non-essential' expenses such as travel, holiday, restaurants, cinema and theatre, which account for 22 per cent of the basket. Some 70 per cent of the households in greater financial difficulty intend to reduce these expenses to pre-epidemic levels; the percentage remains high (above 40 per cent) also for wealthier households and for those who did not suffer significant income losses and do not expect to experience them in the future (see panel (b) of Figure A). This suggests that these assessments stem not only from current income dynamics, but also from uncertainty about future developments.

Figure A

Income and consumption expectations (1)

(per cent)

Source: Based on the Bank of Italy's special survey of households.
For spending, the expectations refer to that on travel, holiday, restaurants, cinema and theatre.

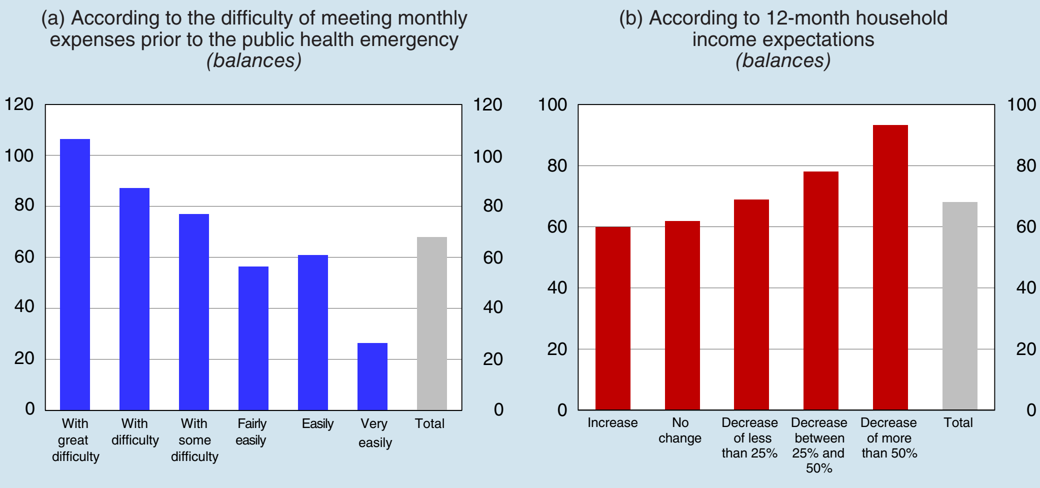
The public health emergency is also impacting the assessments of price developments. The responses on current inflation and on that expected in the coming months signal higher inflation than that suggested by Istat's latest survey conducted in March on consumer confidence, which contains similar questions. The rise in inflation expectations is consistent with the findings of the consumer surveys coordinated by the European Commission for the euro area as a whole in April, when the balance of expectations of an acceleration versus a deceleration in prices reached its highest level since the end of 2012, notwithstanding a very low inflation rate.

It is likely that, owing to the restrictions on consumption imposed by the public health emergency, households observed or only considered important the prices of the subset of goods and services that they were able to purchase, for which the increase in April, particularly for food products, was markedly higher than the general price index, both in the euro area and in Italy (see Chapter 9, 'Prices and costs'). This interpretation appears to be backed by the fact that the respondent households indicated that food products and health-related services are the components expected to drive up inflation in the coming months.

Inflation expectations are higher among the households that were already reporting greater difficulty in meeting monthly expenses before the pandemic (see panel (a) of Figure B) and among those that expect a significant reduction in their income in the coming months (see panel (b) of Figure B). Should these expectations continue, they would likely be associated with expectations of an erosion in purchasing power, which could in turn lead to an increase in precautionary savings.[2]

Figure B

12-month inflation expectations (1)
(per cent)



Source: Based on the Bank of Italy's special survey of households.
(1) Balance between the percentage share of those expecting inflation to rise or to remain stable and of those expecting it to fall; the extreme classes are assigned a double weight, therefore the balance may exceed 100 percentage points.

[2] C. Rondinelli and R. Zizza, '*Spend today or spend tomorrow? The role of inflation expectations in consumer behaviour*', Banca d'Italia, Temi di Discussione (Working Papers), 1276, 2020.

6. FIRMS

Economic activity slowed in 2019, owing to the unfavourable developments in the global economy and the persistent protectionist tensions, which affected manufacturing above all.

At the beginning of this year, the production system was hit by the spread of the COVID-19 epidemic; this resulted in a sharp drop in GDP as early as in the first quarter. The fall was sharpest in services for tourism, restaurants, transport, recreation and culture, but the reduction was widespread. The business birth rate diminished as well: in the first quarter, the balance between registrations and deaths was markedly negative, reaching a seven-year low.

According to the surveys carried out by the Bank of Italy, firms believe that the effects of the epidemic have been transmitted mainly through the reduction of domestic demand, while the foreign demand channel has been significant only for retail trade, hotels and restaurants. Investment plans were revised downwards, including for the first half of this year.

The consequences of the pandemic underscore the structural challenges that Italian firms must tackle. At the end of last year, the use of new technologies remained low compared with the major European countries. The share of turnover obtained through e-commerce, while increasing, was still much lower than that recorded in France and Germany.

Economic developments in 2019

Firms' production, profitability and demographics. – Last year, value added in the Italian economy expanded by just 0.2 per cent, against 0.9 per cent in 2018. Industrial production decreased (-1.0), driven by a decline in domestic demand and the deceleration of exports (see Chapter 4, 'Overview'). The recovery of value added in construction continued (2.6 per cent), though it is still 35 percentage points below the peak of 2007; on the basis of the data for the first nine months of the year, building permits, which provide forward-looking indications on trends in construction, have slowed considerably. Activity increased, albeit at a slower pace than in 2018, in most service segments, whose value added rose by 0.3 per cent.

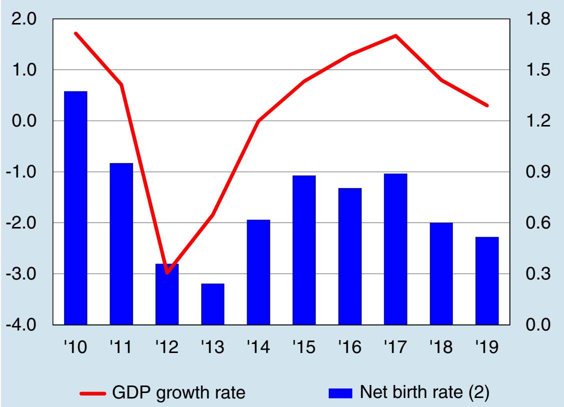
Operating profitability, equal to the ratio of gross operating profit (EBITDA) to value added, declined, reflecting a more rapid rise in the cost of labour than in value added itself. The ratio between EBITDA and total assets instead remained stable (see Chapter 7, 'The financial situation of households and firms'). Owing to the COVID-19 emergency, the Survey of Industrial and Service Firms – conducted by the Bank of

Italy's branches at the start of 2020 on firms with at least 20 employees in industry excluding construction and in private non-financial services – reached 76 per cent of the sample normally interviewed (around 3,200 firms). The survey found that the share of firms posting a profit remained practically unchanged (at 72.9 per cent of the total). The increase for service firms was offset by the second consecutive decline in the last two years for firms in industry excluding construction. This decrease was particularly marked for firms generating at least one third of their revenues abroad. According to the 2019 survey, the growth in turnover stagnated owing to the sharp contraction in industry excluding construction (-2.2 per cent, as against 0.2 per cent in 2018).

The net birth rate of firms stood at 0.5 per cent (or almost 27,000 more firms), largely unchanged compared with 2018 (Figure 6.1). The ratio of limited companies to total active firms continued to grow (to 24 per cent, from 14 per cent in 2007), while there was a reduction in the share of partnerships and sole proprietorships, whose net birth rate has been negative since 2012.

Figure 6.1

Net birth rate of firms and GDP growth rate (1)
(per cent and percentage changes on previous period)



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

Investment. – In 2019, investment increased by 1.4 per cent, a much slower pace than in the previous two-year period (Table 6.1), owing to weaker economic activity and widespread uncertainty.

Table 6.1

Fixed investment in Italy
(chain-linked volumes; per cent)

	% composition in 2019 (1)	Changes			% of GDP (1)	
		2017	2018	2019	2007	2019
Construction	44.9	1.5	2.8	2.6	11.4	8.1
Housing (2)	23.6	1.1	2.9	3.2	5.7	4.3
Other (2)	21.3	1.9	2.7	2.0	5.7	3.8
Costs of change of ownership	4.4	2.5	5.8	4.6	1.1	0.8
Plant, machinery, armaments and cultivated biological resources	38.1	6.3	4.0	0.3	7.6	6.9
of which: transport equipment	7.6	13.7	8.4	0.4	1.5	1.4
Intellectual property	17.0	1.1	2.1	0.8	2.5	3.1
Total gross fixed investment	**100.0**	**3.2**	**3.1**	**1.4**	**21.6**	**18.0**
Total excluding housing	–	3.9	3.2	0.9	15.9	13.8
Total excluding construction	–	4.6	3.4	0.4	10.1	9.9

Source: Istat, national accounts.
(1) At previous year's prices. Rounding may cause discrepancies in totals. – (2) Includes costs of change of ownership.

After five years of robust growth, expenditure on capital goods slowed markedly, affected both by the reduction in capacity utilization – linked to global economic trends – and by the abatement of the effect of tax incentives registered in previous years.

Investment in construction rose by 2.6 per cent: a slight acceleration of the residential component, which was also linked to the halt in the fall in house prices (see Chapter 5, 'Households'), was offset by a slowdown in non-residential property expenditure. The survey conducted by the Bank of Italy on a sample of around 420 construction firms indicates a slowdown in the completion of public works in 2020.

Investment as a share of GDP rose for the fourth year in a row, reaching 18.0 per cent, a level that is still more than 3 percentage points below what it was prior to the global financial crisis. This primarily reflects the continued low level of investment in construction, while that in machinery and equipment has almost returned to pre-2008 levels.

Investment in the Survey of Industrial and Service Firms. – According to this survey, in 2019 investment by firms with 20 or more employees in the non-financial private sector grew by 7.6 per cent (1.4 per cent according to the national accounts, which refer to the economy as a whole): a contraction in manufacturing was offset by a sharp rise in the service sector, which was especially marked for large firms. in both sectors, actual expenditure was higher than in the previously formulated investment plans (Table 6.2).

Table 6.2

Gross fixed investment of firms according to Bank of Italy surveys by class size, capacity utilization and change in turnover (1)

(percentage changes at 2019 prices)

	Total	Number of employees				Capacity utilization (2) (3)		Change in turnover (2)	
		20 to 49	50 to 199	200 to 499	500 & over	Low	High	Low	High
Industry excluding construction									
Outturn for 2019	1.3	2.3	-0.1	-1.2	2.9	5.0	-2.1	-2.7	4.9
Realization rate (4)	102.3	119.1	102.6	103.0	96.7	104.0	100.6	101.0	103.3
Planned investment for 2020	-7.8	-18.8	-15.7	-10.9	2.7	-7.9	-7.7	-12.3	-4.4
of which: manufacturing									
outturn for 2019	-1.2	1.2	-1.4	-1.2	-2.5	1.5	-2.8	-5.7	3.1
realization rate (4)	103.9	118.5	104.5	110.4	92.5	105.9	102.7	102.1	105.5
planned for 2020	-12.8	-18.9	-20.0	-18.4	2.0	-7.9	-14.6	-14.5	-11.0
Services (5)									
Outturn for 2019	14.6	5.6	13.7	7.6	20.7	….	….	11.6	19.9
Realization rate (4)	106.5	111.4	115.5	102.4	102.9	….	….	101.0	117.7
Planned investment for 2020	-8.6	-15.4	-12.1	-5.0	-5.4	….	….	-15.5	-4.8
Total									
Outturn for 2019	7.6	4.2	5.6	2.2	12.0	….	….	5.2	10.7
Planned investment for 2020	-8.2	-16.9	-14.0	-8.4	-1.8	….	….	-13.8	-4.6

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. 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 2019 data; for investment plans, with reference to 2020 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 2019. – (5) Non-financial private services.

Innovation. – Investment in intellectual property rose by 0.8 per cent; the slowdown compared with 2018 (Table 6.1) was also recorded in the other major European countries, such as France and Germany, where, however, the growth rates remain higher (4.5 and 2.8 per cent respectively).

Spending on research and development grew by 1.0 per cent; it also slowed with respect to the last two years. As a share of GDP, it held stable at 1.5 per cent. According to our calculations based on data from the Survey of Industrial and Service Firms, in 2019, spending on research and development continued to fall in service firms and to increase in manufacturing, including when considering firms of equal size, confirming the trend under way since 2018.

Last year, the number of Italian patents filed with the European Patent Office went up for the fifth consecutive year; the increase was equal to 1.6 per cent. The biggest increases were in sectors linked to the development of new instruments (10.0 per cent), in particular of control instruments. As in previous years, mechanical engineering remains the sector with the highest number of patents filed. Despite progressive growth, the amount of patents is still low by international standards.

The rate of utilization of new technologies is also low compared with the main European countries (see the box 'Italy's digital lag', Chapter 6, *Annual Report for 2018*, 2019). In 2019, the share of e-commerce turnover from firms with more than ten employees in the non-farm and non-financial private sector increased further (to 11.5 per cent). However, the share of companies that achieved at least 1 per cent of turnover via this channel remained stable (10.0 per cent) and well below those of France and Germany (16.0 and 18.0 per cent respectively).

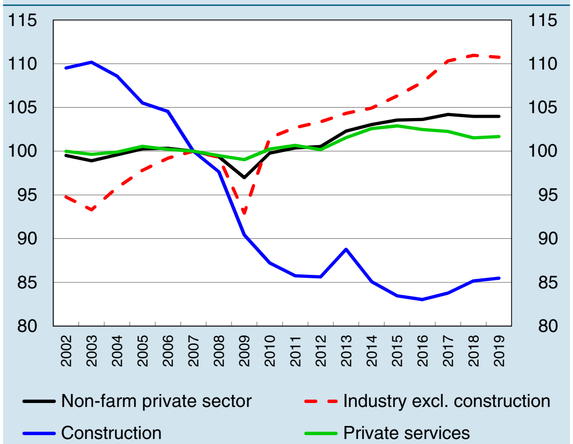
Labour demand. – Last year, total hours worked by payroll employees in the non-farm private sector rose by 0.8 per cent, a sharp slowdown on the two previous years. The slight increase in the number of those in employment (1.2 per cent) and the contraction in hours worked (-0.4 per cent) were both contributory factors. The latter remained 5.2 per cent lower than pre-crisis levels. The deceleration in the number of hours worked was seen to a similar extent in industry excluding construction and in private services. On the other hand, hours worked increased significantly in construction (3.5 per cent), mainly owing to the increase in employment (2.7 per cent).

Productivity. – In 2019, hourly productivity in the non-farm private sector held basically stable (Figure 6.2), mostly reflecting the unfavourable cyclical developments. There were sharply different trends across sectors: for the first time since

Figure 6.2

Hourly productivity in Italy

(index numbers; indices: 2007=100)



Source: Istat, national accounts.

2010, hourly productivity fell (-0.2 per cent) in industry excluding construction; in construction it decelerated (0.3 per cent; from 1.7 per cent in 2018); in private services it increased after several years of decline (0.2 per cent).

As regards industry excluding construction, productivity stagnated in manufacturing after several years of rapid growth. Among the private service sectors, growth in retail trade contracted while the decline in professional activities and business support services continued.

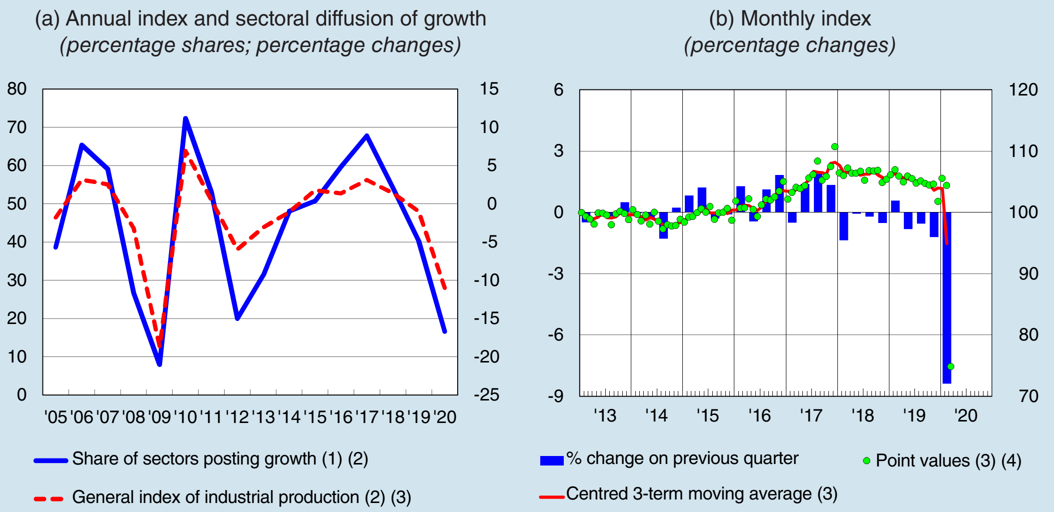
According to the Survey of Industrial and Service Firms, productivity decreased in larger enterprises and – size, sector and location being equal – in those with a lower export propensity.

Trends in 2020

Developments in the first half of the year. – In the first part of 2020, the spread of the COVID-19 epidemic had heavy repercussions on firms, especially in the service sector (see the box 'The impact of the COVID-19 pandemic according to business surveys'). According to ISTAT's preliminary estimate, in the first quarter of 2020, GDP fell by 4.7 per cent, reflecting the contraction in activity in all sectors. Industrial production – which had already fallen in February, when the health emergency had begun to affect manufacturing-intensive areas – declined sharply in March. The reduction in the first quarter as a whole, equal to 8.4 per cent, was the largest since the global financial crisis (Figure 6.3.b). The decline was widespread: according to the information currently available, the share of sectors in expansion decreased to 17 per cent on average in the first quarter (12 per cent in the month of March), the lowest figure since 2012 (Figure 6.3.a).

Figure 6.3

Industrial production



Source: Based on Istat data.
(1) As a proportion of the total (based on the ATECO classification); sectors posting growth are those that have expanded since the previous year. – (2) The data for 2020 are based on year-on-year changes in the first quarter compared with the same quarter in 2019. – (3) Right-hand scale. – (4) Calendar and seasonally adjusted quarterly data; index: 2015=100

Based on our assessments, which take account of the information that can be inferred from trends in energy inputs and road freight (see the box 'The impact of the COVID-19 pandemic on the Italian economy', Chapter 4), and the extension of the closures of activities defined as 'non-essential' ordered by the Government under the Prime Minister's Decree (DPCM) of 22 March 2020 and subsequent provisions (see Chapter 15, 'The COVID-19 epidemic and the economy'), industrial production is likely to have contracted in the second quarter as well, especially with regard to investment and intermediate goods. Looking ahead, the economic recovery will also depend on the effectiveness of the measures put in place to support employment and firms' liquidity (see the box 'The financial support measures for firms in response to the pandemic', Chapter 7, and Chapter 8, 'The labour market').

In services, purchasing managers' indices (PMI) point to a sharp fall in the first part of the year. The reduction was greatest in the tourist, restaurant, transport, recreation and culture sectors. In retail trade, activity as a whole appeared more resilient, thanks to the favourable performance of demand for food and basic necessities and the marked acceleration in online sales (see Chapter 5, 'Households' and Chapter 12, 'Business activity regulation and the institutional environment').

Up until the end of April, the construction sector was affected by the closures imposed by the government decrees, which only permitted the continuation of public works. For construction firms, the PMI index reached a record low in April, while the surveys conducted by the Bank of Italy point to a fall in production for this year.

According to the Survey of Industrial and Service Firms, companies expect a drop in turnover of more than 7 per cent in 2020. The contraction is expected to be more marked in services and among smaller companies. The plans for 2020 also show a sharp contraction in investment, the first since 2014. The decrease is virtually the same in industry and in services, and more than double the average for small enterprises (Table 6.2). The firms that took part in the quarterly Survey on Inflation and Growth Expectations, conducted in March by the Bank of Italy, reported making a sharp downward revision of investment expenditure already in the first six months of this year, in response to the COVID-19 emergency (see the box 'The impact of the COVID-19 pandemic according to business surveys').

THE IMPACT OF THE COVID-19 PANDEMIC ACCORDING TO BUSINESS SURVEYS

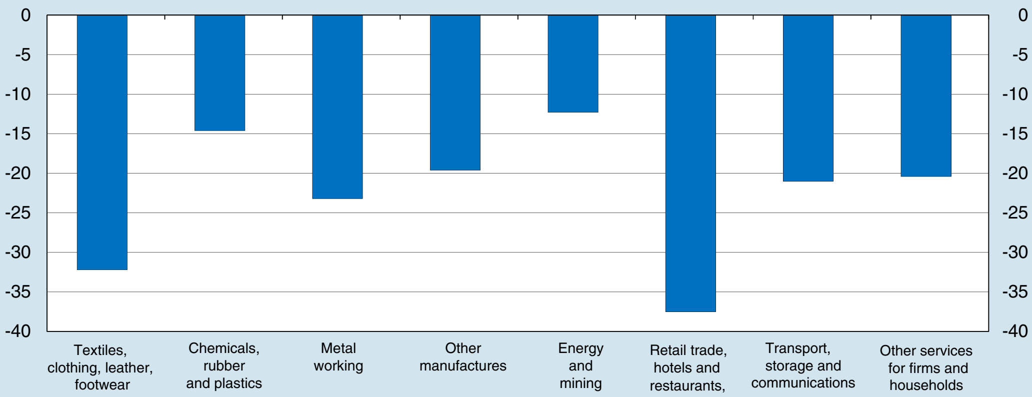
Between 29 January and 14 May, the Bank of Italy's branches carried out their customary Survey of Industrial and Service Firms on companies with 20 or more employees in industry excluding construction and in private non-financial services. Some 3,189 enterprises (around one quarter fewer than in previous years) took part in the survey, notwithstanding the emergency situation. Starting on 16 March, the survey was accompanied by a 'Special survey on the impact of the coronavirus', to which some 3,500 firms replied, aimed at gathering information on the repercussions of the pandemic on economic activity. Overall, the results reveal a very difficult situation, characterized by a fall in sales concentrated in the first half of the year and a sharp drop in planned investment in 2020.

In the first half of this year, firms expect turnover to fall by around 26 per cent on average compared with the same period in 2019. The magnitude of the expected contraction is uniform across the country; it is expected to be larger for firms with fewer than 50 employees (-29 per cent) and less marked for those with more than 500 employees (-18 per cent). Differences in the outlook for turnover are more apparent overall than those registered in previous years and were considerably greater for the companies that replied from mid-March onwards.

In the first half of the year, the service sector was hit hardest, especially retail trade, hotels and restaurants; in industry the decline was more pronounced for textile and clothing companies (Figure A).

Figure A

Forecast change in turnover in the first half of 2020 (1)
(percentage changes)



Source: Banca d'Italia, Special survey on the impact of the coronavirus.
(1) Change expected with respect to the year-earlier period. Data weighted by population weights.

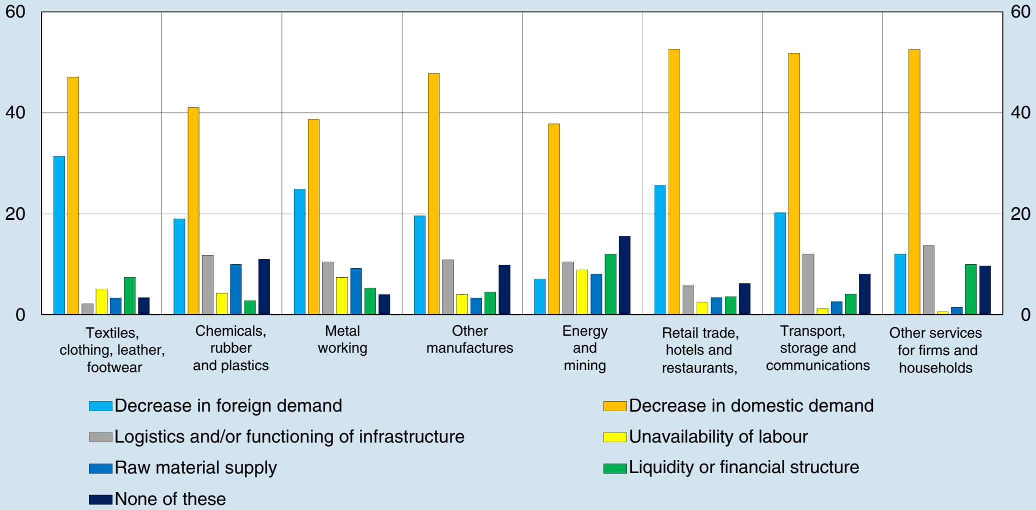
In all sectors, the shock was primarily transmitted via the internal components of demand, presumably also reflecting the interdependencies with the areas of manufacturing more directly affected by the containment measures; the foreign channel was particularly significant for the textile, retail trade, hotel and restaurant, and metalworking industries (Figure B). Some 10 per cent of firms reported that the shock was mostly transmitted through problems with logistics and the functioning of infrastructure; fewer than 10 per cent reported raw material supplies or the unavailability of labour as the main problems. Only 5 per cent of firms reported that the main channel of transmission was financial; this channel was nevertheless deemed significant by almost one third of the firms interviewed, and was mostly apparent in greater delays on payments by customers.

More than three quarters of businesses have changed staffing policies to deal with the emergency (see panel (a) of Figure C), especially through recourse to social safety nets. About one third of the firms managed liquidity tensions by deferring commercial payments; a similar share benefited from extended payment terms by banks or the granting of new credit lines. Only 8 per cent succeeded in changing their outlet markets; the reconversion of production activity involved barely 4 per cent of firms, and was more frequent among textile and clothing businesses (see panel (b) of Figure C).

Figure B

The main channel of transmission of the impact of the pandemic on firms' activity (1)

(percentage shares)

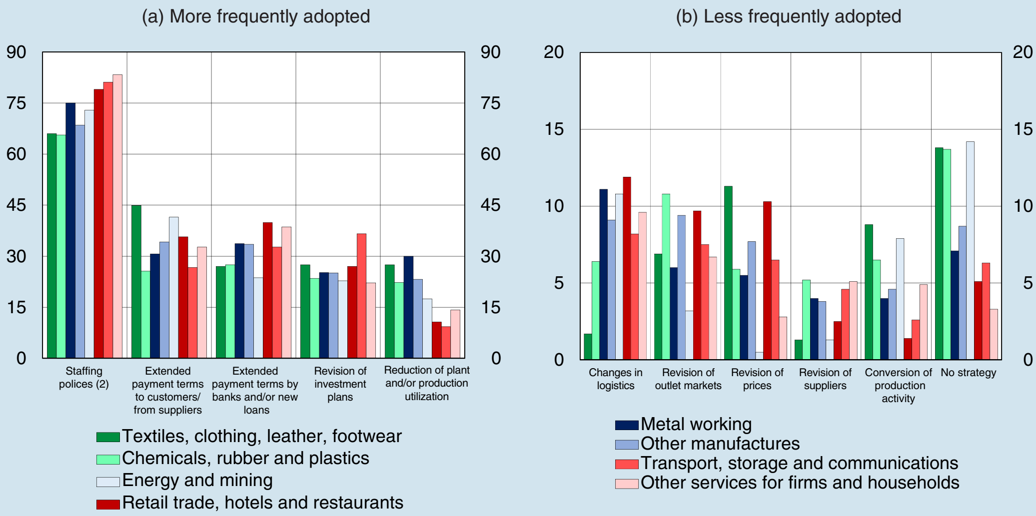


Source: Banca d'Italia, Special survey on the impact of the coronavirus.
(1) Firms were asked to indicate the main channel through which the COVID-19 pandemic is adversely affecting their activity in Italy. On the axis of the ordinates, the values represent the share of firms that have reported a given channel. Data weighted by population weights.

Figure C

Firms' strategies to limit the negative effects of the COVID-19 pandemic (1)

(percentage shares)



Source: Banca d'Italia, Special survey on the impact of the coronavirus.
(1) Firms were asked to indicate the three main strategies adopted, or which may be adopted, to limit the negative effects of the spread of the coronavirus on their activity in Italy. On the axis of the ordinates, the values represent the share of firms that have reported adopting a given strategy. Statistics grossed up to the number of firms in the population – (2) In the survey the item 'staffing policies' comprises several strategies, including varying the number of employees and working hours, introducing shifts, recourse to social safety nets and remote working.

Also due to heightened uncertainty, most firms have scaled back their investment plans for 2020. According to the quarterly Survey on Inflation and Growth Expectations, conducted by the Bank of Italy in March and released on 14 April

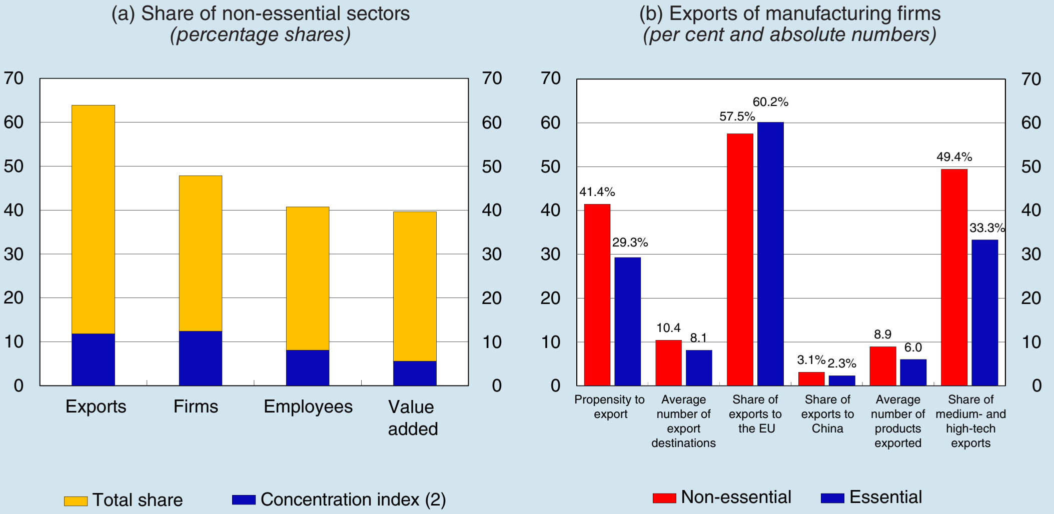
2020, firms reacted rapidly to the shock associated with the pandemic by making substantial cutbacks in planned investment expenditure already in the first half of this year. Even if widespread across firms, the downward revision is estimated to have been more pronounced in the construction sector and in non-commercial services, for businesses in the North-West and Centre, and for large companies. The downsizing of investment plans is likely to have been more widespread among the companies that in the previous survey expected the availability and cost of credit to deteriorate, and among those that expected to have sufficient liquidity only in the short term.

The non-essential economic activities suspended in March and April following the government decrees accounted for approximately 28 per cent of total value added (calculated according to 2017 weights). Including the indirect effects due to interdependencies between suspended and non-suspended activities, the figure was around 34 per cent. Our assessments show that, without considering the indirect effects, for each week of stoppage of economic activity there was a reduction of around 0.5 per cent in annual GDP. However, where possible, the government decrees did permit these activities to be conducted using remote working arrangements; based on our estimates, this should have limited the loss of value added, reducing it by up to 7 percentage points with respect to the figures indicated above.

Confining our analysis to non-farm, non-financial companies, the suspension of non-essential production covered approximately 400 categories of economic activity. The companies belonging to these categories (around 50 per cent of the total) accounted for 41 per cent of workers and 64 per cent of total exports (Figure 6.4.a), with high levels of concentration: of the activities suspended, the first four by volume of foreign sales (linked to the automotive, steel and footwear industries) accounted for 12 per cent of total exports.

Figure 6.4

Comparison of essential and non-essential sectors (1)



Sources: Istat, Frame-SBS; Istat and ICE, COE TEC-Frame-SBS.
(1) For the universe of private sector non-farm, non-financial companies, the data refer to 2017. – (2) The concentration index (CR4) is given by the sum of the 4 highest shares: a higher value indicates a greater concentration.

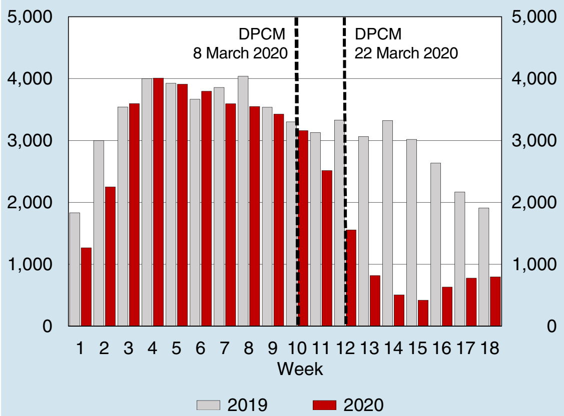
The strong focus on exports of non-essential activities could have longer-term effects if the suspension of production resulted in a loss of market shares and made it impossible to maintain firms' positions within global value chains. With reference to manufacturing companies only (Figure 6.4.b), compared with companies active in essential production, those that carry out non-essential activities were more export-oriented in 2017 (41.4 per cent, as against 29.3 per cent) and were focused on a higher number of foreign markets (10.4 on average, against 8.1), in particular on those outside of the European Union. These firms are also more competitive on average: they sold more products (8.9, compared with 6) with a higher technological content.

In the first quarter of 2020, the balance between registrations and cessations of businesses was markedly negative, reaching a seven-year low (-30,283 firms, compared with -21,659 in the same quarter in 2019), mostly owing to the fall in new firm registrations. The seasonally-adjusted gross birth rate fell to an annualized rate of 6.0 per cent (from 7.0 per cent in the last quarter of 2019); the lower birth rate of firms was concentrated in the final part of the quarter, following the progressive closure of non-essential economic activities, and continued into April (Figure 6.5).

Figure 6.5

Flows of new firms by week (1)

(number of firms)



Source: Based on data from Infocamere.
(1) The data refer to limited liability companies and partnerships.

According to provisional data relating to partnerships and limited liability companies only, between 11 March and 5 May 2020, approximately 14,600 fewer new firms were registered compared with the same period in 2019 (-64.6 per cent). The largest decrease was in the North-West (-68.9 per cent), the lowest in the South and Islands (-60.7 per cent).

7. THE FINANCIAL SITUATION OF HOUSEHOLDS AND FIRMS

Households and firms are facing these difficult economic times with a more balanced financial structure than they had on the eve of the double-dip recession of 2008-13. In 2019, households' financial wealth increased at a fast pace, mainly owing to the upward trend in securities prices; as in more recent years, the growth in indebtedness mainly concerned less risky borrowers. The fall in interest rates on mortgage loans, which reached historical lows, had a positive impact on debt servicing. Profitability and liquid assets in firms' balance sheets remained at high levels compared with the past, and leverage continued to decrease. The low interest rates facilitated firms' ability to repay their financial debts.

In early 2020, households were affected by the contraction in income that followed the introduction of the measures to contain the pandemic and by the fall in securities prices, which reduced financial wealth; risk aversion increased, as did the preference for safer financial assets. The ability to deal with the effects of the crisis, bolstered by the low indebtedness and low interest rates, will benefit from the measures adopted by the Government to support income and from the debt moratoriums. Firms' liquidity needs rose rapidly in connection with the fall in sales. In the short term, the measures adopted to ease the burden of repayments and facilitate access to new loans are contributing significantly to containing the risk that liquidity tensions translate into lasting business crises. In the long term, however, these measures could lead to imbalances in the financial structure; the Government's recent provisions to encourage a greater inflow of equity into the production system are helping to counter this trend.

THE TRENDS IN 2019

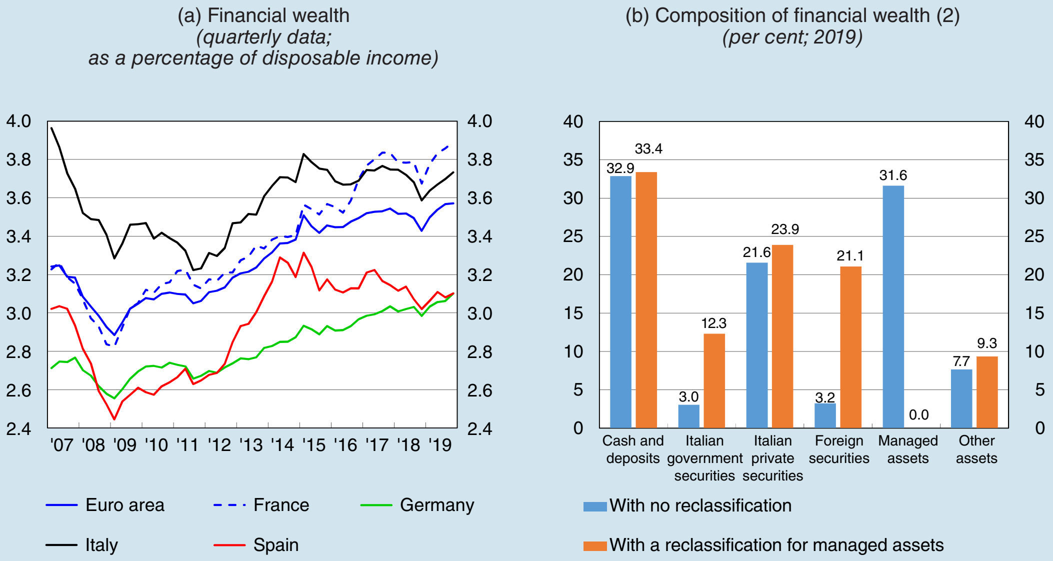
HOUSEHOLDS

Financial wealth and investment

According to our estimates, net household wealth, which is the value of financial and real assets net of liabilities, increased by 1.9 per cent in 2019, to 8.1 times disposable income. The increase was mainly due to the change in financial wealth (which went up by 5.2 per cent) linked to the rise in securities prices. At the end of 2019, financial assets had reached 42 per cent of total gross wealth and amounted to 3.7 times disposable income, a high figure in comparison with the major European countries. However, the positive gap compared with the euro-area average has more than halved since the period prior to the onset of the global financial crisis (Figure 7.1.a).

Figure 7.1

Gross financial wealth of households (1)



Sources: For panel (a), based on data from the Bank of Italy (Financial Accounts), Istat and the ECB; for panel (b), based on data from the Bank of Italy (supervisory reports), Securities Holdings Statistics, Covip, IVASS and Morningstar Direct.
(1) Consumer and producer households and non-profit institutions serving households. – (2) 'With no reclassification' refers to direct exposure to financial assets; 'with a reclassification for managed assets' indicates the total exposure, direct and indirect, taking account of the instruments underlying asset management products. 'Cash and deposits' include foreign deposits, which in any case account for a limited amount of financial assets (about 1.1 per cent). 'Foreign securities' include shares, bonds and foreign public sector securities. 'Other assets' comprise loans, trade receivables, severance pay, residual assets and the discrepancies between the financial accounts and the other sources.

In 2019, Italian households continued to be cautious in selecting their portfolio investments: there were sizeable net sales of bank bonds, government securities and shares, and deposits increased (Table 7.1). At the end of the year, just under one third of financial wealth was held in deposits and cash, higher by more than 7 percentage points than in 2007. The share allocated to asset management products rose further, to 31.6 per cent, against 19.8 per cent in 2007. These instruments improve the risk-return profile of financial portfolios by increasing the diversification of investments, also geographically speaking. According to our estimates,[1] in 2019, the total direct and indirect exposure of households to foreign securities stood at 21.1 per cent of financial assets, and exposure to Italian government bonds was 12.3 per cent (Figure 7.1.b).

[1] Estimates are based on a look-through approach that reclassifies the assets underlying the asset management products; see the box 'Household investments through Italian asset management products', Chapter 7, *Annual Report for 2018*, 2019. Compared with the analysis described in the box, current estimates also take account of the investments underlying the shares of foreign investment funds directly held by households and those linked to the shares of investment funds purchased by intermediaries on behalf of households.

Table 7.1

Financial assets and liabilities of households (1)
(millions of euros and per cent)

	End-of-period stocks			Flows	
	2019	Percentage composition		2018	2019
		2018	2019		
ASSETS (2)					
Cash	165, 890	3.8	3.7	6,668	3,469
Deposits (3)	1,294,966	29.3	29.1	22,570	58,182
Italian	1,254,446	28.3	28.2	24,123	57,160
Sight deposits	813,243	18.0	18.3	36,683	52,446
Other deposits	441,203	10.3	9.9	-12,560	4,714
Foreign	40,520	0.9	0.9	-1,553	1,022
Debt securities	271,082	6.8	6.1	-9,294	-33,126
Italian	203,255	5.1	4.6	-11,601	-28,145
of which: issued by the public sector	135,017	3.4	3.0	10,318	-15,885
issued by banks	62,020	1.5	1.4	-21,071	-11,517
Foreign	67,827	1.6	1.5	2,307	-4,982
Investment fund units	480,281	10.7	10.8	1,366	26
Italian	207,143	4.9	4.7	-9,416	-15,812
Foreign	273,138	5.8	6.1	10,781	15,838
Shares and other equity	966,950	22.1	21.8	-19,032	-16,080
Italian	890,880	20.1	20.0	-21,742	-15,181
Foreign	76,069	2.0	1.7	2,710	-899
Insurance, pension funds and severance pay entitlements	1,122,968	24.1	25.3	38,956	25,425
of which: life insurance reserves	808,255	17.1	18.2	30,461	17,016
Other assets issued by residents (4)	143,257	3.2	3.2	5,756	7,395
Total assets	**4,445,394**	**100.0**	**100.0**	**46,992**	**45,290**
Memorandum item: managed assets (5)	1,403,933	30.2	31.6	36,643	21,590
LIABILITIES					
Short-term debt (6)	48,096	5.2	5.0	-1,077	-141
of which: to banks	43,579	4.7	4.5	-3,281	-275
Medium- and long-term debt (7)	688,922	71.0	71.2	21,226	16,829
of which: to banks	586,948	61.4	60.6	5,586	6,552
Other liabilities (8)	231,079	23.8	23.9	1,861	5,747
Total liabilities	**968,097**	**100.0**	**100.0**	**22,011**	**22,435**
BALANCE	**3,477,297**			**24,981**	**22,855**

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) Trade receivables, derivatives and employee stock options, and other minor items. – (5) Includes investment fund shares, life insurance, pension funds and supplementary pensions, excluding severance pay. – (6) Also includes financing provided by factoring companies. – (7) Also includes securitized loans, financing provided by leasing companies, consumer loans from financial companies and loans from other residents. – (8) Includes commercial debts, severance pay and pension provisions, and other minor items.

Borrowing

Households' debts with banks and financial companies grew by 3.5 per cent in 2019 (Table 7.2); at the end of the year, these debts stood at 61.9 per cent as a ratio of disposable income, far below the euro-area average (95.0 per cent), mainly owing to the lower volume of loans for house purchase (Figure 7.2.a).

Table 7.2

Lending to consumer households (1)
(end-of-period data; per cent and millions of euros)

	12–month percentage changes					Stocks at March 2020 (2)
	2016	2017	2018	2019	March 2020	
			Loans for house purchase			
Banks	2.0	2.3	2.5	2.5	2.1	371,863
			Consumer credit			
Banks	8.6	9.2	9.1	8.6	5.6	111,336
Financial companies	1.2	3.2	4.0	8.6	6.4	37,252
Total banks and financial companies	**6.4**	**7.6**	**7.7**	**8.6**	**5.8**	**148,588**
			Other loans (3)			
Banks	-0.5	0.8	1.0	0.2	-0.9	101,184
			Total loans			
Total banks and financial companies	**2.4**	**3.1**	**3.4**	**3.5**	**2.5**	**621,635**

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.

Mortgages continued to grow at a moderate pace (2.5 per cent). Demand was sustained by the housing market conditions, which remained favourable from April to December, and by the low interest rates, which reached historically low levels (see *Economic Bulletin*, 1, 2020). Since last autumn, the cost gap between fixed-rate and variable-rate loans has narrowed to practically nil. Households have benefited from this by taking out fixed-rate loans or renegotiating existing mortgages. The share of new fixed-rate loans on the total (82 per cent in December) has returned to levels close to the euro-area average (Figure 7.2.b).

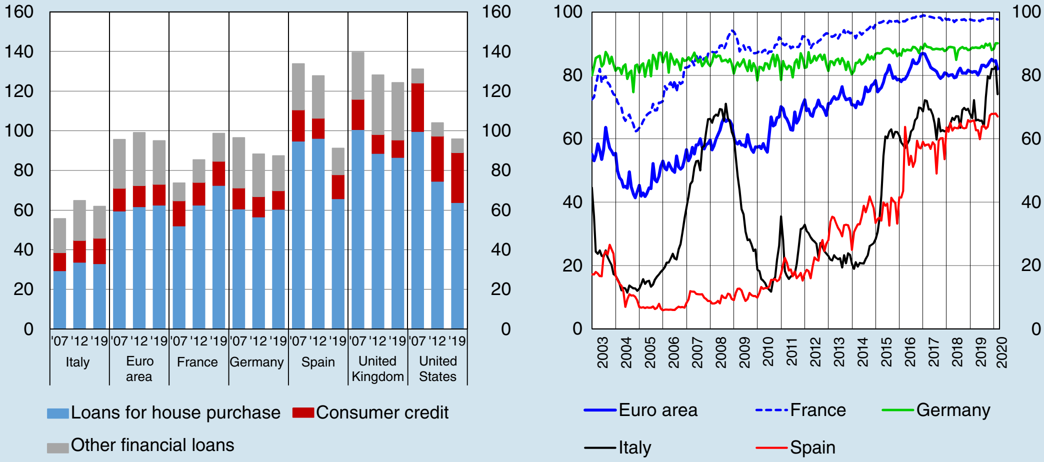
Borrowing for consumption purposes increased by 8.6 per cent. It has been growing steadily since 2015; although this has been the case in the other major euro-area economies as well, the ratio of these debts on disposable income in 2019 was higher for Italy than for the average of the euro area (12.9 and 10.5 per cent, up from 9.2 and 11.4 per cent in 2007 respectively). In comparison with the global financial crisis years, the share of these loans granted to low-income households has decreased. Based on the latest EU-SILC survey for 2018, among households defined as being in relative poverty, the proportion of those with consumer loans has been in sharp decline since 2008 and is lower than in France, Germany, the United Kingdom and Spain (Figure 7.3.a).

Figure 7.2

Household indebtedness (1)
(per cent)

(a) Financial debt as a percentage of disposable income
(yearly data)

(b) Share of new fixed-rate mortgages (2)
(monthly data)



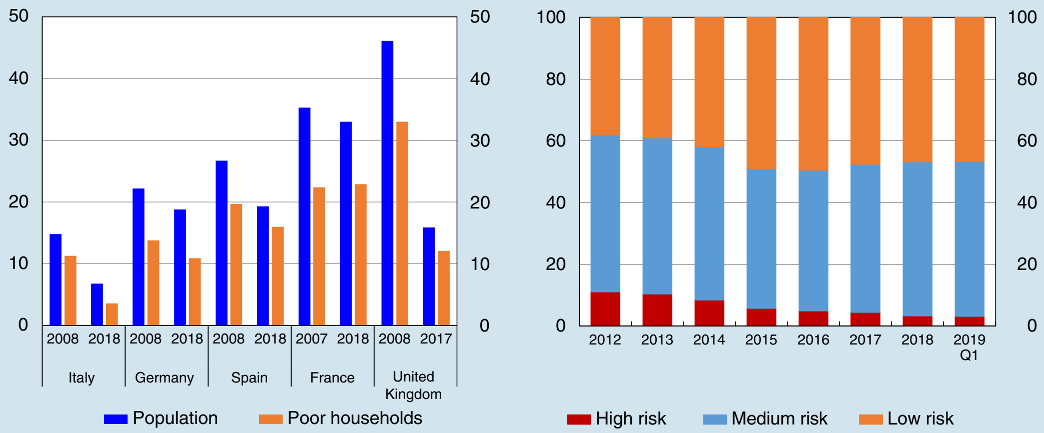
Sources: Bank of Italy and Istat for Italy, ECB for euro-area countries, Office for National Statistics and Bank of England for the United Kingdom.
(1) Consumer and producer households and non-profit institutions serving households. – (2) Ratio of fixed-rate contracts to total loans granted. Fixed-rate mortgages include those lasting for more than one year.

Figure 7.3

Indicators of the financial soundness of indebted households
(per cent)

(a) Share of households with consumer loans (1)
(yearly data)

(b) New loans by risk class of mortgagers (2)
(number of contracts)



Source: For panel (a), based on EU-SILC data; for panel (b), based on Crif SpA data.
(1) The figure shows the share of households with consumer loans as a percentage of the population (blue bars) and as a percentage of poor households (orange bars). The European Commission's definition of relative poverty includes households with an equivalized income that is less than 60 per cent of the national median. The latest data available for the United Kingdom refer to 2017.

The share of new loans granted to households with a high capacity to bear their costs has increased since 2012. This reflects both the careful selection by intermediaries and an increase in demand on the part of high-income households. In the first quarter of 2019, the share of new loans granted to borrowers classified as low-risk was about half of the total; the share granted to borrowers classified as high-risk had reached minimum values (for new mortgages, see Figure 7.3.b; for new debts for consumer purposes, see *Financial Stability Report*, 1, 2020).

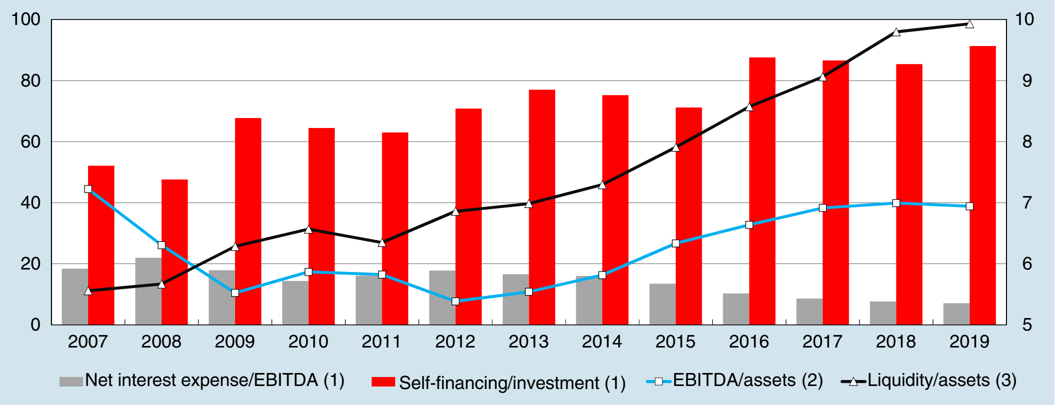
FIRMS

Profitability and financial balance

The recovery in firms' profitability, under way since 2012, came to a halt in 2019. The gross operating profit (EBITDA) of non-financial corporations remained practically unchanged at 7 per cent of total assets, a slightly lower level than that observed in 2007 (Figure 7.4). The further decrease in interest rates helped to bring the share of net interest expense on operating income down to 7.1 per cent.

Figura 7.4

Profitability and coverage of investment
(per cent)



Sources: Based on Cerved data and on nominal Istat data.
(1) Net interest expense and self-financing are estimated based on Istat data. – (2) The ratio of EBITDA to assets for 2019 is estimated based on the EBITDA/assets series available up to 2018 (Cerved data) and on the annual change in the ratio of EBITDA to financial liabilities, net of the effect of market prices (Istat and Financial Accounts data). Right-hand scale. – (3) Total assets are proxied by financial liabilities. Right-hand scale.

Capital accumulation, which slowed compared with 2018 (see Chapter 6, 'Firms'), was supported by an increasing use of internal funds; the ratio between self-financing and investment reached its highest value in more than 20 years (91 per cent). The financial balance of the sector, with a surplus of over €16 billion (Table 7.3), rose to 1.0 per cent of GDP, and liquidity holdings remained stable in relation to assets, after the significant increase of previous years.

Table 7.3

Financial assets and liabilities of firms (1)
(millions of euros and per cent)

	End-of-period stocks			Flows	
	2019	Percentage composition		2018	2019
		2018	2019		
ASSETS					
Cash and deposits	380,687	20.3	20.4	12,696	21,836
Securities	47,162	3.2	2.5	-3,526	-14,582
of which: Italian public sector	37,327	2.7	2.0	-2,035	-14,760
Shares and other equity	724,924	37.2	38.9	29,811	41,084
Trade receivables	544,692	30.5	29.2	-61,124	3,769
Other assets (2)	165,373	8.7	8.9	-2,207	6,372
Total assets	**1,862,837**	**100.0**	**100.0**	**-24,350**	**58,479**
of which: foreign	543,935	29.5	29.2	37,716	17,259
LIABILITIES					
Financial debt	1,223,536	33.3	31.9	15,710	-4,556
Bank loans	631,239	18.3	16.5	-38,624	-35,989
Other loans (3)	443,288	11.0	11.6	58,484	35,234
Securities	149,008	4.0	3.9	-4,150	-3,801
Shares and other equity	1,888,859	47.7	49.3	12,823	35,663
Trade payables	494,378	13.2	12.9	-64,347	1,877
Other liabilities (4)	225,412	5.7	5.9	3,242	8,648
Total liabilities	**3,832,185**	**100.0**	**100.0**	**-32,572**	**41,632**
of which: foreign	749,456	18.8	19.6	24,959	24,386
BALANCE	**-1,969,348**			**8,221**	**16,847**

Source: Bank of Italy, Financial Accounts.
(1) The data refer to the non-financial corporations sector. Rounding of decimal points may cause discrepancies in the totals. – (2) Short-term foreign claims, 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.

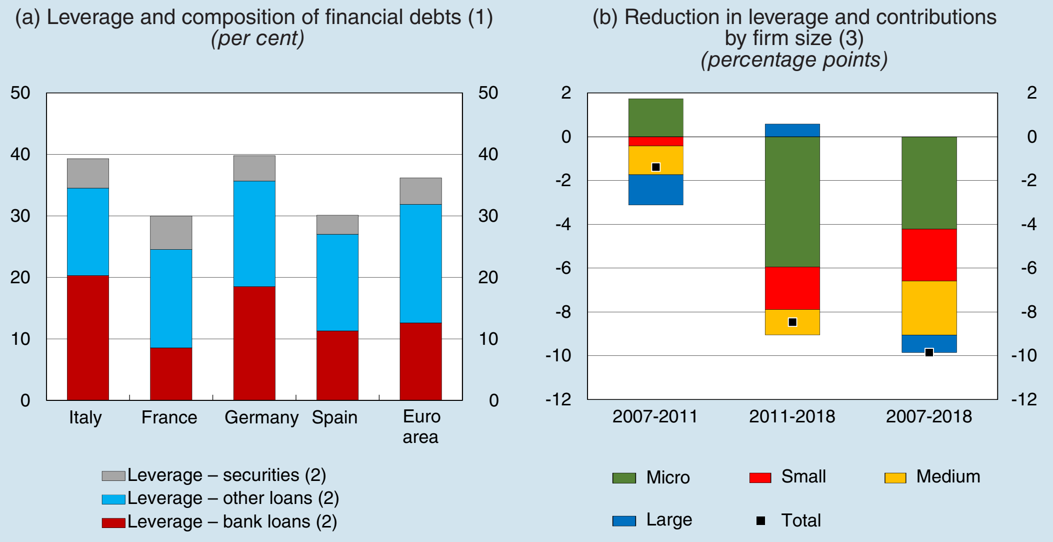
Sources of funding

Financial structure. – The reduction in indebtedness, almost uninterrupted since 2011, continued in 2019 too. Firms' financial debts decreased to 68 per cent of GDP over the year; leverage, calculated as the ratio of financial debt to the sum of financial debt and net equity, declined by almost 2 percentage points to 39 per cent. Larger capital injections and a fall in bank loans contributed to this improvement. Compared with the euro-area average, Italian firms are still characterized above all by a higher share of bank debt in their total financial debts (Figure 7.5.a).

In the last few years, the decrease in leverage has been extensive for micro-businesses, which account for more than two thirds of the fall observed between 2011 and 2018 (around 8 percentage points; Figure 7.5.b). The contraction for these businesses is mainly attributable to the exit of the most indebted ones from the market. A gradual shift in favour of long-term debt has contributed to the rebalancing of the financial structure of firms (see *Financial Stability Report*, 1, 2020).

Figure 7.5

Indicators of firms' indebtedness



Sources: Bank of Italy, ECB and Cerved.
(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) Based on annual samples that include about 550,000 limited companies on average. Leverage is calculated as the ratio of financial debt to the sum of financial debt and net equity at book value.

Table 7.4

Lending to firms (1)

(end-of-period data; per cent)

	12-month percentage changes					Percentage composition
	2016	2017	2018	2019	March 2020	March 2020
			Banks			
Economic activity						
Manufacturing	-0.6	2.6	2.7	-0.2	2.6	23.1
Construction	-5.2	-3.5	-2.1	-4.0	-2.7	11.8
Services	3.4	1.7	4.3	-1.0	3.6	37.7
Real estate	1.0	-3.1	-3.5	-4.4	-3.9	9.8
Other	-1.8	-0.8	-2.8	-3.2	-1.5	9.0
Size of firm						
Small (2)	-2.1	-0.9	-1.0	-2.2	-1.7	16.0
Medium-sized and large	0.7	0.5	1.8	-1.7	1.8	75.4
Total	**0.2**	**0.2**	**1.3**	**-1.8**	**1.1**	**91.4**
			Financial companies			
Leasing	-2.7	-4.0	-3.4	-3.1	-3.5	5.4
Factoring	11.0	4.3	8.5	-1.0	-2.0	2.4
Other financing	-4.6	7.5	0.8	27.3	22.0	0.8
Total	**0.6**	**-1.2**	**0.3**	**-0.8**	**-1.5**	**8.6**
			Banks and financial companies			
Total	**0.2**	**0.1**	**1.2**	**-1.7**	**0.9**	**100.0**

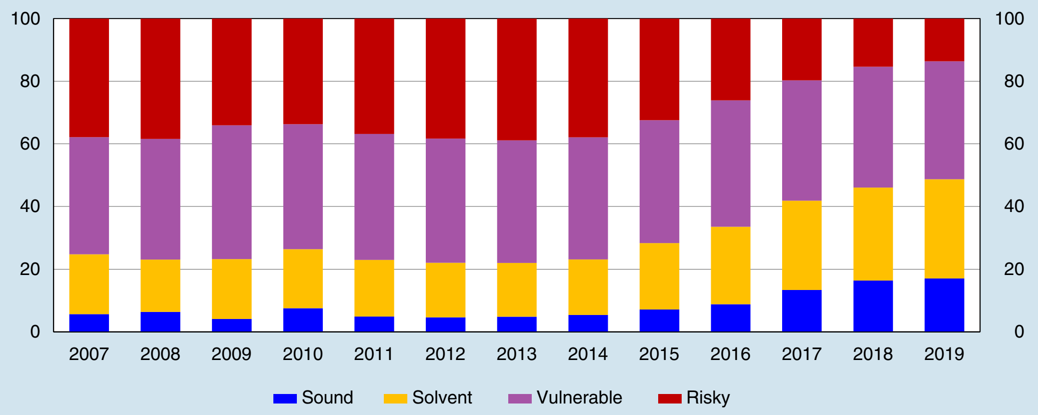
Source: Supervisory reports.
(1) The data refer to non-financial corporations and producer households. The data for March 2020 are provisional. – (2) Limited partnerships, general partnerships, informal partnerships, de facto companies and sole proprietorships with fewer than 20 workers.

Credit. – Loans granted to firms by banks and financial companies decreased by 1.7 per cent in 2019 (Table 7.4). The fall was considerable in the real estate sector and also affected large firms.

The strengthening of the financial conditions of firms and the rather selective credit supply criteria of intermediaries[2] were reflected in a considerable reduction in the share of loans to firms classified as risky (from 38 to 14 per cent between 2007 and 2019; Figure 7.6). Even with the same level of riskiness, between 2012 and 2019 the trend in lending to small firms was worse than the overall trend, reflecting a tightening of credit supply policies towards them (see the box 'Credit to small firms before and after the global financial crisis').

Figure 7.6

Lending to firms by risk class (1)
(per cent)



Source: Based on Bank of Italy and Cerved data.
(1) The data refer to a sample of over 430,000 limited companies. Loans include those granted by financial companies. Allocation into the risk classes is based on Cerved's CeBi-Score4 indicator.

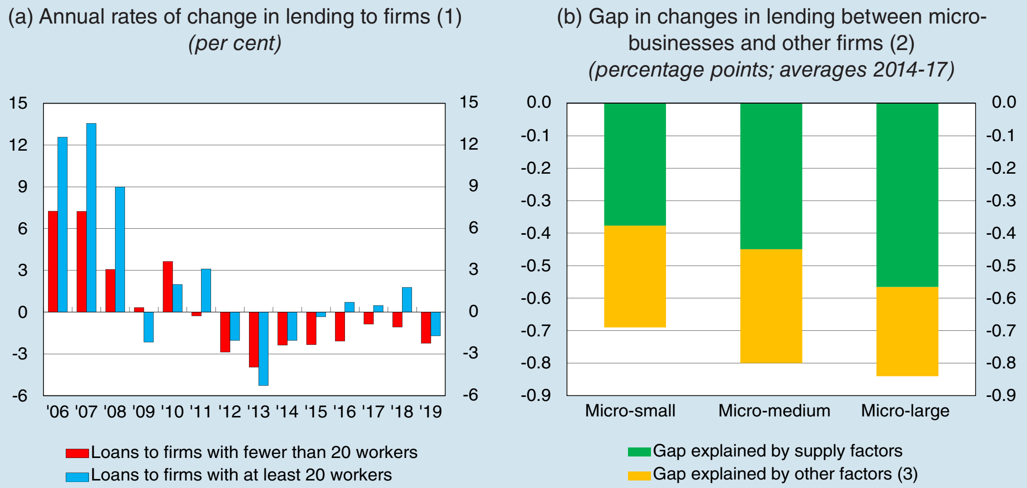
CREDIT TO SMALL FIRMS BEFORE AND AFTER THE GLOBAL FINANCIAL CRISIS

The economic recovery following the long period of recession, which began with the global financial crisis and was fuelled by the euro-area sovereign debt crisis, was accompanied by very weak growth in bank credit that differed greatly according to firm size. Specifically, loans to smaller firms (with fewer than 20 workers) have declined continuously since 2011 (see panel (a) of the figure). The negative trend reflects both demand factors, linked to the exit of marginal firms from the market and the sharp drop in investment, and supply factors, linked to the increased risk aversion of banks, which has made access to credit more difficult for small businesses, generally more fragile from a financial point of view.

[2] G. Eramo, R. Felici, P. Finaldi Russo and F.M. Signoretti, 'How slow is the recovery of loans to firms in Italy?', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 469, 2018.

Figure

Credit dynamics and the contribution of supply factors



Sources: Supervisory reports and calculations based on Bank of Italy and Cerved data.
(1) Data refer to the non-financial corporation and producer household sectors; they include securitized loans. – (2) Average differences in changes in loans granted between micro-businesses and other firms (small, medium-sized and large). The changes are calculated annually in relation to the total assets of the previous year. The supply component is estimated using a linear fixed-effects model, in line with the methodology proposed by H. Degryse et al., 'Identifying credit supply shocks with bank-firm data: methods and applications', *Journal of Financial Intermediation*, 40, 2019. – (3) The other factors include credit demand and a residual supply component common to all intermediaries.

A study on firm-level data,[1] comparing the developments in loans in the period 2004-07 with those in the years 2014-17, shows that, given the same demand for loans and riskiness of borrowers, banks adopted more selective supply policies after the crisis for loans to small and medium-sized enterprises.[2]

Credit availability has declined above all for micro enterprises, for which supply factors account for more than two thirds of the gap in the change in loans compared with large enterprises and more than half of the gap observed with small and medium-sized enterprises (panel (b) of the figure). In contrast, before the crisis, lending policies had encouraged a relatively higher inflow of loans to micro enterprises than to other categories.

All other characteristics being equal, it is above all the largest banks that have adopted more selective lending policies towards smaller firms. This may reflect the greater difficulties on the part of these financial intermediaries in disbursing loans to firms with a significant degree of informational opacity and with high fixed costs compared with the low unit volume of operations.

[1] P. Finaldi Russo, V. Nigro and S. Pastorelli, 'Bank lending to small firms: Evolution of a financing model', Banca d'Italia, Temi di Discussione (Working Papers), forthcoming. The study, which looks at the credit relationships of a large sample of limited companies, identifies the contribution of supply factors in the two periods analysed, assuming loan supply shocks that are uneven across debtors of different size classes within the same bank. The results take account of the differences between firms in their demand for credit and in the economic and financial conditions that mark their sector, the province where they operate, their size, and the data reference year.

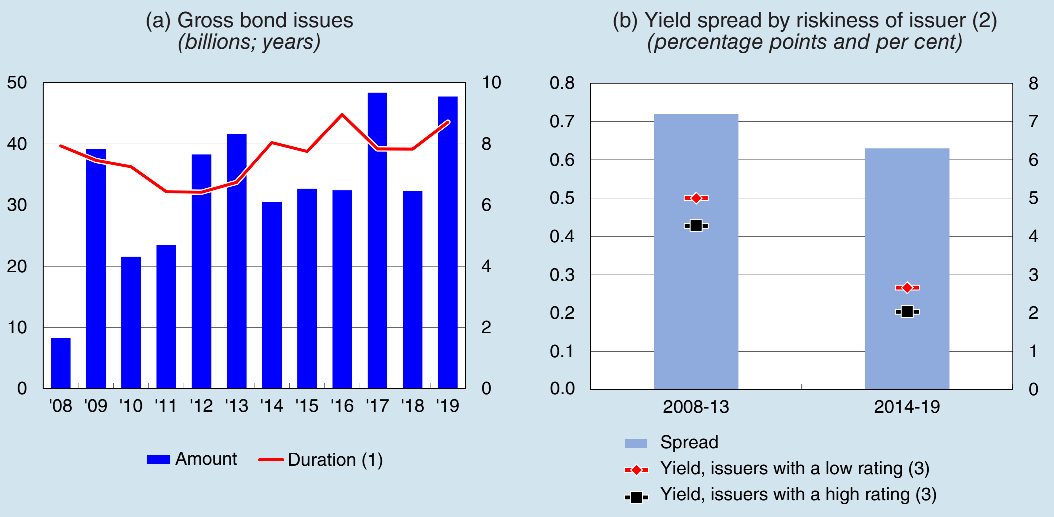
[2] The definition of firm size used in the study is in line with that in the Commission Recommendation (2003/361/EC). Micro firms: fewer than 10 workers and a turnover (or total assets) not exceeding €2 million; small firms: fewer than 50 workers and a turnover (or total assets) not exceeding €10 million; medium-sized firms: fewer than 250 workers and a turnover (or total assets) not exceeding €50 million (€43 million); and large firms are all the remaining firms.

Alternative sources of funding. – In 2019, the diversification in the sources of financing for Italian companies continued. Recourse to bond loans increased steadily: total gross emissions for the year amounted to €47.7 billion, €12.5 billion more than the average for placements in the years 2014-18 (Figure 7.7.a). The average maturity of securities at issuance rose to about nine years, in line with the trend observed in the main European countries.

Bond market participation increased among new issuers and among riskier ones, which benefited from a relatively more marked decline in yields at issue. Between 2014 and 2019, the yield spread between the securities issued by firms with different credit ratings narrowed compared with the previous five years (Figure 7.7.b).

Figure 7.7

Bond market indicators



Sources: Based on data from Dealogic, Cerved and the Bank of Italy's Securities Database.
(1) Duration is calculated as the average, weighted by the amounts, of the maturities of euro-denominated fixed-rate bond loans. Right-hand scale. – (2) Fixed-rate bond loans. Issuance costs are weighted by the amount issued. Risk classes are defined based on Cerved's CeBi-Score4 indicator. – (3) Right-hand scale.

The use of innovative financing channels is expanding, despite starting from very low initial levels. The sale of commercial invoices on a digital platform, known as invoice trading, recorded the highest growth rates. Based on data from the Politecnico di Milano,[3] the value of the resources mobilized on the new invoice trading platforms, equal to €940 million over the twelve months ending in June 2019, almost doubled on an annual basis. The use of direct lending through specialized funds is still limited, though gradually increasing. The volume of funding collected through innovative channels remains rather limited overall.

The number of new IPOs of non-financial corporations increased: in 2019, there were 33 operations, far more than the 22 recorded on average over the period 2013-18. The average size of the companies admitted to the stock exchange decreased, in line

[3] Politecnico di Milano, 'La finanza alternativa per le PMI in Italia', *Osservatori Entrepreneurship & Finance,* 2, November 2019 (only available in Italian).

with the trend observed in recent years;[4] this was reflected in a reduction of the total amount of capital raised, which was more than halved compared with 2018.

According to the data released by Invest Europe/EDC, the resources invested by venture capital firms in Italian companies came to €244 million in 2019, double the average of the previous three years. Investment for financing the growth of later-stage companies rose to more than a third of total investment, a significantly higher volume than the average for the years 2016-18 (€41 million). The amount invested per transaction went up to almost €2.7 million, owing to the increase in the average size of the companies financed.

THE EARLY MONTHS OF 2020 AND THE MEDIUM-TERM PROSPECTS

HOUSEHOLDS

In the early months of 2020, the effects of the COVID-19 pandemic were transmitted to the household sector through the fall in income as a result of the containment measures (see Chapter 5, 'Households') and the decrease in the market value of financial wealth caused by the fall in stock and bond prices (see the box 'The financial markets' reaction to the spread of the pandemic', Chapter 14).

At the end of April, the value of the financial assets of Italian households was lower than at the end of 2019 by about €130 billion, or 2.9 per cent. The financial instruments whose value is most exposed to market tensions are mainly held by households belonging to the highest income classes (see *Financial Stability Report*, 1, 2020). The worsening of growth prospects and the increased uncertainty have led to greater risk aversion and a preference for liquid instruments. According to the findings of a recent survey,[5] in March, more than half of households with more than €25,000 worth of financial assets reported that they did not want to invest in risky assets, a significant increase in the share compared with the previous two years (42 and 39 per cent in early 2019 and 2018 respectively).

The initial evidence on the number of house sales shows a fall in transactions (see Chapter 5, 'Households'), which might lead to a fall in residential mortgage loans. The expansion of consumer credit could be affected by lower expenditure on durable goods. In March, households' debts to banks[6] decreased by 6.9 per cent compared with February.

The capacity of households to cope with the crisis, aided by the modest level of indebtedness and low interest rates, also depends on the financial resources available to them to offset the fall in income. According to the data from the special survey of households conducted by the Bank of Italy (see the box 'Italian households' assessments and expectations during the current public health emergency', Chapter 5), in April, 38

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4 P. Finaldi Russo, F. Parlapiano, D. Pianeselli and I. Supino, 'Firms' listings: what is new? Italy versus the main European stock exchanges', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 555, 2020.

5 Prometeia and Ipsos, 'Wealth Insights', April 2020.

6 The figure refers to consumer and producer households; it does not include financial companies.

per cent of mortgagers stated they had difficulties in paying their instalments because of the COVID-19 epidemic. The percentage is higher among the self-employed and those employed in the trade and food service sectors (52 and 64 per cent respectively). Among individuals with debts for consumption purposes, the share of those with difficulty in paying instalments is slightly lower on average, at 34 per cent. Individuals who declared that they have accumulated savings sufficient for essential consumption (food, heating, hygiene and so on) and, if they have debts, for the payment of no more than three months of instalments, account for 38 per cent of the total. The percentage rises to over 50 per cent when the person is a worker with a fixed-term contract or when household income has been more than halved because of the pandemic. Individuals in sounder financial conditions, i.e. with sufficient resources to meet these expenses until at least the end of the year, account for about one third of the total.

Indebted households that are temporarily in difficulties with their instalment payments can use the Solidarity Fund for mortgages for the purchase of a primary residence (Gasparrini Fund), the envelope of which has recently been expanded by the Government[7] (see the box 'The measures adopted to deal with the public health emergency in Italy', Economic Bulletin, 2, 2020). Some households can also have their payments suspended or have the length of their loans extended by activating the clauses included in their contracts. In 2019, the share of loans with this type of clause was around 36 per cent (it was less than 20 per cent on average during the double-dip recession). Some private initiatives, such as the moratorium on consumer credit promoted by Assofin[8] and the agreement reached between the Italian Banking Association (ABI) and consumer associations,[9] are helping to alleviate the burden of household debt.

Based on a dedicated survey launched by the Bank of Italy,[10] as at 8 May, it is estimated that banks had received just over 105,000 applications connected to the Gasparrini Fund to suspend mortgage instalments for a primary residence, accounting for a residual debt of slightly more than €9 billion. More than 32,000 applications were accepted, just over 5,500 were refused, and the remainder were in progress. Given the

[7] The Gasparrini Fund, established in 2007, allows holders of a mortgage for the purchase of a primary residence to benefit from the suspension of instalment payments in the event of situations of temporary difficulties that are likely to adversely affect a household's overall income. The scope and resources of the Fund were extended by Decree Law 18/2020 (the 'Cure Italy' Decree) and Decree Law 23/2020 (the 'Liquidity' Decree). The maximum duration of the suspension is 18 months. Half of the interest accrued during the suspension period of the suspension is paid by the Fund; the other half will be repaid in instalments by the borrower at the end of the suspension together with the remaining debt, in line with the new amortization plan.

[8] The debt moratorium provides for the possibility of suspending the payment of instalments for loans of over €1,000 with a duration of more than six months. This benefits consumers in temporary difficulties owing to the termination of payroll or non-standard employment contracts, the suspension of jobs or reduction in working hours and, for the self-employed and professional categories, a fall in turnover of more than 33 per cent compared with that of the last quarter of 2019. The suspensions can be for a maximum of six months.

[9] The agreement reached between ABI and the consumer associations provides for the possibility of suspending for up to 12 months the principal amount of instalments of mortgages other than those eligible for the benefits provided by the Gasparrini Fund and of loans with no collateral, with repayments in instalments. This includes loans backed by mortgages for the restructuring of non-luxury properties, liquidity purposes or the purchase of non-primary dwellings or which, while connected with the purchase of the primary dwelling, are not eligible for access to the Gasparrini Fund, as well as special purpose or personal loans and consolidation loans. Loans secured by a pledge of one fifth of a salary and payments by third parties are excluded. The maximum duration of the suspension is 12 months.

[10] The Bank of Italy collects information through the Task Force set up with the Ministry of Economy and Finance, the Ministry of Economic Development, ABI, Mediocredito Centrale and SACE.

resources of the Fund that have not yet been used, it is estimated that approximately 300,000 additional suspensions could be granted.[11] There have been almost 400,000 applications for the suspension of consumer loan instalments, worth more than €6.5 billion; most of these applications have been accepted.

Debt moratoriums have provided strong support in the past to households experiencing temporary difficulties. According to the most recent data from the Survey of Household Income and Wealth, more than 70 per cent of the households that had recourse to the suspension of instalments in the years 2015-16 resumed their payments regularly when the suspension ended.

FIRMS

The slump in sales associated with the spread of the pandemic has eroded firms' profitability margins. About 46 per cent of the 3,500 companies interviewed for the dedicated survey on the impact of the coronavirus (ISECO), concluded in May, predict a reduction in turnover of 30 per cent or more compared with the same period in 2019; the share is highest among smaller firms (see the box 'The impact of the COVID-19 pandemic according to business surveys', Chapter 6).

The decline in revenue, which was not matched by an equally marked reduction in expenditure owing to the rigidity of some costs, has led to a rise in liquidity needs. According to Bank of Italy estimates that take account of the margins available on credit lines and the debt moratorium on bank loans, total liquidity needs in the period March-July 2020 would amount to approximately €50 billion; as a percentage of turnover, the liquidity gap would be greater for large companies (see the box 'The effects of the pandemic on firms' liquidity needs in *Financial Stability Report*, 1, 2020). Most of these needs could be covered by making use of the public guarantee schemes introduced from March onwards (see the box 'The financial support measures for firms in response to the pandemic').

THE FINANCIAL SUPPORT MEASURES FOR FIRMS IN RESPONSE TO THE PANDEMIC

In order to limit the effects of the pandemic on production activity, the Government has launched a wide range of initiatives since March to support the financial situation of firms, specifically by providing for tax breaks and a reduction in social security contributions, an extension of the wage supplementation scheme, non-repayable contributions, recapitalization incentives and measures for access to credit.[1] With regard to the latter, the measures already in place include a debt moratorium for small and medium-sized enterprises (SMEs) to reduce their payments to the banking system, and the strengthening of the state-backed demand guarantee system to support

[1] The measures were introduced by Decree Laws 18/2020, 23/2020 and 34/2020. For a more detailed description of the credit measures, see the box 'The financial support measures for firms', *Economic Bulletin*, 2, 2020 and the box 'Public intervention in lending to firms', *Financial Stability Report*, 1, 2020.

[11] For each application accepted, it is assumed that the Fund will bear 50 per cent of the interest accruing over the maximum suspension period (18 months). The annual interest is estimated by multiplying the average residual debt of applications already approved (around €93,000) by the interest rate on the stocks of mortgage loans as at March.

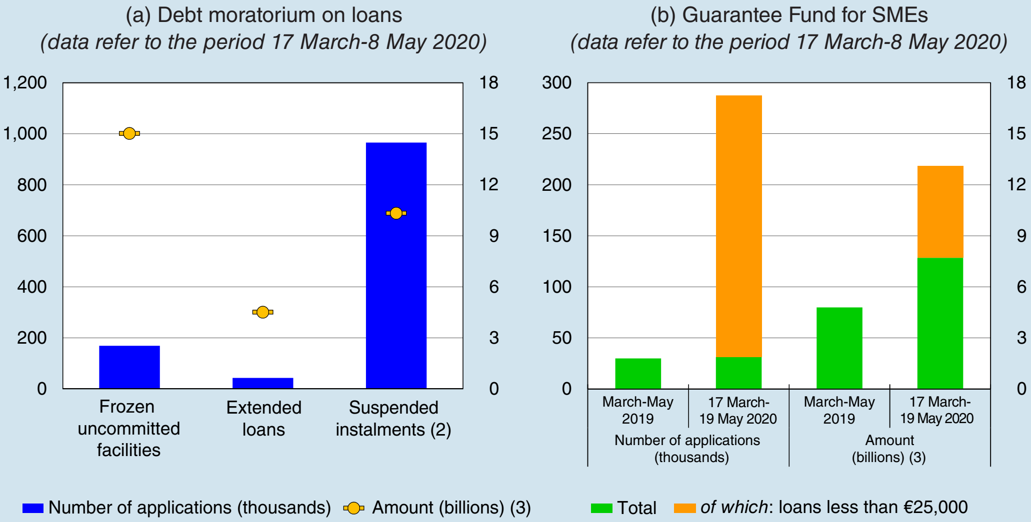
the flow of new loans. The measures are temporary, except in rare cases, do not provide for an assessment of the creditworthiness of beneficiaries by public authorities and are intended for companies that had no non-performing loans prior to the crisis.

The moratorium allows SMEs to obtain an extension on maturing loans until the end of September 2020, the suspension of instalment payments and the freezing of uncommitted credit facilities, such as current account overdrafts. The maturing loans and instalments that could be affected by these measures are estimated at over €60 billion; the credit lines and other uncommitted facilities that will remain at the full disposal of companies for the whole period amount to around €160 billion, a third of which had yet to be used at the end of January.

Based on the survey begun by the Bank of Italy to monitor access to the moratorium, up until 8 May, intermediaries had received about 1.2 million applications, for a total value of €30 billion. The requests were almost always accepted (less than 1 per cent were rejected) and generally involved the suspension of loan instalments (see panel (a) of the figure).

Figure

Firms' participation in the measures to support access to credit (1)



Sources: Bank of Italy, Ministry for Economic Development and Mediocredito Centrale.
(1) The data refer to the applications received. – (2) The amount of the instalments suspended, referring to a residual debt of about €120 billion, is estimated by assuming fixed-rate amortization, a residual debt maturity of close to 6 years and an average interest rate of 1.9 per cent. – (3) Right-hand scale.

The extension of public guarantees for SMEs was achieved through the Central Guarantee Fund, by widening the range of potential beneficiaries, raising the coverage ratios of loans, increasing capital endowments and simplifying procedures. The Fund's Management Board implemented the changes in the days immediately following the issuance of the measures. Up until 19 May, there had been almost 300,000 applications for admission to the guarantee, almost all of which were accepted by the Management Board; this was ten times the number for the three months March-May 2019. The increase is entirely due to applications for loans of less than €25,000 that, in accordance with the legislation, can be granted without waiting for the Board's approval. The amount of funding relative to the applications received, totalling €13.1 billion, was almost three times higher than in the corresponding quarter of last year (see panel (b) of the figure).[2]

For large companies too, government support has taken the form of state-backed demand guarantees. SACE, a company in the CDP Group that previously specialized in supporting the internationalization of companies, was empowered to issue guarantees worth €200 billion on loans to companies of all sizes. SACE's new operations started in late April, and up until 19 May, guarantees worth just over €150 million had been granted; on the same date, around 250 financing operations were being examined by banks, for a total of nearly €18.5 billion.

The actions taken by the Government can contribute effectively to containing the liquidity crisis of firms; the volume of loans potentially affected by the interventions is substantial, even by international standards (see the box 'The discretionary fiscal policies of the major euro-area countries in response to the COVID-19 emergency', Chapter 2).

During the first weeks that the measures were implemented, the time taken to approve applications was affected by their high numbers and by the need, in some cases, to adopt completely new operational procedures; the situation gradually improved in May, especially with regard to smaller loans. Banks' assessments of the creditworthiness of beneficiaries also affect the time it takes to disburse loans. In this regard, banks use mixed practices, which reflect the difficulty in balancing the need to supply funds quickly to the companies that need them and to prevent guarantees from having to cover very high-risk loans.[3] This is an important process for preserving banks' capacity to support economic recovery and ensuring an efficient allocation of public funds.

In order to ensure an efficient and rapid use of the measures, a task force was set up in which the Bank of Italy participates together with the Ministry of Economy and Finance (MEF), the Ministry of Economic Development, the Italian Banking Association, Mediocredito Centrale and SACE.[4] The Bank of Italy also recommended that banks should step up their efforts to minimize any inconvenience to their customers and to facilitate access to the support measures envisaged so that they can fully achieve the results expected.[5]

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[2] Comparisons with the previous year are affected by the decrease in the Fund's operations observed since April 2019, following the entry into force of a reform that has rewritten the criteria for accessing the guarantee. Even leaving aside this change, however, there still appears be a sizeable increase in applications and loans after 17 March 2020.

[3] 'Conversion into law of Legislative Decree 23/2020 (urgent measures concerning access to credit and tax obligations for firms, special powers in strategic sectors, health and labour measures and an 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).

[4] For more information, see the MEF website: 'The task force for the efficient and rapid use of support measures for liquidity'.

[5] Bank of Italy, 'Recommendation on issues relating to the economic support measures drawn up by the Government for the COVID-19 emergency', 10 April 2020 (only in Italian).

Larger firms met their funding needs by borrowing from banks, which returned to growth (the twelve-month change was 1.8 per cent in March; see Table 7.4). Although lending to small firms continued to decrease on an annual basis (-1.7 per cent), an increase was observed in March in contrast to the reduction in the previous months. The six-monthly Survey on the Access to Finance of Enterprises in the euro-area, concluded in March 2020, shows that the balance between Italian SMEs expecting an improvement in the availability of bank loans over the next six months and those expecting a deterioration is broadly similar to the negative peak of 2012 (-13 and -12 percentage points respectively).

Businesses have increasingly turned to providers of funds other than traditional ones. Based on CRIF credit bureau data on a sample of ten operators using innovative technologies for the supply of financial services (FinTech), the number of loan applications and their amount increased by 30 and 60 per cent in the first quarter of the year compared with the same period in 2019.

The fall in securities prices early in the year led to a rapid deterioration in the conditions for accessing the bond market: between January and April, bond issues were halved compared with the average for the same period in the three previous years (€6 billion and €12 billion respectively). Placements, mainly attributable to large firms, became more expensive; for issuers with a low rating, there was a marked increase in risk premiums. Non-financial corporations also had very little recourse to the stock market: until April, there was only one listing on the stock exchange, a significantly smaller number than the six operations concluded during the same period in 2019 and than those scheduled at the beginning of the year.

The measures adopted by the Government to prevent a disruption of credit and of the payment chain by granting public guarantees contribute significantly to alleviating firms' liquidity tensions. In the long term, as some of the losses incurred will probably not be recoverable, they could lead to imbalances in their financial structure.[12] The recent measures to encourage a greater inflow of own funds into the production system[13] are helping to counter this trend.

[12] G. Gobbi, F. Palazzo and A. Segura, 'Le misure di sostegno finanziario alle imprese post-Covid-19 e le loro implicazioni di medio termine', Banca d'Italia, *Note Covid-19*, 15 April 2020 (only available in Italian); it also appeared with the title 'Unintended effects of loan guarantees during the COVID-19 crisis' on VoxEU.org.

[13] Decree Law 34/2020 (the 'Relaunch Decree').

8. THE LABOUR MARKET

In 2019, employment growth continued at a slower pace; the part-time component increased, while the full-time component remained stable. The unemployment rate declined to 10.0 per cent, the lowest level since 2012. During the year, the increase in labour market participation of previous years was interrupted, reflecting the demographic changes and retirements prompted by the introduction of the *quota 100* early retirement scheme (Law 26/2019).

In early 2020, the public health emergency caused a rapid deterioration in the labour market. According to the administrative data drawn from the mandatory reporting on new and terminated employment contracts, the number of new payroll employment contracts began to fall in early March, especially in the fixed-term component: between January and the end of April of this year, almost 600,000 fewer jobs were created than in the same period of 2019. The drop in employment was mitigated by the freezing of layoffs and the boosting of wage supplementation, which sustained permanent employment contracts: employers applied for access to wage supplementation instruments for more than 7 million employees. Subsidies for self-employment, quasi-employment and seasonal employment positions were introduced, as were new household income support measures.

In some sectors, including accommodation and food services, the consequences of the COVID-19 epidemic could persist even after business suspension measures are eased owing to the drop in tourist flows, the increase in costs associated with the adoption of health protection protocols and possible shifts in consumer demand.

The unemployment rate fell in March by almost 1 percentage point compared with February, to 8.4 per cent, as a result of the significant decline in labour market participation: the restrictions on mobility, the deterioration in the employment outlook and the closing of schools discouraged job seekers.

The minimum remuneration levels established by national collective bargaining continue to rise very slowly, reflecting the large percentage of employees waiting for contract renewal (more than 80 per cent). Growth could slow further if the uncertainty regarding the changing state of the economy causes a delay in the negotiation process.

The labour market in 2019

In 2019, the growth in the number of persons employed, after increasing substantially for three years, gradually weakened: the positive trend in the first half of the year, buoyed by the rise in permanent payroll employment, came to a halt in the summer months and changed direction in the fourth quarter. On average for the year, the moderate increase in the number of persons in employment (0.6 per cent; Table 8.1) was almost wholly confined to the part-term component (3.0 per cent), while full-time employment remained virtually stable. The decrease in average working hours, which was particularly pronounced in manufacturing, inhibited the rise in total hours worked (0.4 per cent).

Table 8.1

Main labour market indicators (1)
(percentage changes on previous period; rates)

	Q1 2019	Q2 2019	Q3 2019	Q4 2019	2019	Q1 2020
Persons employed (2)	0.2	0.3	0.1	-0.1	0.6	-0.4
Payroll employees (2)	0.3	0.4	0.2	0.0	0.8	–
Self-employed workers (2)	-0.2	0.0	0.1	-0.1	-0.1	–
Activity rate (3)	65.7	65.7	65.7	65.7	65.7	64.9
Unemployment rate (4)	10.3	9.9	9.8	9.7	10.0	9.1

Sources: Based on Istat's national accounts for persons employed, payroll employees, and self-employed workers in 2019 and on Istat's labour force survey for all the other items.
(1) Seasonally adjusted quarterly and annual data. – (2) Year-on-year percentage change. The breakdown for payroll employees and self-employed workers is not available for the 1st quarter of 2020. – (3) Rates calculated based on the population between ages 15 and 64 years. – (4) Rates calculated based on the population between ages 15 and 74 years.

The unemployment rate fell to 10.0 per cent, from 10.6 per cent in 2018. Over the course of the year, the participation rate ceased to rise following the gradual exit from the labour market of those who, as a result of the 2011 pension reform, had their working lives extended. Contributing to this, albeit to a lesser extent than the Government had expected, was the introduction of the *quota 100* early retirement scheme (see Chapter 8, 'The labour market' in the *Annual Report for 2018*, 2019). In 2019, almost 150,000 pension positions, around half of those projected, were liquidated through this early retirement channel.

In 2019, the annual growth in the minimum remuneration levels established by national collective bargaining slowed to 1.1 per cent (from 1.5 per cent in 2018), owing to the moderate increase provided for under existing contracts and to the high percentage of contracts due for renewal, including all public sector contracts. On 31 December the collective bargaining agreements for the metalworking and retail trade industries also expired, concerning over 30 per cent of employees.

The impact of the COVID-19 emergency on the labour market

Employment and hours worked. – The health emergency that began at the end of February had an immediate impact on the labour market. According to Istat's labour force survey, the average number of persons in employment in the first quarter of 2020 fell by 0.4 per cent compared with the previous three months. The administrative data on mandatory reporting provided by the National Agency for Active Labour Market Policies (ANPAL) indicate that developments in private sector payroll employment remained in line with those observed in the same period of 2019 until the third week of February, then began to deteriorate sharply at the end of the month. The decline has accelerated since the end of March: between the start of the year and 23 April,[1] there were almost 600,000 fewer new hires (net of terminations) compared with the same period of 2019 (see the box 'Developments in private sector payroll employment during the public health emergency').

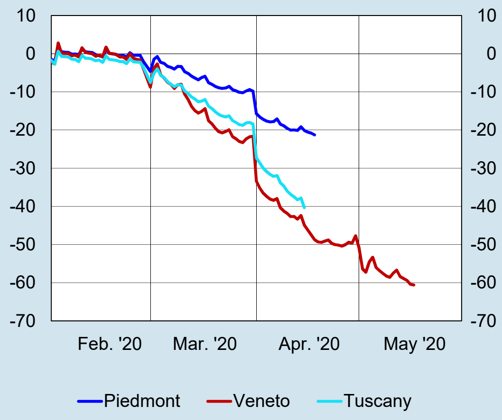
DEVELOPMENTS IN PRIVATE SECTOR PAYROLL EMPLOYMENT DURING THE PUBLIC HEALTH EMERGENCY

The data from the mandatory reporting on new and terminated employment contracts currently available to us for the regions of Piedmont, Veneto and Tuscany – fully comparable with those published by Italy's National Agency for Active Labour Market Policies (ANPAL) – enable us to analyse in detail the impact of the health emergency on developments in payroll employment in the non-farm private sector.[1]

Figure A

Net cumulative new hires in Piedmont, Veneto and Tuscany (1)

(starting as of 1 February 2020 differences compared with the same date in 2019; thousands of units)



Source: Based on data from mandatory reporting by the Region of Piedmont's Labour Market Observatory, by Veneto Lavoro and by the Tuscany Regional Economic Planning Institute.
(1) New hires net of terminations. The target universe is composed of non-farm private sector payroll employment positions under permanent, fixed-term and apprenticeship contracts. Since 2020 is a leap year, new hires and terminations that occurred on 29 February are added to those of 28 February..

The data for Veneto show that between 1 February and 17 May there were about 60,600 fewer net new contracts[2] than in the same period of 2019 (Figure A), corresponding to 47 positions per 1,000 employees. In mid-April, when compared with the same date in 2019, the balance between new hires and terminations was 21,300 units lower in Piedmont and 40,350 lower in Tuscany (21 and 49 fewer jobs per 1,000 employees, respectively).

In the regions examined, the reduction was particularly acute for new hires, mainly in the fixed-term component (see panels (a) and (b) of Figure B). The number of terminations was instead closer to that for 2019, in part due to the temporary freeze on collective and individual terminations for cause and extensive recourse to wage supplementation schemes.

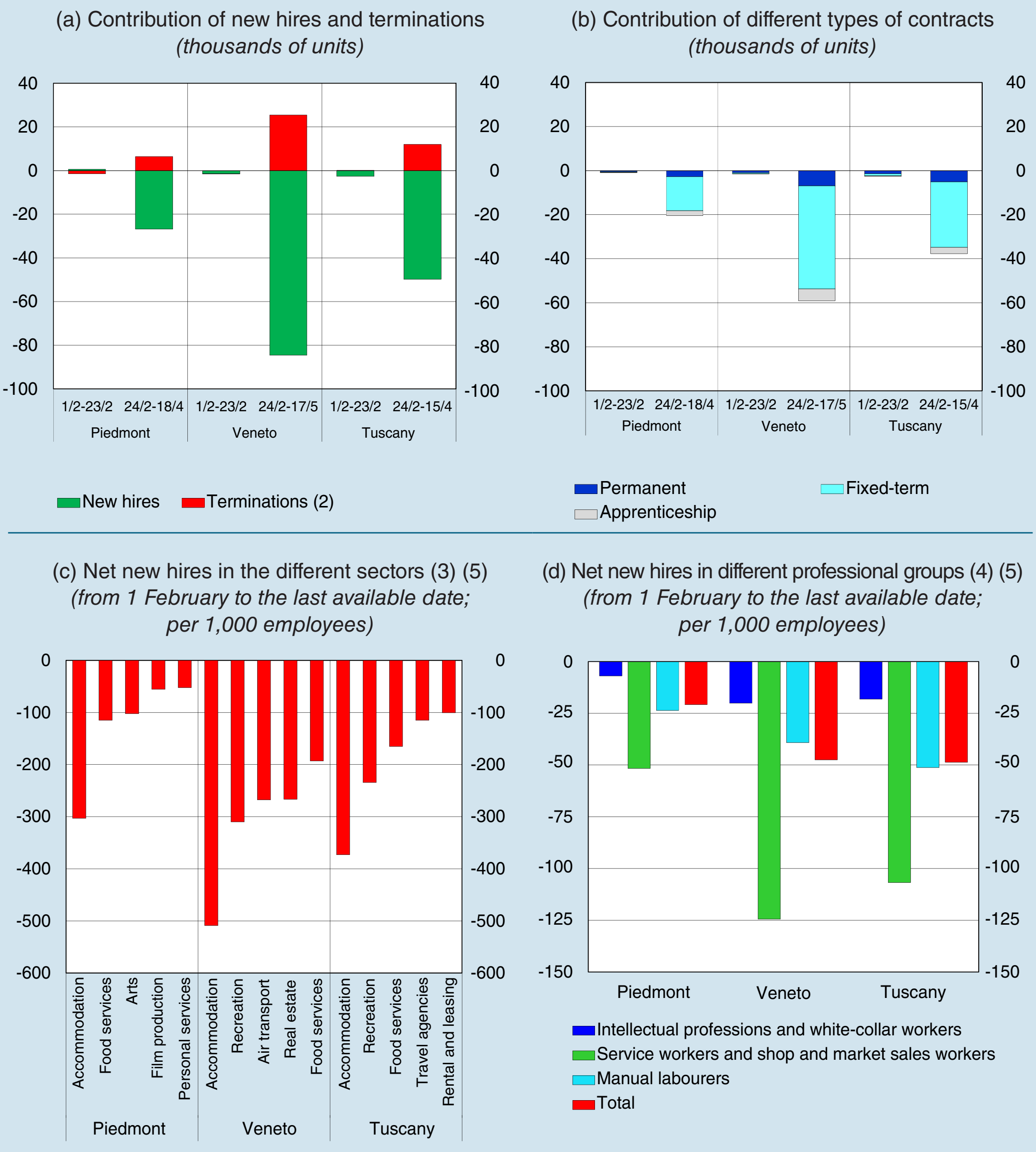
[1] The analysis covers permanent, fixed-term and apprenticeship contracts. It excludes the sectors corresponding to the two-digit ATECO codes from 01 to 03, 84 to 88 and 97 to 99.

[2] New hires net of terminations.

[1] The data from the mandatory reports for the entire national territory provided by ANPAL were last updated on 23 April 2020.

Figure B

Net new jobs in Piedmont, Veneto and Tuscany (1)
(differences compared with the same period of 2019)



Sources: Based on data from Istat's labour force survey and on mandatory reporting by the Region of Piedmont's Labour Market Observatory, Veneto Lavoro and the Tuscany Regional Economic Planning Institute.
(1) New hires net of terminations. The target universe is composed of non-farm private sector payroll employment positions under permanent, fixed-term and apprenticeship contracts. The dates of the most recent data available are: 18 April for Piedmont, 17 May for Veneto and 15 April for Tuscany. – (2) Terminations are represented by a minus sign. – (3) The panel shows the 5 sectors that registered the greatest decreases in net new hires. In each region, sectors with fewer than 1,000 employees are excluded. – (4) The category 'intellectual professions and white-collar workers' includes: (a) legislators, entrepreneurs and senior managers; (b) intellectual, scientific and highly specialized professions; (c) technical professions; (d) managers of office functions. The category 'manual labourers' includes: (a) craft, skilled trade and agricultural workers; (b) plant operators, machine operators and vehicle drivers; (c) elementary occupations. – (5) Each column represents the ratio of the difference in net new hires in 2020 compared with 2019 (in the period from 1 February to the date of the most recent data available) to the number of regional employees in the sector or in the professional group.

Although widespread even in sectors not directly affected by the lockdown, the decrease in the balance between new hires and terminations has been especially severe in the tourism and recreational services sector (see panel (c) of Figure B), which makes extensive use of temporary and seasonal contracts. Looking ahead, during the summer months net hires could decrease to a larger extent in areas where these sectors typically absorb a higher share of new hires.

In all three regions, the spread of COVID-19 has reduced the demand for labour for all the major professional groups (see panel (d) of Figure B). When expressed in terms of per 1,000 employees, the sharpest decline has been in sales positions and in service industry jobs; intellectual professions and white-collar jobs, which can more often be performed remotely, have registered a smaller drop.

The drop is entirely due to a marked decline in new hires, which affected almost all sectors,[2] to which contributed both the rising uncertainty concerning the evolution of the COVID-19 epidemic and the lockdown of numerous businesses in order to limit the contagion. According to our calculations based on the labour force survey, the Government's measures ordering the suspension of 'non-essential' activities in March[3] affected 7.9 million workers, around 34 per cent of total employment (61.1 per cent in industry and 25.4 per cent in services; Table 8.2). Women were slightly less affected by the lockdown measures since they tend to be more highly concentrated in 'essential' service sectors, such as education and healthcare. The impact of restrictions may have been lessened through the use of smart working;[4] effective recourse to remote working may, however, be hampered by delays on the part of businesses, particularly smaller firms, in adopting new technologies (see Chapter 12, 'Business activity regulation and the institutional environment').[5]

In order to protect permanent employment, all for-cause dismissal procedures were suspended for five months, starting on 17 March, as provided by Decree Law 18/2020 ('Cure Italy' decree) and Decree Law 34/2020 ('Relaunch Decree'). At the same time, in order to lighten firms' labour costs given the steep drop in business, the Government introduced new wage supplementation schemes that do not require companies to share in the cost. Firms that are eligible for the ordinary wage supplementation scheme (*Cassa integrazione guadagni* or CIG) and those in the process of obtaining extraordinary wage supplementation (*CIG straordinaria*) were granted access to an emergency wage supplementation scheme (*CIG di emergenza*),

[2] Hiring decreased only moderately in agriculture and healthcare. The slight increase in domestic work could reflect the emergence of irregular employment, in response to the need to justify travel.

[3] Prime Ministerial Decrees of 9 March 2020, 11 March 2020 and 22 March 2020, as amended on 25 March by a Decree of the Ministry of Economic Development. Since they are deemed essential goods and services, the decrees did not limit the following: the production and sale of foodstuffs and pharmaceuticals, healthcare, the public administration, financial and insurance services, transport, waste management, the production and distribution of gas, water and electricity. Companies in the supply chains for the above sectors could request a waiver from application of the decrees subject to prior authorization by the prefectural authorities.

[4] The data on remote working options are partially based on the sample survey of professions conducted by the National Institute for Public Policy Analysis (*Istituto nazionale per l'analisi delle politiche pubbliche* or INAPP). For an analysis of the risk profiles of workers during the epidemic and a more thorough look at the lockdown measures, see also T. Barbieri, G. Basso and S. Scicchitano, 'Italian workers at risk during the Covid-19 epidemic', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), forthcoming.

[5] According to the data from the Politecnico di Milano's Smart Working Observatory, almost 60 per cent of firms with more than 250 workers have already initiated remote working plans; the percentage drops to 12 per cent for small and medium-size enterprises.

Table 8.2

Distribution of persons employed and monthly wages by essential and suspended activities (per cent; euros)	Essential activities	Suspended (non-essential) activities
Persons employed	66.1	33.9
By sector		
Agriculture	94.0	6.0
Industry	38.9	61.1
Services	74.6	25.4
By type of employment contract		
Fixed-term employment	63.9	36.1
Permanent employment	69.6	30.4
Self-employed professionals	82.2	17.8
Freelancers and family workers	57.8	42.2
Self-employed workers, entrepreneurs and members of cooperatives	47.0	53.0
By worker's place of residence		
North	63.0	37.0
Centre	68.1	31.9
South and Islands	70.8	29.2
By demographic characteristics		
Women	72.2	27.8
Men	61.7	38.3
Italian citizens	67.0	33.0
Foreign citizens	58.6	41.4
Under 35 years of age	58.4	41.6
From 35 to 54 years of age	66.4	33.6
55 years of age and up	73.3	26.7
Monthly wages	1,357	1,271

Source: Based on Istat's labour force survey.

with 'National COVID-19' as the designated reason; a similar instrument is planned for employers that participate in the wage supplementation fund (*Fondo di integrazione salariale* or FIS).[6] Under-waiver supplemental wage funding (*CIG in deroga*) has been reintroduced for all other firms, regardless of the economic sector and size. The maximum duration of all these schemes is 18 weeks, of which four can

[6] The FIS, introduced in 2015, is very similar to the CIG, and applies to firms with at least five employees that operate in sectors not covered by the ordinary instruments.

be used in the months of September and October only.[7] The remaining 14 weeks, which can be used up until the end of August, are sufficient to cover the lockdown period, but not the entire period of suspension of dismissals.

Applications for the 'National COVID-19' emergency supplementation scheme and the *CIG in deroga* cover more than 7 million workers, equal to almost half of all private sectors employees. Recourse to wage supplementation instruments has reached an all-time high: in 2009, during the recession, the number of workers per month that received wage supplementation (CIG) never exceeded 700,000 and the per capita hours worked were reduced by 1.7 per cent.

These interventions provide reduced coverage to temporary workers, which account for more than 17 per cent of employees, as they do not change the duration of the fixed-term employment relationship.[8] In addition, due to the difficult cyclical situation, firms may have to give up on hiring new employees, even seasonal ones, and on renewing employment contracts set to expire. In order to encourage firms to renew fixed-term contracts, the 'Relaunch Decree' allowed firms to extend temporary contracts without justification even after the first 12 months.

The impact of the health emergency on self-employed workers has varied. Some 82.2 per cent of the approximately 1.4 million self-employed professionals engage in business activities not subject to lockdown; this percentage falls to 47.0 per cent for the 3 million persons working on own account. The 'Cure Italy' decree introduced a €600 subsidy for the month of March for self-employed workers registered with special sections of the mandatory social security scheme and self-employed professionals who operate with a VAT number or freelancers who are signed up for the separate social security scheme run by Italy's National Social Security Institute (INPS), including those whose activities have not been restricted. On 8 May 2020, INPS approved nearly 3 million applications for the subsidy, out of a potential pool of beneficiaries estimated to number around 3.5 million, with a take-up rate of around 85 per cent.[9] The total expenditure amounted to almost €1.8 billion.

The 'Relaunch Decree' renewed the subsidy for the month of April on the same terms; for May, instead, the amounts are differentiated and there are elements of conditionality linked to the actual decline in business and revenues or of the associated employment income. In addition, self-employed workers may receive tax benefits to partially cover their fixed costs and, for the smallest firms, loss of revenue.

7 The tourism, trade shows and entertainment sectors are exempt from this rule and can instead take advantage of 18 continuous weeks of wage supplementation.

8 Article 19-*bis* of the 'Cure Italy' decree, which suspends the prohibition on entering into, renewing or extending fixed-term or temporary employment contracts for firms that take advantage of the wage supplementation scheme, was introduced only while the decree was being converted into law on 24 April 2020.

9 The benefit is not granted to independent pensioners. For more details, see D. Checchi, F. Di Nicola, E. Di Porto, P. Naticchioni, G. Bovini and E. Viviano, 'Prime evidenze sui pagamenti connessi al DL Cura Italia n. 18/2020', INPS and Banca d'Italia, 27 April 2020.

Self-employed professionals who are enrolled in private pension plans may apply for a €600 subsidy for the months of March, April and May; however, only low- and medium-income earners are eligible for the assistance.[10]

In May, the re-opening of businesses, initially limited to the manufacturing, construction and wholesale sectors, was progressively extended; however, accommodation, food services and recreational services, which employ 7.0 per cent of payroll employees, remain severely restricted. In these sectors, which accounted for almost one fifth of employment growth over the past seven years, a high percentage of workers are employed with fixed-term contracts (38.3 per cent, or about 500,000 workers), which are often seasonal and of very short duration; this category of workers may have difficulty finding employment in other sectors.

In light of the poor employment outlook, the 'Relaunch Decree' extended the duration of unemployment benefits under the new unemployment insurance scheme (*nuova assicurazione sociale per l'impiego* or NASpI) for all those whose right to them expired in March or April. Subsidies of varying amounts and duration have been earmarked for domestic, seasonal, on-call or agency employees, whose access to NASpI unemployment benefits may be limited due to a fragmented job history. Finally, for less affluent households that received very little or no income in April and that do not have access to other support instruments, the decree provides for a two-month subsidy, called emergency income (*Reddito di emergenza*), whose eligibility requirements are less stringent than those for the new minimum income scheme (*Reddito di cittadinanza*); in fact, even foreign nationals who have been resident in Italy for fewer than 10 years are eligible.

Although the characteristics of the current crisis differ from those of past recessions, due both to its intensity and to its impact across various sectors, the empirical evidence for the 2008-09 recession suggests that the potential impact on workers of a sharp contraction in activity may be long-lasting (see the box 'The impact on workers of a fall in demand or a reduction in lending: evidence from the 2008-09 recession').

THE IMPACT ON WORKERS OF A FALL IN DEMAND OR A REDUCTION IN LENDING: EVIDENCE FROM THE 2008-09 RECESSION

The COVID-19 pandemic is causing economic activity to contract, with medium- to long-term implications that are difficult to predict due to the uncertainty about how the situation will evolve in Italy and the world (see Chapter 4, 'Overview'). Analysis of the impact of the 2008-09 recession on the labour market demonstrates that a dramatic contraction in activity can have lingering effects on those workers most affected.

[10] The Interministerial Decree of 28 March 2020, implementing the 'Cure Italy' decree, indicates those who are eligible for the subsidy, namely: (a) workers who in 2018 earned no more than €35,000 or whose activity was curtailed by the restrictive measures taken to control the COVID-19 epidemic; (b) workers who earned between €35,000 and €50,000 in 2018 and who, due to the health emergency, saw their income drop by at least 33 per cent in the first quarter of 2020 compared to the same period of 2019.

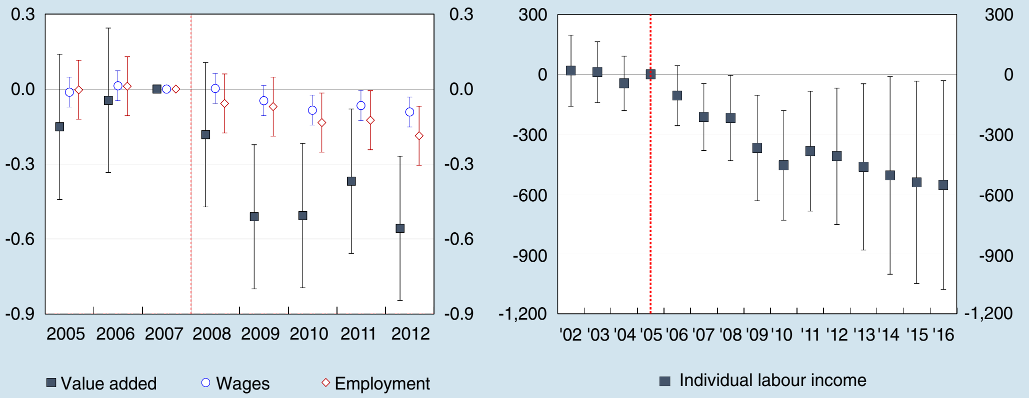
For manufacturing firms, the decline in demand in outlet markets recorded in 2008-09[1] – of varying intensity depending on pre-existing trade relations – resulted in a substantial and sustained decrease in their value added[2] (see panel (a) of the figure). The effects on employment and average wages have gradually become apparent; employment contracted initially due to a decrease in new hires followed by an increase in separations and it was concentrated among younger workers, for whom periods of unemployment entail higher losses in terms of human capital accumulation. Over the five-year period from 2008 to 2012, the drop in the wage bill as a result of the reduction in wages and employment was in any event less marked than that in value added. This led to a significant increase in the ratio of labour income to GDP, which peaked in 2009 and then stabilized in the following years at levels above what they were in the pre-crisis years.

Figure

The impact of a drop in demand for goods and a reduction in credit to firms

(a) Effect of the drop in demand for goods in 2008-09 on firm-level value added, employment and average wages (1)
(percentage points)

(b) Effect on individual labour income of a restriction on credit to the pre-crisis employer (2)
(euros)



Sources: Based on data from INPS, the Central Balance-Sheet Data Office, the Bank of Italy, the Central Credit Register and the Survey of Industrial and Service Firms.
(1) Wages and employment are defined in terms of full-time equivalent units. Each point represents the percentage-point change in the variable analysed, compared with 2007, attributable to a drop of 1 percentage point in demand for goods in 2008-09 due to the change in demand in foreign export markets (therefore, not due to local demand and supply conditions). The estimates of the coefficients for each of the three years 2005-07, not significantly different from zero, show that the firms most and least hit by the shock analysed did not register divergent trends before the shock occurred. The vertical lines represent the 95% confidence intervals. The regression includes fixed effects by firm and year. – (2) Each point indicates the difference in labour income among individuals employed, prior to the crisis (in 2006), by firms at the 90th and at the 10th percentile of exposure to the credit supply shock, compared with the same difference in the base year (2005), controlling for individual and province per year fixed effects. The estimates of the coefficients for each of the three years 2002-05, not significantly different from zero, show that the firms most and least hit by the shock analysed did not register divergent trends before the shock occurred. The vertical lines represent the 95% confidence intervals. The average annual labour income for workers in the sample was about €26,000 in 2006.

1 In the two years 2008-09, value added in the manufacturing sector fell by 18 per cent in Italy; during the same period, world trade fell by 22 per cent.

2 F. D'Amuri, S. Lattanzio and B. Smith, 'The anatomy of labor cost adjustment during the Great Recession', Banca d'Italia, Temi di Discussione (Working Papers), forthcoming. The change in firms' demand for goods between the two-year periods 2009-10 and 2007-08 is that attributable to the change in exports, obtained by aggregating, for each ATECO sector (identified by a two-digit code), the change in exports from all countries as a group (excluding Italy) to each individual country.

Further analysis confirms that the negative effects of periods of crisis persist throughout the careers of workers employed by the hardest-hit firms. The empirical evidence[3] shows that individuals employed by the firms hardest hit during the 2008-09 financial crisis (since they were subject to more stringent credit supply restrictions)[4] received labour income which, even in 2016, was 2 per cent lower than that of employees of the least-affected firms (see panel (b) of the figure). The loss amounted to around 20 per cent in 2016 for those who had experienced periods of unemployment. The persistent decline in labour income is mainly explained by a permanent reduction in the probability of employment.

The long-run impact seems to depend on the conditions of the local labour market in which these workers were employed. The long-term impact of a recession can therefore vary from one area of the country to another, even when the shock suffered by the individual firm is the same. In 2008-09, firms operating in areas with lower unemployment levels retained the most qualified workers and dismissed those less qualified. Instead, in the other areas, even the highest skilled individuals lost their jobs and suffered a persistent drop in employment income.

[3] E. Adamopoulou, M. De Philippis, E. Sette and E. Viviano, 'The long run earnings effects of a credit market disruption', Banca d'Italia, Temi di Discussione (Working Papers), forthcoming.

[4] The shock to credit supply at the firm level is calculated as the sum of interbank market exposures of each creditor bank (average value from 2002 to 2006), weighted by the respective percentage of total credit granted to the firm in 2006. The effects on employment income refer to the difference between those employed by firms in the 90th and the10th percentile of the shock distribution. This difference corresponds to an increase of approximately 10 percentage points in the average exposure to the interbank market for banks that are creditors to the firm, to a growth in credit granted to the firm after 2006 about 3 percentage points per year lower and to a permanent reduction in firm size.

Labour supply and unemployment. – The consequences of the COVID-19 epidemic and the measures taken to combat it have discouraged labour market participation, which fell from 65.1 per cent in February to 64.3 per cent in March: despite the job losses which, however, were limited by the freeze on dismissals and the extension of wage supplementation (CIG), the unemployment rate nevertheless fell by almost 1 percentage point to 8.4 per cent.

The trend in Google searches for jobs, a leading indicator of changes in the unemployment rate, pointed to a significant drop that coincided with the announcement of business lockdown measures (Figure 8.1).

Measures closing schools may have also delivered a blow to participation, especially female participation. The need to care for school-aged children could prevent or limit regular working schedules of parents in single-adult households or in two-parent households where both parents work; in the latter case, it is most often mothers, who typically earn less than their male partners, who decide to leave their jobs or reduce their hours at work. There are around 3 million households with at least one child under 14 years of age and in which both parents work:[11] in just over 40 per cent of these cases (1.3

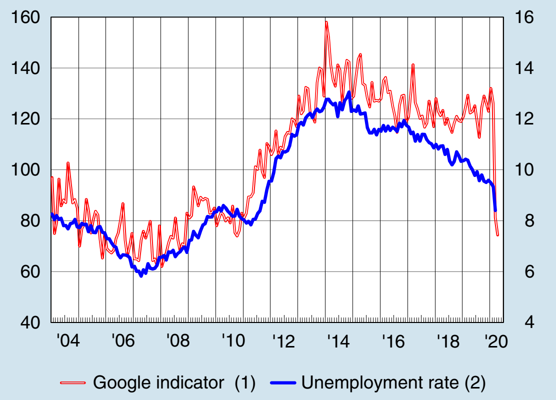
[11] This includes single-parent households.

million households) at least one adult could work remotely, thereby reconciling work with family needs, albeit with difficulty and with a significant risk of loss of productivity.

Collective bargaining and industrial relations. – The uncertainty arising from the health emergency, combined with the extremely low levels of inflation (see Chapter 9, 'Prices and costs'), could discourage the renewal of expired collective bargaining agreements affecting more than 80 per cent of payroll employees: with the exception of the food industry,[12] which has been little affected by the lockdown measures and the decrease in demand, in the first few months of 2020 there were no significant developments in the negotiation process. This would further weaken the already moderate growth in the minimum remuneration levels established by national collective bargaining (0.6 per cent in the first quarter of the year).

Figure 8.1

Online job search indicator and unemployment rate



Sources: Based on Istat's labour force survey and Google Trends data.
(1) The Google indicator is composed of the sum of three sub-indicators relating to searches using the key words 'job offers', 'Indeed', and 'Lavoro subito' (the second two search terms refer to two very popular job posting sites). A sub-indicator is assigned a value of 100 in the month in which the ratio of searches for the given key word to the total number of Google searches performed peaks relative both to its own time series and to those of the other key words. All the other values are normalized with reference to this level. – (2) Per cent; right-hand scale.

To promote the gradual resumption of economic activity, the Government has encouraged dialogue between employers' organisations and trade unions to establish common protocols for protecting workplace health. An initial agreement, signed on 14 March and amended on 24 April, regulated many areas, including the new health monitoring procedures, the provision of hygiene and personal protective equipment, the sanitization of workplaces, and the reorganisation of production lines and introduction of shifts to facilitate compliance with the physical distancing rules.[13] Firms also agreed to make use of smart working for all jobs that can be performed remotely.

[12] On 6 May 2020, the trade unions signed with some of the food industry associations, which include the major multinationals in the sector, a national collective bargaining agreement which provides for an increase in remuneration, starting from December 2019, and sets 14 May 2020 as the date on which negotiations for renewal of the national contract would resume.

[13] On 9 April 2020, the Fiat Chrysler Automobiles Group and workers' representatives agreed on guidelines for reopening manufacturing facilities.

9. PRICES AND COSTS

As in the rest of the euro area, the weakening of cyclical conditions had a significant impact on price developments in Italy. In 2019, consumer price inflation was 0.6 per cent, compared with 1.2 per cent the year before. The weakness in the core component was compounded by the significant slowdown in energy prices. The reduction in inflation was in part attributable to stagnation in the producer price index, the decline in the prices of imported goods connected with lower world growth, and weakening wage dynamics. The pass-through of wages to selling prices was very limited, likely because of the more uncertain demand conditions.

Inflation fell further in the early months of 2020, becoming almost nil in April. The sharp drop in energy prices as a result of the fall in oil prices contributed to these developments, which were exacerbated by the pandemic (see Chapter 15, 'The COVID-19 epidemic and the economy'); furthermore, this was compounded by a large increase in margins of spare capacity as a result of the health emergency, which is affecting the prices of non-energy goods and services.

Firms' expectations regarding changes in their own selling prices over the next twelve months fell to barely positive levels, reflecting the marked worsening in demand expectations.

Developments in contractual earnings suggest a slowdown in wage growth during the year, which could also be affected by the negative impact of the deterioration of the economy.

Prices and costs in 2019

Last year, inflation in Italy, as measured by changes in the harmonized index of consumer prices (HICP), declined to 0.6 per cent (Table 9.1). Price dynamics were affected by the marked slowdown of the energy component (to 0.5 per cent) and the less pronounced one in the food component (to 1.0 per cent).

Net of food and energy products, the price index rose by 0.5 per cent. Service prices grew by 1.0 per cent, as they did the previous year; those of non-energy industrial goods decreased slightly (-0.2 per cent), after remaining unchanged in 2018.

These inflation components continued to be affected by the weak cyclical conditions. A methodological change, which postponed the collection of price data to the day of the month in which seasonal discounts begin for these goods, entailed for the summer months a reduction in the price index for clothing and footwear and moderated core inflation by about 0.1 percentage points.

Table 9.1

Consumer prices

	Percentage changes on previous year		Percentage weights
	2018	2019	2019
HICP	**1.2**	**0.6**	**100.0**
Unprocessed food products	1.3	1.5	6.4
Processed food products	1.5	0.7	14.2
Energy products	5.7	0.5	9.2
Non-food, non-energy products	0.0	-0.2	26.9
Services	1.0	1.0	43.3
Goods and services with administered prices	3.0	0.4	10.7
Overall index excl. food, energy and tobacco	0.6	0.5	70.2
GDP deflator	**0.9**	**0.9**	**100**
Index of producer prices of industrial products sold on the domestic market	**3.9**	**0.0**	**100**

Source: Based on Istat data.

The producer prices of industrial products sold on the domestic market, which had risen by almost 4 per cent in 2018, remained stable in 2019 as a whole. The twelve-month change, still positive in the first half of the year, became negative starting in July, reaching -3.6 per cent in the last quarter. Even net of the food and energy components, the producer price index slowed gradually, becoming practically nil in the final months of 2019 (0.6 per cent on average for the year as a whole). Import prices declined by 1.0 per cent compared with the previous year, owing in part to the fall in the energy component index (-6.0 per cent).

Hourly nominal wages for the economy as a whole rose by 1.1 per cent, slightly less than in 2018 (1.3 per cent). Growth was held back above all by the stagnation in public sector wages, pending the renewal of the collective bargaining agreements that expired in December 2018.

In the non-farm private sector, the rate of growth was slightly higher (1.4 per cent), despite the gradual slowdown in the minimum hourly wages set by collective bargaining (0.7 per cent); the increase in the wage components in excess of such contractual earnings was lower in manufacturing and more pronounced in private services, especially in retail trade. The average social security contributions per employee increased by 2.4 per cent, owing to the end of the relief provided for by Laws 190/2014 and 208/2015, still in force for a significant proportion of employment relationships in 2018. Unit labour costs (ULC) grew by 1.7 per cent (1.6 per cent in 2018; see Chapter 6, 'Firms').

The growth rate of the GDP deflator remained unchanged compared with 2018, at 0.9 per cent, while firms' profit margins decreased.

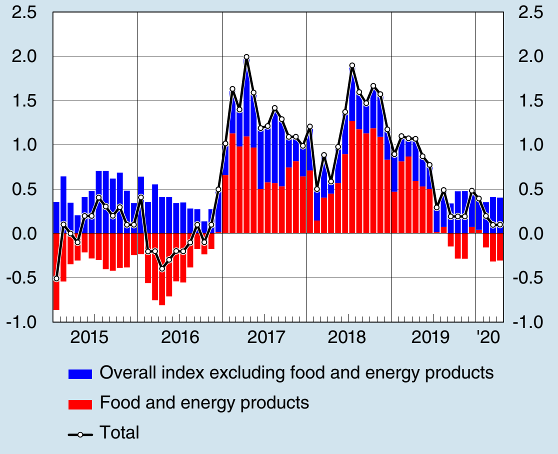
The inflation outlook for 2020

In the early months of this year, inflation weakened further: after recording a twelve-month rate of 0.2 per cent in the first quarter on average (Figure 9.1), it was barely positive in April (0.1 per cent).[1] The virtual stability of the core component, at very low levels, added to the sharp drop in energy prices, following the fall in oil prices, which was further exacerbated by the pandemic (see Chapter 1, 'The global economic situation, economic policies and world trade'). The prices of food products instead accelerated (to 2.9 per cent growth in April), reflecting the increase in demand induced by the rise in meals eaten at home as a consequence of the health emergency. The more intense pressure on retail prices was only partly balanced by the lower demand from the restaurant industry. For fruits and vegetables, this was compounded by an increase in costs in connection with labour shortages.

Figure 9.1

Inflation in Italy and contributions of its components (1)

(monthly data; 12-month percentage changes and percentage points)



Source: Based on Istat data.
(1) HICP

According to our assessments, going forward the general index is expected to record zero or slightly negative growth in the second half the year. The exceptional contraction in GDP (see Chapter 4, 'Overview') and in demand is impacting the core components; the international recession is squeezing the prices of energy commodities and, via this channel, the prices charged to final consumers. Social distancing measures, be they compulsory or voluntary, are likely to hold back demand in some segments of the service sector in the coming months, namely in the hotel and restaurant industry, whose prices have supported inflation over the last two years.

In March, the producer prices of industrial goods sold on the domestic market were 4.9 per cent lower compared with one year earlier; even net of the energy component, which fell by more than 15 per cent, the index displayed weak growth (0.4 per cent). The pressures coming from the foreign markets are negative: in March, the import prices of intermediate inputs and energy goods decreased by 2.8 and 29.0 per cent respectively.

In the first quarter of 2020, growth in the minimum wages set by the collective bargaining agreements remained moderate, even by international standards, both for

[1] The suspension of service in the hotel and restaurant industry and in long-haul transport, together with the temporary interruption, starting from 11 March 2020, of Istat's inflation survey, has meant that in March and April the data on the prices of some items were not collected, but were instead imputed. Therefore, changes in the relevant sub-indices in the two months March and April must be analysed and interpreted with caution.

the economy as a whole and for the non-farm private sector (0.6 per cent compared with one year earlier for both sectors). This was due in part to the large share of employees whose collective agreements are pending renewal, which is now more than 80 per cent (see Chapter 8, 'The labour market'). If the renewal of the agreements were to be delayed, also owing to the uncertainty about the outlook for the economy, wage growth could slow further: in the early months of the year, negotiations resumed only for the food sector, which has not suffered the negative repercussions connected with the health emergency.

Over the course of the year, nominal wages might be held back by the decrease in their variable components, linked to the performance of a given firm and, therefore, to the cyclical situation. In the first half of the year, this could be partially offset by a composition effect stemming from the measures adopted in March,[2] which allowed business to continue in sectors that, on average, display higher productivity and wages (see Chapter 5, 'Households').

Firms' expectations regarding changes in their own selling prices over the next twelve months, as collected by the Bank of Italy in March (see 'Survey on Inflation and Growth Expectations', Banca d'Italia, Statistics Series, 14 April 2020), fell to barely positive levels, reflecting the marked worsening in demand expectations. The inflation expectations for 2020 as a whole formulated by the analysts surveyed by Consensus Economics declined from 0.8 per cent in February to -0.2 per cent in May.

[2] Prime Minister's Decrees (DPCMs) of 9 March 2020, 11 March 2020 and 22 March 2020, the latter amended by the Decree of 25 March 2020 issued by the Italian Ministry of Economic Development.

10. COMPETITIVENESS, FOREIGN TRADE AND THE BALANCE OF PAYMENTS

In 2019, exports slowed, but still outpaced the growth of world trade, due in part to Italian firms' stronger price competitiveness, especially in non-euro area markets. The current account surplus grew to 3.0 per cent of GDP. Italy's net international investment position was very close to balance (-1.7 per cent of GDP).

Since March, Italy's foreign trade has been affected by the spread of the COVID-19 epidemic, in particular by the contraction in global demand and by the interruption of 'non-essential' production in Italy and in its main trading partners. International tourist flows have been impacted since February.

In 2020 as a whole, these trends will have opposite-sign effects, which in the aggregate could cause the current account surplus to increase: the possible improvement in the merchandise trade balance net of energy products, linked primarily to the steep decline in domestic demand, and the reductions in the energy and transport deficits, would only be partially offset by the deterioration in the tourism balance surplus.

The Bank of Italy's negative balance on the TARGET2 European payment system fell significantly in 2019; since March, it has again begun to widen in connection, on the one hand, with the creation of liquidity through the Eurosystem's adoption of extraordinary monetary policy measures and, on the other, with less recourse by Italian banks to net funding on the international market and with sales of Italian financial assets held by non-residents.

Price competitiveness

In 2019, the price competitiveness of Italian firms improved, more than offsetting the deterioration recorded the previous year. According to the indicator based on producer prices of manufactures, the gain amounted to 1.5 percentage points (Figure 10.1.a), of which two thirds due to developments in relative prices in Italy and one third to the depreciation of the nominal effective exchange rate of the euro. The recovery of competitiveness was more than half a percentage point greater than that recorded in Germany. According to the indicator developed by the European Central Bank based on the unit labour costs of the economy, the improvement amounted to 2.1 percentage points, 2 percentage points higher than that reported by firms in Germany.

According to our estimates, last year Italy's price competitiveness was broadly aligned with levels consistent with the country's macroeconomic fundamentals, including GDP per capita and the degree of openness to foreign markets.[1]

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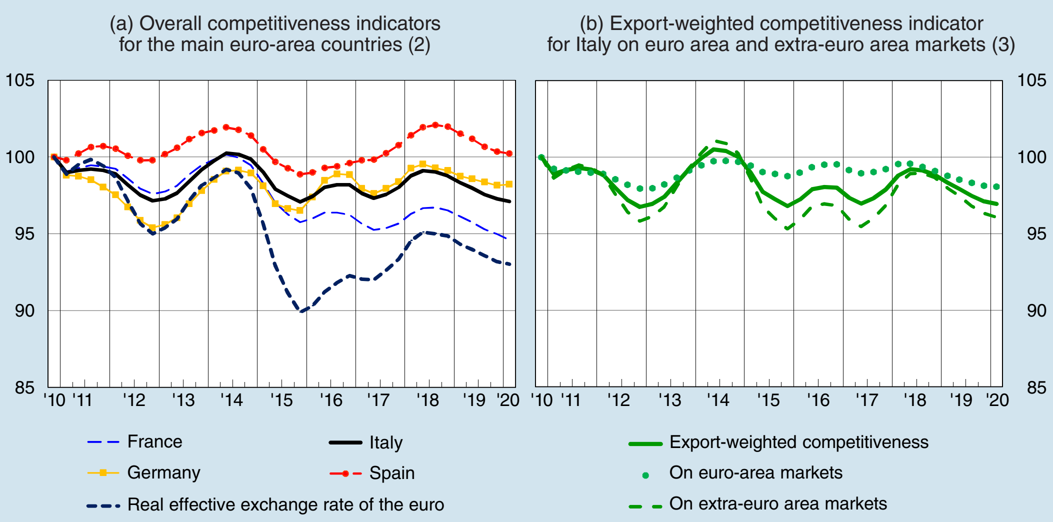
[1] For the methodology, which uses five different measures based on different price and cost indicators, see C. Giordano, 'An update of the Bank of Italy methodology underlying the estimation of price-competitiveness misalignments', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 556, 2020.

The improvement in 2019 is also confirmed considering export-weighted price competitiveness alone, which measures the ability to compete in outlet markets with both local producers and other exporting countries:[2] according to the producer price indicator, the gain was equal to 1.8 percentage points and was more pronounced in extra-euro area markets (Figure 10.1.b).

Figure 10.1

Price competitiveness indicators of the main euro-area countries and the real effective exchange rate of the euro (1)

(indices: Q4 2010=100; 4-quarter moving average)



Source: For the real effective exchange rate of the euro, ECB.
(1) Based on producer prices of manufactures. An increase in the indicator signals a loss of competitiveness. All the competitiveness indicators are calculated with respect to 60 competitor countries (including the members of the euro area), except for the real effective exchange rate of the euro, which is calculated by the ECB in relation to 18 competitor countries outside the euro area. The data for the last quarter are partly estimated. – (2) The overall competitiveness indicators represent a 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, which measures countries' capacity to compete with the other 60 exporters and with local producers in the international outlet markets. For the methodology, see A. Felettigh, C. Giordano, G. Oddo and V. Romano, 'New indicators to assess price-competitiveness developments in the four largest euro-area countries and in their main trading partners', *Journal of Economic and Social Measurement*, 41, 3, 2016, 203-35, also published in Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 280, 2015. – (3) The export-weighted competitiveness indicator can be broken down into the two indicators calculated for euro-area markets only and extra-euro area markets only (for more details on the breakdown, see A. Felettigh and C. Giordano, 'A novel three-market view of price competitiveness', Journal of Economic and Social Measurement, 44, 2-3, 2019, 89-116, also published in Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 447, 2018.

Exports and imports

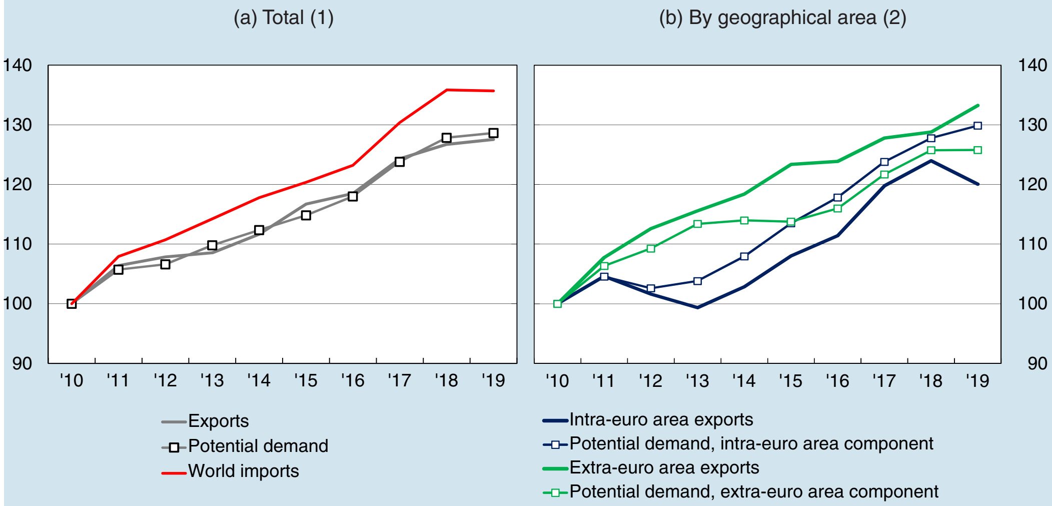
Exports. – Exports of goods and services increased by 1.2 per cent in volume in 2019, slowing with respect to the previous year, but nevertheless outpacing the growth of world trade.

Goods exports increased by 0.7 per cent, in line with the trend in potential demand from outlet markets (Figure 10.2.a). Exports to the euro area contracted, while those to the rest of the world accelerated, rising well above the corresponding demand for Italian products (Figure 10.2.b), driven by the marked improvement in price competitiveness.

[2] Global price competitiveness reflects both export- and import-weighted competitiveness, which captures the ability to compete with imports on the domestic market.

Figure 10.2

Goods export volumes, potential foreign demand and world goods imports
(annual averages; indices: 2010=100)



Sources: Based on IMF and Istat data.
(1) Goods exports based on national accounts data. Potential demand is calculated as the weighted average of the goods import volumes of Italy's trading partners, weighted by their respective shares of Italian exports in value terms. – (2) The breakdown into intra-euro area and extra-euro area goods exports is estimated, beginning with the aggregate national accounts figure, on the basis of foreign trade data and the prices of industrial products sold abroad.

Italy's sales in the euro area suffered above all from the fall in German demand, linked in part to the crisis in the automotive sector and, more broadly, to the weakening of the manufacturing industry of our main trading partner. Germany activates, both directly and indirectly through the integration of Italian manufacturing firms in global value chains, around 16 per cent of Italy's total exports and 38 per cent of those to euro-area markets alone.

Among the largest extra-euro area economies, sales of goods decreased in China, although by less than in 2018, and were particularly strong in Switzerland and Japan; in Japan, exports benefited from the trade agreement with the European Union in force since February last year. Sales to the United Kingdom increased again; according to our estimates, the impact of Brexit on the Italian economy will be smaller than in other European countries (see the box 'Protectionism and global value chains: an analysis of the effects of Brexit'). Though slowing, exports to the United States also expanded, despite the introduction in October last year of new countervailing duties on a list of products imported from the EU, following the World Trade Organization's ruling that European government aid to the company Airbus was damaging US industry. For Italy, these measures focus on a number of agri-food goods and affect less than 0.1 per cent of total goods exports.

PROTECTIONISM AND GLOBAL VALUE CHAINS: AN ANALYSIS OF THE EFFECTS OF BREXIT

Global value chains magnify the effects of raising trade barriers between countries, as the resulting costs are added each time intermediate goods cross the borders of the various countries involved in their production.

To investigate these mechanisms, it is possible to apply a general economic equilibrium model to assess the macroeconomic impact of Brexit on the European Union and the United Kingdom, taking account of production ties between countries and sectors.[1] The model provides estimates of the effects that occur through the international trade channel and not the potential effects of changes in the climate of confidence of households and firms and their financing conditions.

Given the current uncertainty over future trade relations between the two areas, different scenarios have been hypothesized: (a) a free trade agreement that rules out the imposition of duties, but does not prevent the escalation of non-tariff barriers; (b) the failure to reach agreement and the imposition in bilateral trading of the same duties applied by the EU to countries with which no specific trade agreements are in force, based on the World Trade Organization's 'most favoured nation clause'; (c) a variant of the previous scenario, in which, in line with what the Government announced in March 2019, the United Kingdom unilaterally removes its duties on the majority of imported products, introducing them only on specific manufactured goods (including motor vehicles) and on some agricultural products.

The total volume of exports of goods and services would decrease by 2 per cent for the EU and by 13.3 per cent for the UK in the first scenario, by 2.6 and 19.3 per cent in the second scenario, and by marginally less in the third scenario (see the table).

Table

Estimates of the impact of Brexit on selected macroeconomic aggregates (1)
(percentage changes)

	EU27			United Kingdom		
	Free trade agreement	WTO scenario	Alternative WTO scenario	Free trade agreement	WTO scenario	Alternative WTO scenario
Exports	-2.0	-2.6	-2.5	-13.3	-19.3	-18.0
Imports	-2.1	-2.9	-2.8	-15.9	-21.4	-19.0
Disposable income	-0.4	-0.6	-0.5	-2.1	-3.1	-2.8
Nominal GDP	-0.4	-0.6	-0.6	-1.8	-2.4	-2.7
Price index (2)	0.0	-0.1	0.0	0.3	0.7	0.1

Sources: Based on the World Input-Output Database; WTO, Integrated Data Base; International Trade Centre, *Market Access Map*; Comtrade; G. Felbermayr, J. Gröschl and I. Heiland, 'The European Union in turmoil: a general equilibrium analysis of trade and welfare effects', mimeo, 2017.
(1) Changes in exports, imports and disposable income of households are calculated at constant prices. – (2) Harmonized index of consumer prices.

The contraction in trade would be flanked by a rather modest fall in the real disposable income of households for the EU (between 0.4 and 0.6 per cent), and a more severe drop for the United Kingdom (between 2.1 and 3.1 per cent).

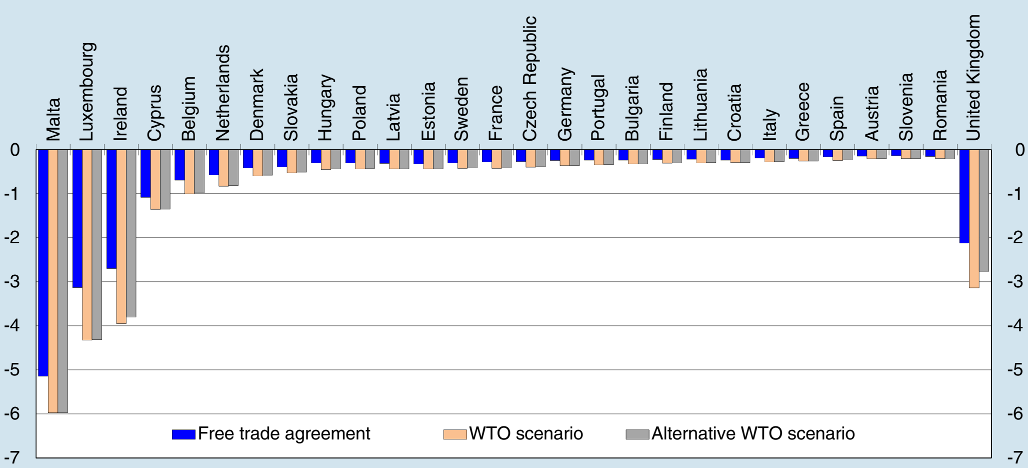
In all three scenarios, the reduction in disposable income would be uneven across EU economies; for the four largest countries, it would be very limited even

[1] R. Cappariello, S. Franco-Bedoya, V. Gunnella and G. Ottaviano, 'Rising protectionism and global value chains: quantifying the general equilibrium effects', Banca d'Italia, Temi di Discussione (Working Papers), 1263, 2020.

in a no-deal scenario; for Italy, it would be around 0.3 per cent, with negligible variations across the three scenarios. For some countries – Malta, Luxembourg and Ireland – the reduction would be more pronounced and larger than that estimated for the UK itself, owing to the limited geographical diversification of their trade links and intensive trade with the United Kingdom in products characterized by high price elasticity, such as services (see the figure).

Figure

Impact of Brexit on households' disposable income by country (1)
(percentage changes)



Sources: Based on the World Input-Output Database; WTO, Integrated Data Base; International Trade Centre, *Market Access Map*; Comtrade; G. Felbermayr, J. Gröschl and I. Heiland, 2017, op. cit.
(1) At constant prices.

The analysis demonstrates the importance of global value chains in increasing the costs of protectionism. The presence of close production ties between the UK and the rest of the EU amplifies the macroeconomic effects of Brexit linked to a deterioration in trade. In the scenario with no bilateral flows of intermediate products between the two areas, the estimated drop in income would be reduced in all scenarios; in particular, in the event of no agreement, the contraction would be halved for both the EU (from -0.6 to -0.3 per cent) and the UK (from -3.1 to -1.6 per cent).

However, new trade barriers at global level could still pose significant risks; the history of post-unification Italy reveals the economic benefits linked to the different degrees of openness to trade of this country (see the box 'The impact of trade barriers in Italian economic history').

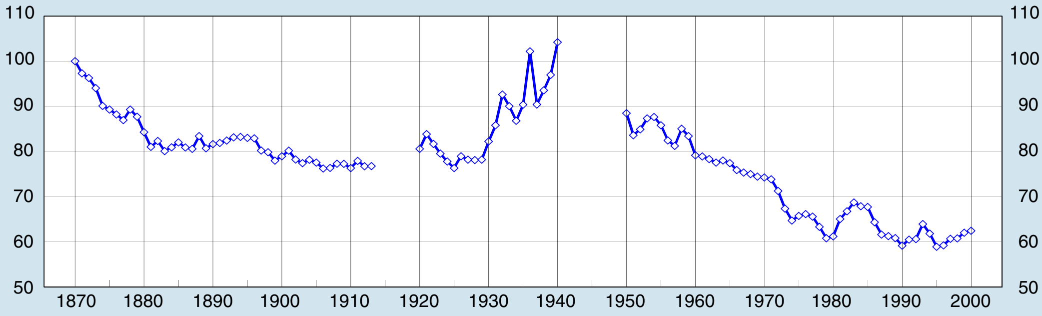
THE IMPACT OF TRADE BARRIERS IN ITALIAN ECONOMIC HISTORY

In recent years, the United States has imposed a series of restrictions on imports that is without parallel since the Second World War in terms of the number of countries involved and the magnitude of the tariff hikes. The trade partners affected by these measures have responded in kind, by raising tariffs on a considerable share of US exports.[1] The main risk associated with unilateral measures to raise trade barriers is that of triggering a gradual deterioration of international trade relations based on retaliation. This process can have significant adverse economic effects, as also witnessed by Italy's economic history.

A recent analysis quantified the intensity and repercussions for Italy of barriers to foreign trade between 1870 and 2000 using a trade costs index (Figure A).[2] The index is a synthetic measure of the broad spectrum of costs that hamper international trade (tariffs, non-tariff barriers, administrative red tape).

Figure A

Trade costs (1)
(index: 1870=100)



Sources: Based on data from D.S. Jacks, C.M. Meissner and D. Novy, 'Trade booms, trade busts, and trade costs', *Journal of International Economics*, 83, 2, 2011, 185-201.
(1) The index is a geometric average of the costs of bilateral trade and is obtained residually from a gravity equation: the growth in trade that is not explained by the interaction between the national incomes of the two countries is attributable to changes in the costs of bilateral trade. The index is calculated with reference to 11 of Italy's trading partners (Austria, Belgium, France, Germany, Greece, Japan, Norway, the United Kingdom, Spain, the United States, and Switzerland).

After 1870, barriers to foreign trade declined rapidly (owing to the reduction in transportation costs and to the trade openness policy adopted in Italy after Unification), lasting until the protectionist reversal of the1880s. The ensuing increase in costs was mitigated by numerous bilateral trade agreements which, over the following decade, encouraged the resumption of a downward trend that continued up to the First World War. Between the mid-1920s and the Second World War, in a context of growing national and international protectionism, the costs began to rise again, wiping out the previous reduction. Since the 1950s, multilateral agreements and free trade treaties (especially the General Agreement on Tariffs and Trade and the Treaty establishing the European Economic Community) have done much to dismantle barriers to trade.

Overall, some 40 per cent of Italy's bilateral trade growth with the partner countries considered in the analysis is attributable to the gradual dismantling of barriers to trade, despite the fact that this process was halted in the inter-war period.

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[1] P.D. Fajgelbaum, P.K. Goldberg, P.J. Kennedy and A.K. Khandelwal, 'The return to protectionism', *The Quarterly Journal of Economics, 135, 1, 2020, 1-55.* See also the box 'Recent trade tensions and their implications', Chapter 1, *Annual Report for 2018,* 2019; R. Cappariello and M. Mancini, 'US trade policy in numbers: how exposed is the EU?', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 528, 2019.

[2] M. Gomellini, 'Breve storia delle barriere agli scambi in Italia', Banca d'Italia, Quaderni di Storia Economica (Economic History Working Papers), forthcoming.

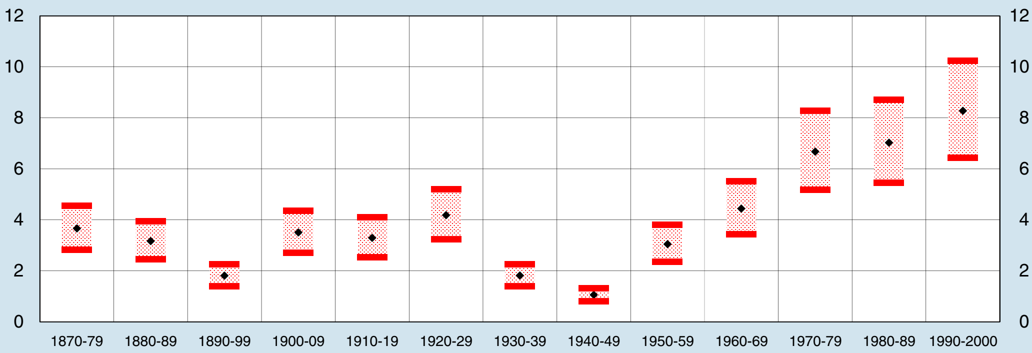
The widespread protectionism that prevailed between the mid-1920s and end of the 1930s had a very negative effect: it has been calculated that without it the volume of Italian trade could have almost doubled in the same period (instead, it was halved).

In addition to reducing exports, protectionism deprives the economy of important gains stemming, for example, from lower prices and productivity gains spurred by foreign competition. The resulting negative effects can be acute in countries, such as ours, which have limited natural resources.

The gains from trade for Italy were estimated in a counterfactual exercise, using a statistic based on two parameters: the share of domestic spending on imported goods and the elasticity of trade to commercial costs.[3] In this exercise, all the benefits are measured by the difference, expressed in terms of GDP, between the current openness to trade and a hypothetical system of autarky. The results show that between 1870 and the first half of the 20th century, the average gains were equivalent to less than 4 percentage points of GDP on an annual basis (Figure B); in the second half of the century they increased, reaching around 8 percentage points of GDP in 2000.

Figure B

Gains from trade (1)
(percentage points of GDP)



Source: For GDP, A. Baffigi, 'GDP for Italy's History. A User's Manual', Collana Storica della Banca d'Italia (Historical Series of the Bank of Italy), Marsilio Editori, 2015.
(1) Ten-year averages. The black dots represent the central values obtained using different estimates; the red bars correspond to the maximum and minimum values.

[3] C. Arkolakis, A. Costinot and A. Rodríguez-Clare, 'New trade models, same old gains?', *The American Economic Review,* 102, 1, 2012, 94-130. See also G. Federico and A. Tena-Junguito, 'A tale of two globalizations: gains from trade and openness 1800-2010', *Review of World Economics,* 153, 3, 2017, 601-626.

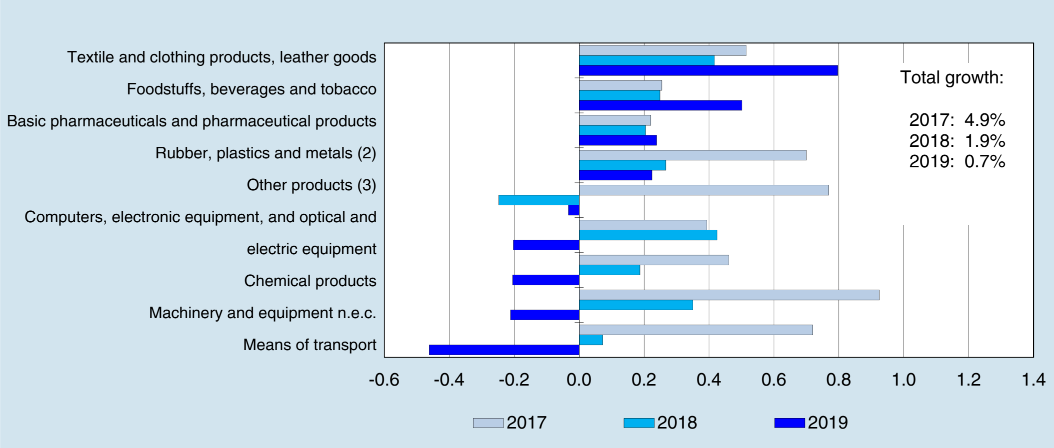
Among the main sectors, a strong stimulus to export growth came from the fashion and food industries once again in 2019 (Figure 10.3), while the pharmaceutical sector and rubber, plastics and metals contributed to a lesser extent.[3] This was countered by

[3] The positive contribution of the pharmaceutical sector was greater according to foreign trade data which, unlike national accounts data, include goods exported for processing activities carried out on behalf of third parties with no transfer of ownership of the goods from the client (in this case foreign) to the Italian contractor. This activity has increased sharply in recent years (see G. Allione, R. Bronzini and C. Giordano, 'Recent export developments in the pharmaceutical sector in Italy and in the Lazio region', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 566, 2020.

the decline in sales of machinery, linked to the slowdown in the global investment cycle (in turn due in part to protectionist tensions) as well as to the weakening of German industry; a significant negative contribution also came from the decline in exports of motor vehicles, partly due to the introduction of new European legislation on pollutant emissions.

Figure 10.3

Contributions of each sector to growth in the volume of goods exports (1)
(percentage points)



Source: Based on Istat national accounts data.
(1) The sectors are ranked in descending order according to their contribution to total growth in 2019. – (2) Includes rubber, plastic, non-metallic mineral products, metals and metal products, excluding machinery and equipment. – (3) This residual item includes the manufactures not listed in the other items, agricultural and extractive industry products, and the remaining products.

In 2019, Italy's market share in global goods imports was unchanged at 2.8 per cent at current prices and exchange rates (2.7 per cent at constant prices), broadly in line with the levels recorded since the start of the decade. Its market share in the euro area remained practically the same as in 2018 (5.0 per cent at current prices and exchange rates; 4.9 per cent at constant values).

Imports. – The volume of imports of goods and services declined by 0.4 per cent, driven by the decline in goods purchases, especially from Germany.

This was mainly attributable to the reduction of imports of motor vehicles and refined oil products, which more than offset the positive contribution from agriculture, the fashion industry and the pharmaceutical sector. In the case of the latter, imports are partly used to produce medicines for export.

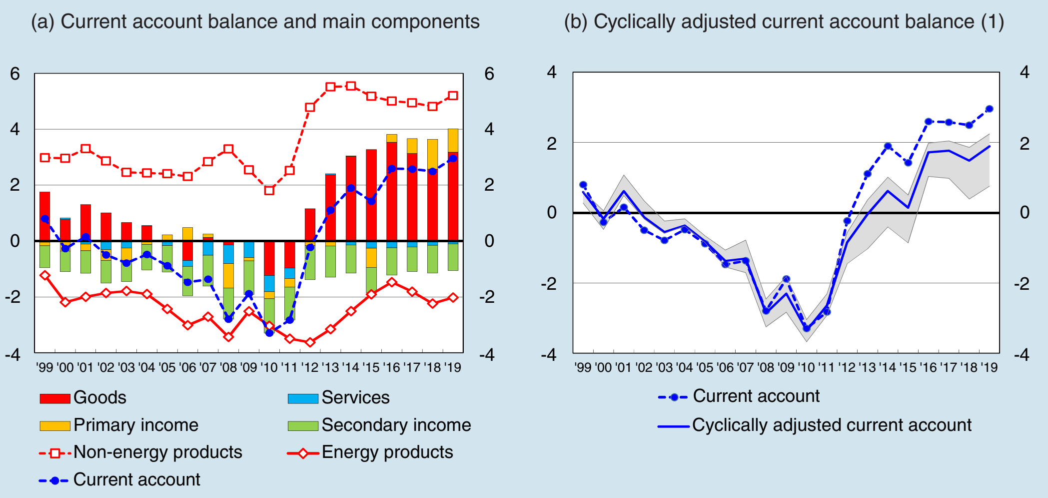
The balance of payments and the net international investment position

The current account. – The current account surplus reached €52.9 billion in 2019, equal to 3.0 per cent of GDP, the highest figure recorded since the launch of EMU (Figure 10.4.a and Table 10.1). According to our estimates, which take account of the size of the output gap in Italy and in its main trading partners, as well as of the elasticity of exports and imports to the various demand components, even when cyclically adjusted the surplus expanded, to around 1.9 per cent of GDP (Figure 10.4.b).

Figure 10.4

Current account balance

(per cent of GDP)



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.

The expansion of the current account surplus reflected the increase in the merchandise trade surplus (to €56.9 billion) and, to a lesser extent, the reduction in the services deficit (to €1.8 billion), in part owing to the further expansion of the tourism balance, which ran a surplus of 1 percentage point of GDP. Foreign visitors' spending in Italy, led by tourists from Europe and North America, rose by 6.2 per cent at current prices; holiday expenditure, especially for seaside and mountain resorts, and business travel spending both increased. By contrast, the transport deficit widened slightly (to €9.8 billion), reflecting trends in air passenger transport.

After rising for three straight years, the primary income surplus narrowed, to €14.9 billion, owing to the capital income component and, in particular, to portfolio securities income that went from a surplus of €2.1 billion in 2018 to a deficit of €3.1 billion. The increase in dividend payments to non-residents and the decline in profits reinvested by foreign investment funds[4] more than offset the positive effect of the improvement in Italy's net international investment position. The secondary income deficit declined slightly, to €17.0 billion.

4 The data for 2019 for this component are not strictly comparable with those of previous years, since they are estimated using the information collected by the European System of Central Banks in the Centralised Securities Database, which in December 2018 began to include the information transmitted by national central banks rather than that reported by commercial providers.

Table 10.1

Balance of payments (1)
(billions of euros, unless otherwise indicated)

	2016	2017	2018	2019	2019 Jan.-Mar.	2020 Jan.-Mar.
Current account	**44.0**	**44.7**	**44.0**	**52.9**	**3.8**	**8.6**
Per cent of GDP	2.6	2.6	2.5	3.0		
Goods	60.0	54.4	45.4	56.9	9.7	15.1
Non-energy products (2)	84.9	85.9	85.0	93.0	19.2	22.6
Energy products (2)	-25.0	-31.5	-39.5	-36.1	-9.6	-7.5
Services	-4.1	-3.8	-2.7	-1.8	-3.7	-4.4
of which: transport	-8.4	-9.2	-9.5	-9.8	-2.5	-2.1
travel	13.8	14.6	16.2	17.2	1.3	0.5
Primary income	4.8	9.3	18.8	14.9	4.8	3.9
Secondary income	-16.7	-15.1	-17.5	-17.0	-6.9	-6.0
Capital account	**-2.6**	**1.0**	**-0.6**	**-1.9**	**-0.2**	**-0.5**
Financial account (3)	**32.7**	**47.6**	**30.4**	**46.1**	**1.1**	**-0.7**
Direct investment	-11.1	0.4	-0.2	-1.5	2.3	7.1
Italian investment abroad	12.2	10.9	33.7	24.6	12.1	7.4
Foreign investment in Italy	23.3	10.5	33.9	26.1	9.8	0.3
Portfolio investment	139.9	84.1	119.9	-50.6	-21.0	32.0
Assets, equity and investment funds (4)	44.5	85.8	28.6	36.7	-3.7	-9.8
Assets: debt securities (4)	22.7	29.3	17.0	30.7	1.9	4.2
Liabilities: equity and investment funds (4)	-0.5	17.8	-4.8	14.7	0.8	-6.8
Liabilities: debt securities (4)	-72.3	13.1	-69.5	103.4	18.4	-30.8
Financial derivatives	-3.3	-7.2	-2.7	2.5	0.4	-1.1
Other investment	-91.6	-32.3	-89.3	92.4	18.7	-39.3
Change in official reserves	-1.2	2.7	2.6	3.2	0.7	0.6
Errors and omissions	**-8.6**	**2.0**	**-13.0**	**-4.9**	**-2.5**	**-8.8**

Source: For GDP, Istat.
(1) For January, February and March 2020, provisional data. – (2) Based on Istat foreign trade data. – (3) 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). – (4) Assets: a positive balance indicates residents' net acquisitions of securities issued by non-residents; a negative balance indicates net sales. Liabilities: a positive balance indicates non-residents' net acquisitions of securities issued by residents, a negative balance indicates net sales.

The financial account. – In 2019, foreign portfolio investment reached €67.4 billion, rising markedly on 2018, in part owing to the portfolio diversification linked to the reduction in the yields on Italian bonds since the middle of last year. Italian residents purchased foreign investment fund shares amounting to €39.3 billion, mostly ascribable to households, and debt instruments worth €30.7 billion, primarily public sector securities.

According to preliminary data, foreign direct investment (€24.6 billion) was lower than in 2018, although it remains well above the level recorded in the last eight years. Intra-company loans increased, while there was a decline in the equity component.

On the liabilities side, non-resident investors resumed purchases of Italian portfolio securities, which rose to historically high levels, equal to €118.1 billion. Investments in public sector bonds reached €83.9 billion, more than offsetting the sales recorded in 2018 and marking the highest level as a percentage of GDP in the last decade; the purchases likely reflected the accommodative monetary conditions in the euro area and the agreement reached between Italy and the European authorities on fiscal policy. Private sector exposure to foreign bonds (especially in the banking sector), equity and investment fund shares has increased, albeit to a lesser extent.

Based on provisional data, foreign direct investment in Italy (€26.1 billion, equal to 1.5 per cent of GDP), was also lower than in 2018, despite the marked increase in intra-company loans.

Italian banks' net funding on the international market in the form of loans and deposits, including the component cleared by resident central counterparties, decreased by €58.1 billion (Table 10.2), notwithstanding a recovery in the final part of the year, relating to the launch of the new two-tier system for remunerating banks' reserves held with the Eurosystem.[5]

Table 10.2

Changes in the TARGET2 balance and relation with the other balance of payments items (1)
(billions of euros)

	TARGET2 balance (end of month)	Change in TARGET2 balance (A)+(B)+(C)+(D)+(E)+(F)-(G)	Foreign portfolio investment in Italian public sector securities (A)	Foreign portfolio investment in Italian private sector securities (excl. bank bonds) (B)	Foreign portfolio investment in Italian bank bonds (C)	Net foreign funding of resident monetary financial institutions (excluding central bank) in loans and deposits (D)	of which: handled by resident central counter parties	Current account and capital account balance (E)	Other items (2) (F)	Italian portfolio investment in foreign securities (G)
2019	-439	43	84	23	11	-58	-48	51	-1	67
2019 – Q1	-475	7	17	1	..	-5	-18	4	-12	-2
Q2	-448	27	34	9	..	-20	-3	12	-1	7
Q3	-468	-20	22	4	6	-40	-27	16	-3	27
Q4	-439	29	10	9	4	7	1	19	15	36
2020 – Q1	-492	-52	-26	-11	..	-24	15	8	-5	-6
Apr.	-513	-21	….	….	….	….	….	….	….	….

(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 2020 – Q1, provisional data. – (2) Direct investment, financial derivatives, residual items in other investment, official reserves, errors and omissions.

Overall, in 2019 the Bank of Italy's negative balance on the TARGET2 European payment system declined by €42.5 billion, owing to substantial capital inflows. The fall was especially marked in the two months October-November, following the

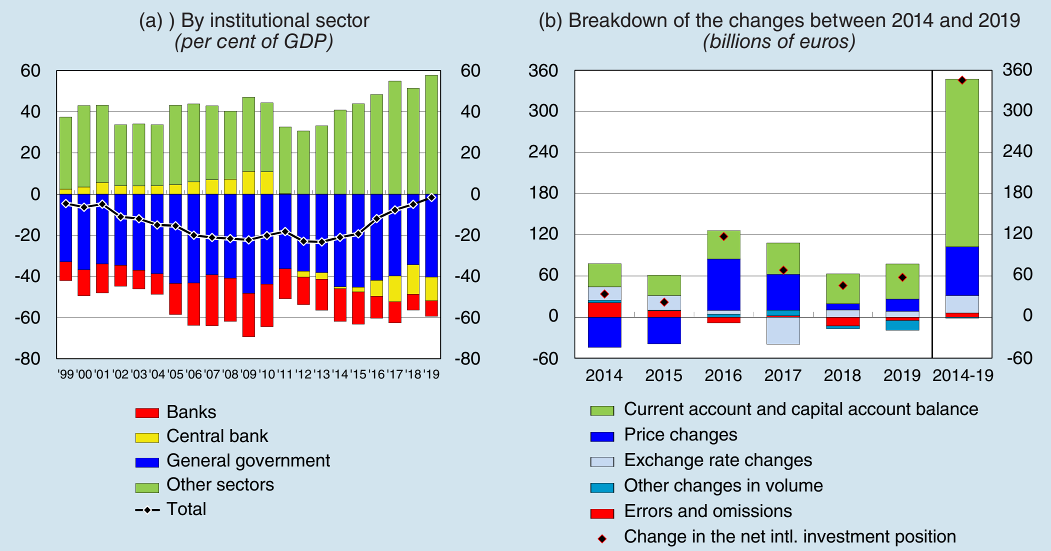
[5] A. Secchi, 'A two-tier system for remunerating banks' excess liquidity in the euro area', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 534, 2019.

introduction of the two-tier system, which made it advantageous to redistribute liquidity between banks and national banking systems, leading to an inflow of funds to Italian intermediaries.

The net international investment position. – In December 2019, Italy's net foreign investment position was negative by €29.7 billion, equal to 1.7 per cent of GDP (Figure 10.5.a).[6] The improvement of €58.0 billion compared with the previous year, which brought the overall correction from 2013 to almost 22 percentage points of GDP (Figure 10.5.b), was still due to the current account surplus, in addition to the positive contribution of the valuation adjustments. There were very substantial changes in the market prices of portfolio securities, especially on the assets side, in connection with the favourable performance of the international stock markets.

Figure 10.5

Net international investment position



Source: For GDP, Istat.

Trends in the early months of 2020

The progressive spread of the COVID-19 epidemic has had a significant impact on the trade of goods and services in Italy.

In the two months January-February, despite the sharp fall in exports to China following the measures adopted there to contain the public health emergency, sales of Italian goods, valued at current, seasonally-adjusted prices, increased moderately

[6] A number of methodological revisions were made in 2019, in particular for the compilation of data on the assets held by households abroad, which benefited from a new external source of information, and from the new way of calculating the liabilities of Italian investment funds based on specific reports from asset management companies. The overall effect of these revisions was to worsen the balance, with respect to the data previously released, by around 2 percentage points of GDP.

compared with the last quarter of 2019,[7] in part sustained by the further modest improvement in price competitiveness (see Figure 10.1.a). Purchases from abroad grew at a slightly lower rate.

In March, instead, exports and imports of goods both suffered a dramatic fall. Compared with the same month in 2019, the decline in foreign sales extended to all the major outlet markets, with the exception of Belgium and the United States, and to most sectors of economic activity, excluding the food, chemical-pharmaceutical and paper industries. The decline in imports affected Italy's main trading partners and all the major products except for food and pharmaceuticals.

For the quarter as a whole, the contraction in the seasonally-adjusted value of goods exports was 4.1 per cent on the previous quarter; that of imports was 5.1 per cent.

In its early stages, the spread of the epidemic in China made the purchase of inputs more difficult for Italian firms, which import almost 6 per cent of their intermediate goods from there. The production of exporting firms was hit hard by the suspension of activities deemed non-essential, pursuant to the Prime Minister's Decree of 22 March 2020, subsequently amended by the Decree of 25 March 2020 issued by the Ministry of Economic Development. According to our estimates, which also take account of intersectoral linkages along domestic and international production chains, non-essential production accounts for around 60 per cent of Italy's total foreign sales and 42 per cent of intermediate input purchases from abroad. The effect of only one week's suspension of production at the end of March was that in the first quarter of 2020 growth in exports and imports of goods and services in value terms declined, respectively, by 4.6 and 2.3 percentage points if compared with a no-suspension scenario. It is, however, worth noting that these estimates do not take account of the additional negative impact of the difficulties experienced by Italian firms in procuring supplies owing to the disruption of production in other key partner countries and the obstacles to the movement of goods that emerged from March onwards; nor do they contemplate the possibility that some firms fast tracked deliveries abroad, drawing on their stocks of finished products.

After the decidedly negative assessments of manufacturing firms already recorded in March, in April the purchasing managers' index (PMI) for foreign orders fell to its lowest level since the start of the time series. According to the Bank of Italy's recently conducted 'Special survey on the impact of the coronavirus' (see the box 'The impact of the COVID-19 pandemic according to business surveys', Chapter 6), the contraction in foreign demand that followed the epidemic, while hitting all the sectors surveyed, was greatest in the fashion industry.

The spread of the epidemic has had repercussions on international tourism flows since February. According to preliminary data, in February and March, the revenues for visits to Italy fell, respectively, by 13.2 and 81.4 per cent compared with the same months last year. According to the data gathered by Eurocontrol,[8] in April and in the

7 The figures on trade flows for the months from February 2020 onwards are partially estimated insofar as a portion of the firms surveyed opted to defer the transmission of their reports on trade with their EU partners.

8 Eurocontrol is the intergovernmental organization that supports European aviation and gathers data on total national and international traffic (passengers and freight).

first half of May, total air traffic declined by around 93 per cent compared with the same period in 2019.

Uncertainty over the duration and spread of contagion and of containment measures, including in countries with which Italy is highly integrated, makes it hard to quantify the impact of the pandemic on the current account balance in 2020 as a whole. There are likely to be effects of opposite sign, which taken together could lead to an increase in the surplus. The balance of goods, net of energy products, could improve due to shrinking domestic demand. The decline in oil prices, if it were to persist, would lead to a significant reduction of the trade deficit in energy products. In particular, if crude oil prices were to stabilize at around the average levels recorded since the start of the year (approximately 34 per cent lower in euros compared with 2019), the energy deficit would improve by 0.7 percentage points as a share of GDP, at the same level of imported volumes. If the probable drop in energy product imports is also taken into account, partly linked to the compression of domestic demand, the reduction of the energy deficit could be even more significant. Among services, the tourism surplus is likely to deteriorate, especially if the health emergency does not abate during the summer season, where almost half of tourism revenue is concentrated; were international tourism flows to cease altogether, the reduction in the surplus on current account would amount to 1 percentage point of GDP. Finally, it is reasonable to expect a reduction in the systematic deficit in transport, which in 2019 accounted for more than 0.5 per cent of GDP, owing to the significant drop in international passenger transport and in the volume of goods transported.

After the purchases registered in the two months January-February (€26.2 billion), in March foreign investors made sales of Italian portfolio securities worth €63.8 billion, linked to the heightened financial turmoil, which subsequently subsided somewhat. According to Emerging Portfolio Fund Research data,[9] restricted to the portfolio of a sample of international funds only, in April disinvestments from Italian securities came to a halt.

Following the increase recorded in the previous two months (equal to €26.7 billion), in March Italian banks' net funding on the international market in the form of loans and deposits fell by €50.4 billion in relation to recourse to Eurosystem refinancing operations by intermediaries (see Chapter 13, 'Banks and institutional investors').

The Bank of Italy's negative balance on TARGET2 reached €383 billion at the end of January, its lowest level since the start of 2017, and remained at levels just above this at the end of February; from March onward it increased significantly, reaching €492 billion at the end of the month and €513 billion at the end of April (Table 10.2). The widening of the negative balance was accompanied by an increase in liquidity injected into the financial system through refinancing operations and the Eurosystem's securities purchase programmes. On the balance of payments side (for which data are available for the month of March only), this expansion reflected the reduction in net foreign funding by Italian banks and sales of Italian portfolio securities by non-residents, offset to only a very small extent by residents' disposals of foreign portfolio assets (amounting to €10.3 billion).

[9] Emerging Portfolio Fund Research (EPFR) provides data on the funding and composition of the portfolios held by the main institutional and retail investment funds around the world.

11. THE PUBLIC FINANCES

In 2019, general government net borrowing amounted to 1.6 per cent of GDP. The improvement of 0.6 percentage points compared with 2018 is due in almost equal parts to the decrease in interest expense and the increase in the primary surplus, which reached 1.7 per cent of GDP. The debt-to-GDP ratio remained unchanged at 134.8 per cent. Last autumn, the Government planned a gradual reduction of the deficit and debt-to-GDP ratio over the three years 2020-22, of up to 1.4 and 131.4 per cent respectively.

The health and economic emergency has profoundly altered the public finance projections for 2020 and for the years to come. This has made wide-ranging support measures indispensable.

According to official assessments, the deficit is expected to be 10.4 per cent of GDP in 2020 and 5.7 per cent in 2021, respectively around 8 and 4 percentage points of GDP more than was planned during the last budget session. For the two-year period as a whole, just over half of the increase in the deficit is the result of the marked deterioration in the macroeconomic outlook. The remaining part reflects the effects on the budget of the measures that the Government has introduced since March to strengthen the healthcare system and to support households, workers and firms. The measures approved raise the deficit by about €75 billion in 2020 and by just over €30 billion on average per year from 2021 onwards.

To prevent the crisis from impairing firms' ability to access credit, there has been a considerable strengthening of the public guarantees system, as in the main advanced countries. The total amount of the guarantees available based on the decree laws approved since March exceeds €500 billion, about six times the value of the guarantees outstanding at the end of 2019. The uncertainty over the general state of the economy could mean that significant outlays will be required going forward, albeit distributed across several fiscal years, as a result of the enforcement of a portion of the guarantees given.

The steep drop in GDP expected and the higher funding requirement will impact the debt-to-GDP ratio, which the official projections expect to rise by more than 20 percentage points this year to 155.7 per cent. The mechanical effect of the decrease in the denominator accounts for about half of this increase. In 2021, the debt-to-GDP ratio should fall thanks to the economic recovery, the effects of which should more than offset that of the deficit.

In the 2020 Economic and Financial Document published in April, the Government indicated that a multi-year recovery effort will be needed to reduce such high debt levels. This cannot be based solely on a primary surplus, but also on low borrowing costs and on greater economic growth.

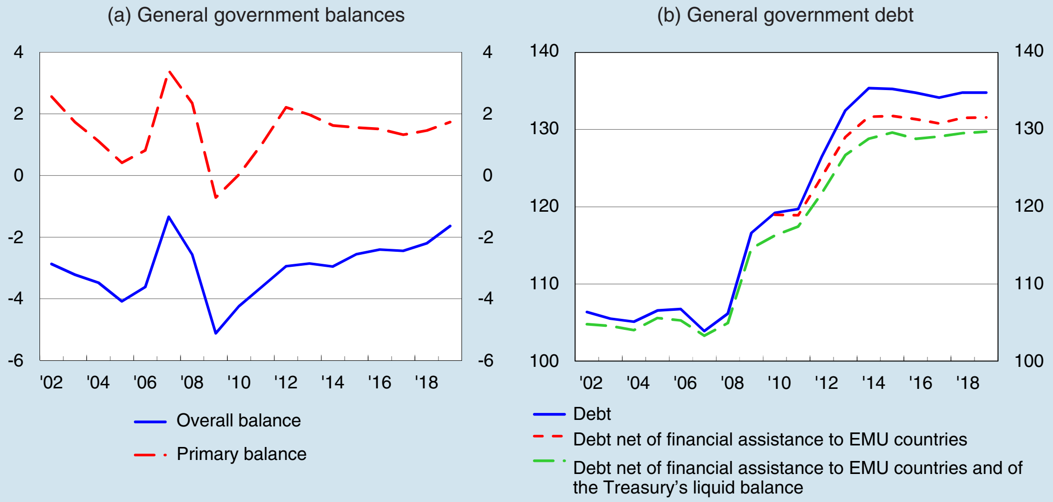
The public finances in 2019

Net borrowing: objectives and outturns. – At the end of 2018, following discussions with the European Commission (see the box 'The budgetary cycle in the context of the European Semester', Chapter 11, *Annual Report for 2018*, 2019), the Government had set a net borrowing target of 2.0 per cent of GDP for 2019. The 2019 Economic and Financial Document, published the following April, revised that level to 2.4 per cent as a result of a weaker than expected economic performance. During the summer, after the Commission had communicated that the opening of an Excessive Deficit Procedure (EDP) for Italy for non-compliance with the debt rule was considered justified, the Government restored the deficit target to 2.0 per cent of GDP, also as a result of a corrective decree (Decree Law 61/2019, converted into Law 85/2019; see the box 'The recent budget measures and the European Commission's assessments', *Economic Bulletin*, 3, 2019).[1] Last autumn, in its Update to the Economic and Financial Document, the estimate for the 2019 deficit was revised to 2.2 per cent, taking account of a lower primary surplus only partially offset by a more favourable trend in interest expense.

The final figure for general government net borrowing in 2019 came to 1.6 per cent of GDP, an improvement of 0.6 percentage points compared with 2018 (Figure 11.1 and Table 11.1). With respect to last autumn's estimates, the primary surplus was higher by 0.4 percentage points of GDP, mainly due to better than expected tax revenues of over €10 billion, largely attributable to direct taxes (€7 billion).

Figure 11.1

Public finance indicators
(per cent of GDP)



[1] Following these measures, the Commission announced on 3 July 2019 that it would not propose opening the Excessive Deficit Procedure to the European Council.

Table 11.1

Consolidated accounts of general government (1) *(billions of euros and per cent of GDP)*	2014	2015	2016	2017	2018	2019
Current revenue	772.7	781.4	784.4	797.7	814.4	837.5
of which: social contributions	214.4	219.1	220.6	225.6	234.5	242.1
direct taxes	237.2	242.6	247.6	250.3	248.9	257.4
indirect taxes	247.8	246.6	242.5	248.5	254.4	257.9
Capital revenue	6.8	9.3	7.1	6.6	4.0	3.9
Tax burden	*43.1*	*42.9*	*42.2*	*41.8*	*41.9*	*42.4*
Total revenue	**779.5**	**790.7**	**791.5**	**804.3**	**818.5**	**841.4**
per cent of GDP	47.9	47.8	46.7	46.3	46.3	47.1
Current primary expenditure	694.6	697.5	710.3	714.6	733.7	749.3
Interest payments	74.5	68.1	66.4	65.5	64.6	60.3
Capital account expenditure (2)	58.5	67.3	55.6	66.8	59.0	61.1
of which: gross fixed investment	37.8	39.8	39.0	38.3	37.8	40.5
Total expenditure	**827.6**	**832.9**	**832.3**	**846.8**	**857.3**	**870.7**
per cent of GDP	50.9	50.3	49.1	48.8	48.5	48.7
Primary balance	**26.5**	**25.8**	**25.6**	**23.0**	**25.8**	**31.0**
per cent of GDP	1.6	1.6	1.5	1.3	1.5	1.7
Net borrowing	**48.1**	**42.2**	**40.8**	**42.5**	**38.8**	**29.3**
per cent of GDP	3.0	2.6	2.4	2.4	2.2	1.6

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.

At the end of 2018, the Government was planning a moderately expansionary fiscal stance for the following year, with a reduction in the cyclically adjusted primary surplus of about three tenths of a percentage point of GDP. Based on final budgetary data, the European Commission estimates that this surplus instead increased by 0.4 percentage points, mainly due to higher than expected revenues. Structural net borrowing appeared to fall markedly, to 1.5 per cent of GDP from 2.3 per cent in 2018; assuming the same impact of the temporary measures, the decrease reflects the fall in interest expense of 0.3 percentage points of GDP, as well as the change in the cyclically adjusted primary balance.

Revenue. – In 2019, revenue rose by 2.8 per cent (to €841.4 billion; Table 11.1), mostly driven by direct taxes and social security contributions. Revenue from the former was up by 3.4 per cent. Corporate tax receipts (IRES) recorded an increase of 3.6 per cent, attributable solely to the tax balance for 2018, which takes account of the previous legislative amendments;[2] personal income tax (IRPEF) rose by 2.5

[2] The increase in the balance of the IRES paid in 2019 was affected by the particularly low level observed in the previous year. Based on the tax payment mechanisms, the reduction in the rate (from 27.5 to 24 per cent), which came into force in 2017, was only reflected to a limited extent in the frontloaded payment made that same year, leading to a reduction in the 2017 tax balance, recorded the following year.

per cent, concentrated in taxes on payroll employment and reflecting the wage bill dynamics (see Chapter 9, 'Prices and costs').[3] Substitute taxes on financial incomes also increased due to the solid market performance. Social security contributions rose by 3.2 per cent: the change can be ascribed to the private sector,[4] and also reflects the phasing out of the tax relief granted in previous years. Among indirect taxes, the increased VAT revenue on internal trade – probably boosted by the introduction of mandatory e-billing from 1 January of last year – more than offset the decrease in that for imports.

The tax burden reached 42.4 per cent of GDP (against 41.9 per cent in 2018), the highest value since 2015. The gap compared with the average of the other euro-area countries (equal to 41.3 per cent) widened by 0.7 percentage points: the tax burden is lower than in France (47.4 per cent), but higher than in Germany (41.6 per cent) and in Spain (35.2 per cent).

Expenditure. – General government expenditure increased by 1.6 per cent last year, reaching €870.7 billion; the increases in current primary expenditure (2.1 per cent) and capital expenditure (3.6 per cent) were partly offset by the reduction in interest payments (-6.7 per cent). Compared with the other euro-area countries, the ratio of interest payments to GDP in Italy (3.4 per cent) is about two percentage points higher, equal to just under €37 billion in terms of absolute value; more than two thirds of the difference is due to the higher debt-to-GDP ratio and the remainder to the greater average cost of the debt.

Current primary expenditure was mainly affected by the performance of social benefits in cash, which increased by 3.7 per cent. Among these, pension expenditure rose by 2.4 per cent, reaching 16.7 per cent of GDP: the measures relating to the changes to the pension system (the *quota 100* early retirement scheme) contributed to this. Other benefits rose by 10.1 per cent, mainly owing to the introduction of the new minimum income scheme (*Reddito di cittadinanza* or RdC).

Capital account expenditure increased by 3.6 per cent as a result of the sharp rise in gross fixed investment (7.2 per cent compared with 2018), and was only partly offset by the reduction in transfers (-3.4 per cent). The simplification of fiscal rules for local and regional authorities[5] also contributed to the investment growth of the past year, following the 4.5 per cent contraction observed on average between 2010 and 2018.

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3 IRPEF on self-employment decreased: one contributory factor may have been the extension of the flat rate scheme to taxpayers with incomes of up to €65,000.

4 Social security contributions for public sector employees decreased slightly, affected by the payment in 2018 of arrears following the renewal of some national collective agreements covering the three-year period 2016-18.

5 In order to create more room for manoeuvre for local government investment, the 2019 Budget Law (Law 145/2018) simplified the framework of rules to which local and regional authorities are subject, bringing the rules for calculating the balance used for the harmonized accounts (which entered into force in 2015) closer to those for calculating the balance required to comply with a balanced budget provision (applied since 2016, replacing the Internal Stability Pact). The transition to the new arrangements involved all local government authorities, with the exception of the non-autonomous regions.

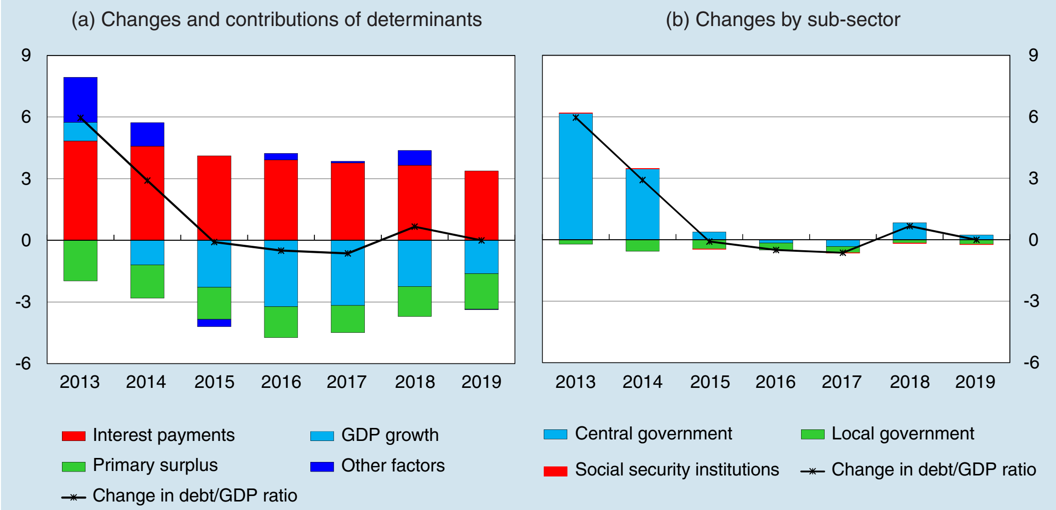
The public debt: objectives and outturns. – At the end of the 2018 budgetary session, the Government had planned a decrease of 1 percentage point in the debt-to-GDP ratio for 2019 compared with the previous year. The 2019 Economic and Financial Document envisaged an increase of almost half a percentage point, as a result of the downward revision of the growth estimates and the expected rise in net borrowing; the start of the decline in the debt burden was postponed to 2020. In its Update to the Economic and Financial Document published in September, the Government again revised the estimate of the debt-to-GDP ratio, raising the expected increase with respect to 2018 to almost 1 percentage point; the revision mainly reflected privatization receipts that were lower than expected (1.0 per cent of GDP).

The final budgetary data show that the ratio of general government debt to GDP remained at the 2018 level of 134.8 per cent.[6] The reduction effect caused by the primary surplus was offset by the opposite effect of the gap between the average cost of the debt and the nominal growth rate of the economy (Figure 11.2).

Figure 11.2

General government debt

(per cent of GDP)



The reduction in interest rates in the second half of the year helped to accelerate the decline in the average cost of the debt, which stood at 2.5 per cent at the end of 2019 (from 2.8 per cent the year before; it was 4.2 per cent in 2012; Figure 11.3). The average residual life of the debt remained stable at 7.3 years.

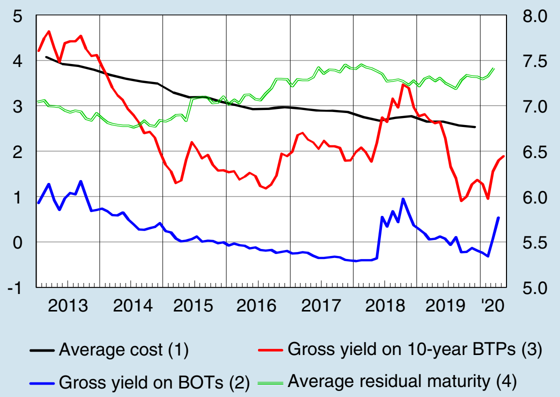
6 Last September, the Bank of Italy updated its estimates for general government debt, mainly as a result of the inclusion of the interest accrued but not paid on postal savings certificates, in compliance with the methodological amendments agreed at European level (see 'Preliminary Hearing on the Update to the 2019 Economic and Financial Document', testimony of L.F. Signorini, Deputy Governor of the Bank of Italy, before the Senate of the Republic, Rome, 8 October 2019). This revision, which has no impact on the assessment of the sustainability of the public finances, led to a higher debt-to-GDP ratio (by just over 3 percentage points in 2018), but a slightly more favourable trend in the ratio, also looking ahead.

The share of public debt held by the Bank of Italy was equal to 16.7 per cent at the end of 2019, down slightly compared with 2018 (16.9 per cent). The net purchases made under the Eurosystem's expanded asset purchase programme (APP), suspended until last October, were relaunched the following month (see the section 'Money and public sector securities markets', Chapter 14).[7] The share held by non-residents (including the ECB and the other Eurosystem national central banks) increased to 31.5 per cent (from 28.6 per cent in 2018), after declining for three consecutive years.

Some general government liabilities are not included in the definition of public debt applied in order to comply with European rules: the main ones for Italy are commercial debts and liabilities relating to exposure in derivatives, in addition to the guarantees issued. According to ISTAT estimates,[8] the commercial debts not included in government debt amounted to 2.8 per cent of GDP in 2019 (€49.4 billion), against 2.7 per cent in 2018.[9] The market value of the net derivative liabilities not included in the debt increased in 2019 from 1.2 to 1.5 per cent of GDP (€27 billion),[10] mainly affected by interest rate developments.[11] The total amount of guarantees issued in 2019 to non-general government entities rose from 4.3 to 4.9 per cent of GDP: two thirds of this increase is due to guarantees provided to non-financial corporations and households.

Figure 11.3

Average cost and average residual maturity of the debt, gross yield on BOTs and 10-year BTPs
(monthly and quarterly data; per cent and years)



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.

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7 Compared with what is reported in Chapter 14, 'The money and financial markets', the shares shown here are calculated with reference to the face value (and not to the market value) and to the total amount of debt (and not just to the equity component).

8 Due to the emergency situation, no estimates are provided this year for general government commercial debts based on the Survey on Industrial and Service Firms.

9 Istat's estimates only partially take account of the commercial liabilities arising from capital expenditure and do not include those transferred without recourse by the creditor to financial intermediaries (see the box 'General government commercial debts', Chapter 11, *Annual Report for 2017*, 2018). According to the European rules, the latter are included in the public debt. It should be borne in mind that some commercial debts are to be expected, given the payment times contractually agreed by the parties.

10 These figures do not include derivative liabilities that have been reclassified among government debt in accordance with the European statistical rules, either from the outset or following a restructuring or the exercise of a swaption. Reclassified liabilities amounted to €8.2 billion (0.5 per cent of GDP) at the end of 2019.

11 The net derivative liabilities are largely attributable to the Ministry of Economy and Finance (MEF). The relative portfolio, with which the MEF has insured itself in the past against generalized increases in market rates, consists mainly of interest rate swaps on which the Italian Government pays a fixed interest rate (about 4 per cent on average) and receives a variable rate (typically the six-month Euribor, currently at negative levels); see M. Bucci, I. De Angelis and E. Vadalà, 'Don't look back in anger: the use of derivatives in public debt management in Italy', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 550, 2020.

The public finances in 2020 and the medium-term prospects

The budgetary session. – The 2020 Draft Budgetary Plan (DBP) published last November set out a net borrowing target for 2020 of 2.2 per cent of GDP, unchanged compared with what was then expected for 2019, followed by a gradual decline to 1.8 per cent in 2021 and to 1.4 per cent in 2022.

In line with the DBP's objectives, the budget for the three years 2020-22, approved by Parliament in December 2019, increased the deficit with respect to the current legislation levels by almost 1 percentage point of GDP in 2020, and by around 0.6 points on average in each of the following two years.[12] The expansionary interventions (then assessed as amounting to around 1.7 per cent of GDP in 2020) mainly involved the deactivation of the safeguard clauses for 2020 and their reduction for the following two years; resources were also allocated to reducing the tax wedge on labour, to public and private investment and to the renewal of public sector contracts. To partially cover these outlays, the budget raised resources amounting to about 0.8 percentage points of GDP, mostly through measures to combat tax evasion, higher taxes on gambling and tobacco products, and spending cuts.

With reference to the tax wedge on labour, its reduction was subsequently defined in Decree Law 3/2020 of last February that, starting from 1 July 2020, provided for a permanent tax bonus and a new temporary tax credit for employment income. The bonus, called a 'supplementary benefit', replaced the one for mid-to-low-income workers introduced in 2014 (IRPEF bonus of €80). The new tax credit for payroll employment – in force for the second half of 2020 only – is instead in addition to the existing one (see the box 'The effects of a reduction in the tax wedge on work incentives').

THE EFFECTS OF A REDUCTION IN THE TAX WEDGE ON WORK INCENTIVES

Effective marginal tax rates (EMTRs) – defined as the change in the total amount of social security contributions, income taxes and cash transfers observed following an increase of one unit in labour income – are widely used in the literature as a measure to assess the risks of individual choices being distorted that are attributable to the tax system. When EMTRs are high, a significant portion of the increase in labour income is eroded by a combination of increased taxation and lower transfers; this may act as a disincentive to labour supply.

According to estimates made using the Bank of Italy's microsimulation model (BIMic),[1] the legislation in force prior to last February's measures to reduce the tax wedge (Decree Law 3/2020, converted into Law 21/2020), the average of the

[1] N. Curci, P. Rizza, M. Romanelli and M. Savegnago, 'Irpef: (Un)Fairness and (in)efficiency. A structural analysis based on the BIMic microsimulation model', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 546, 2020.

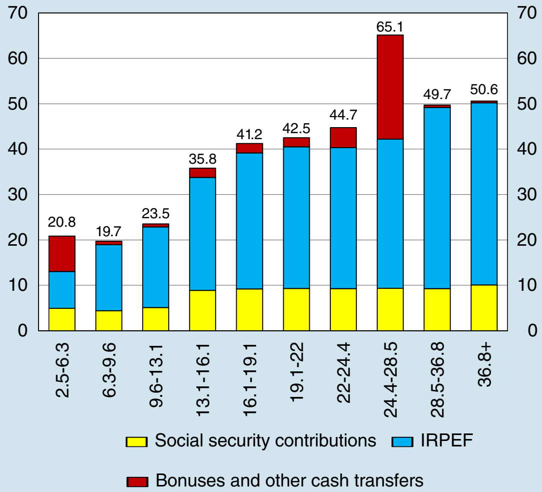
[12] 'Preliminary hearing on the budgetary provisions for the three years 2020-22', testimony by L.F. Signorini, at the Senate of the Republic, Rome, 12 November 2019.

EMTRs for payroll employees in 2020 was 39.4 per cent, of which approximately 27 per cent was due to personal income tax (IRPEF), 8 per cent to social security contributions and over 4 per cent to cash transfers (which decrease with income). The highest EMTRs (equal on average to 65.1 per cent; figure A) referred to taxpayers in the eighth decile of the income distribution (between €24,400 and €28,500). Such high rates are mainly due to the marked reduction in the €80 IRPEF bonus, which occurs as incomes go up (*décalage*) from €24,600 to €26,600.[2] EMTRs that are close to the average value observed in the eighth decile risk discouraging labour supply along the intensive margin.

Figure A

Average of effective marginal tax rates by tenths of payroll employment income (1)

(per cent)



Source: Based on BIMic, the Bank of Italy microsimulation model.
(1) The calculations refer to the previous legislation with respect to Decree Law 3/2020. Employment income does not include social security contributions paid by employees. The values on the horizontal axis show the two extremes (in thousands of euros) of the corresponding tenth.

With the recent measures to reduce the tax wedge set out in Decree Law 3/2020, it was stipulated that, with effect from 1 July 2020, the IRPEF bonus is replaced by a new instrument called a 'supplementary benefit' which is bigger and is targeted at a wider range of workers, which now also includes taxpayers with incomes of between €26,600 and €28,000.[3] In addition, and only for the second half of 2020, the Decree Law added a further tax credit to the existing one, which applies to incomes of between €28,000 and €40,000 and decreases as income rises.[4] The Government intends this measure to become a permanent feature of a broader reorganization of the tax credit system.

As a result of these regulatory innovations, the *décalage* of the overall tax relief in 2020 is less pronounced than under previous legislation (see panel (a) of Figure B, red and blue lines). The new measures lead to a slight reduction in the average EMTRs, to 38.5 per cent. The decrease is concentrated in the €24,600

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2 The IRPEF bonus, introduced in 2014, is only for workers (relative to the period of employment) whose tax liability (before any tax credits) exceeds the payroll-income tax credit; in the case of workers employed throughout the year, this condition is met when income roughly exceeds €8,145. The amount of the bonus remains constant at €960 per year up to a total income of €24,600 and decelerates rapidly thereafter, to the point where those with an income of €26,600 are no longer eligible for it.

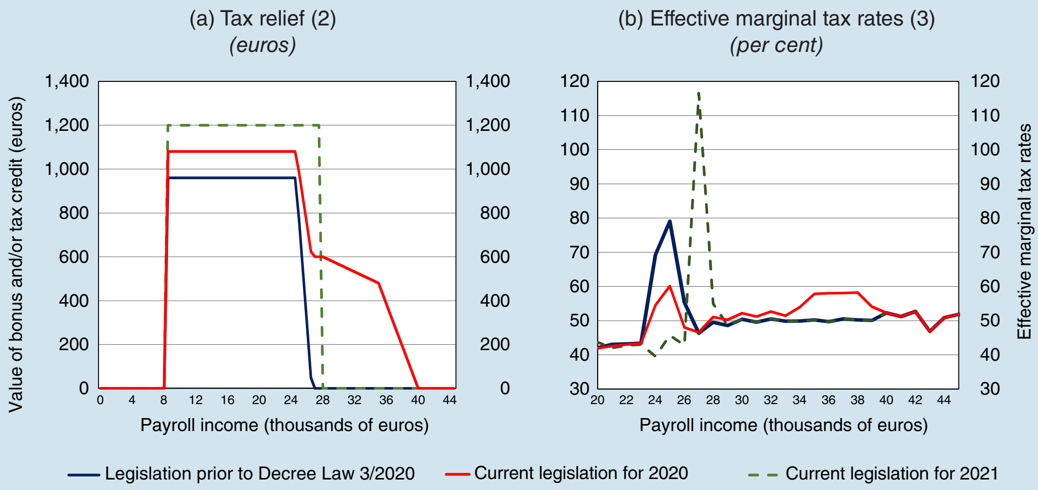
3 The supplementary benefit amounts to €1,200 per year and the range of beneficiaries includes payroll employees with a total annual income of between €26,600 and €28,000. The new supplementary treatment is also only payable (relative to the period of employment) to workers whose tax liability (before any tax credits) exceeds the payroll-income tax credit.

4 The additional tax credit for payroll employees concerns workers with a total annual income of between €28,000 and €40,000. This tax credit is also in relation to the period of employment. In the case of an individual employed throughout the second half of 2020, the deduction amounts to €600 for an income of €28,000, decreases to €480 for an income of €35,000, and then falls rapidly until it lapses at an income of €40,000.

to €26,600 income bracket (which according to our estimates includes about one million workers) and is only partially offset by the increase occurring in the €28,000 to €40,000 bracket (approximately 3 million workers; see panel (b) of Figure B).

Figure B

Tax benefits and effective marginal tax rates for payroll employees (1)



Source: Based on BIMic, the Bank of Italy microsimulation model.
(1) Employment income does not include social security contributions paid by employees. – (2) Tax relief refers to a payroll employee who has been employed for a whole year. – (3) Effective marginal tax rates take account of the social security contributions paid by employees, IRPEF and cash transfers, the amount of which depends on gross income.

From 2021 (green line), if the further tax credit for payroll employees is not confirmed, the *décalage* of the overall tax relief will also become more marked than that provided for in the legislation in force until last February. This translates to a new peak (greater than 100 per cent) in EMTRs in conjunction with the phasing out of the supplementary benefit, higher than the peak in 2019 resulting from the reduction in the €80 IRPEF bonus. For workers with an income of between €28,000 and about €30,000 (just over 900,000 people according to our estimates), there would therefore be an incentive to reduce their taxable income.[5] In the event that the additional tax credit is confirmed for 2021 (which according to calculations on the official documents would lead to revenue shortfalls of just over €3 billion), the EMTR average for all employees would be approximately 1 percentage point lower than that provided for by the legislation in force. Specifically, the elimination of the peak expected in the event that the additional tax credit is not confirmed would more than compensate an increase in EMTRs for individuals with incomes of between €28,000 and €40,000.

[5] For example, if the gross income of a worker resident in Milan, with no dependent family members and with no other tax credits, increases by €1 - from €28,000 to €28,001 - their disposable income is significantly reduced from around €22,600 to €21,400; to restore disposable income to a level of €22,600, the worker must increase their gross income to around €30,140.

The effects of the pandemic on public accounts and the fiscal policy response. – The spread of the COVID-19 epidemic and the resulting health and economic emergency have dramatically changed the prospects for the public finances this year and the next (Table 11.2).

Table 11.2

The public accounts outlook in the latest official documents
(percentage changes)

	Italy's 2020 Draft Budgetary Plan				2020 DEF: current legislation scenario				2020 DEF: scenario with new policies (1)			
	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021	2022
Net borrowing	2.2	2.2	1.8	1.4	1.6	7.1	4.2	–	1.6	10.4	5.7	–
Primary surplus	1.3	1.1	1.3	1.6	1.7	-3.5	-0.6	–	1.7	-6.8	-2.0	–
Interest payments	3.4	3.3	3.1	2.9	3.4	3.6	3.6	–	3.4	3.7	3.7	–
Debt	135.7	135.2	133.4	131.4	134.8	151.8	147.5	–	134.8	155.7	152.7	–
GDP growth	*0.1*	*0.6*	*1.0*	*1.0*	*0.3*	*-8.0*	*4.7*	–	*0.3*	*-8.0*	*4.7*	–

(1) The scenario 'with new policies' is based on the current legislation macroeconomic outlook.

The Economic and Financial Document (DEF) published last April outlines a context of profound uncertainty, recognizing that in the current situation, any forecast is necessarily subject to large margins of error.[13] Moreover, in accordance with the European Commission's guidelines, the DEF does not define the budgetary policy for a period of three years as usual, but only for this year and the next. In addition to the current legislative framework, which takes into account the effects of the measures approved in the first four months of the year, the DEF presents a 'new policy' scenario that incorporates the effect on the public accounts of Decree Law 34/2020 ('Relaunch Decree').[14]

For 2020, in the new policy scenario, the net borrowing target has been revised upwards by 8.2 percentage points of GDP, to 10.4 per cent; the revision mainly concerns the primary balance, which goes from a surplus of around 1 percentage point of GDP to a deficit of almost 7 per cent. Taking into account the carry-over to 2020 of the better than expected outcome in 2019 (officially estimated at 0.4 percentage points of GDP), the revision of the primary balance is close to 8.5 points. This reflects the automatic effect of the macroeconomic deterioration and the measures that the Government has introduced since March to strengthen the healthcare and civil protection system and

[13] 'Preliminary hearing on the 2020 Economic and Financial Document', testimony by E. Gaiotti, Director General for Economics, Statistics and Research, before the Senate of the Republic, Rome, 29 April 2020 (only in Italian).

[14] The scenario is based on the current legislation macroeconomic scenario since it does not take into account the effects of the 'Relaunch Decree' on the growth rate of GDP.

to support households, workers and firms. These measures increase the deficit by about €75 billion (4.5 per cent of GDP).[15]

Net borrowing and the primary deficit in 2021 are expected to fall by almost 5 percentage points of GDP, to 5.7 and 2.0 per cent respectively. The improvement will either come from the partial recovery of GDP or from the end of the temporary measures to support the economy. These factors will more than compensate for the discretionary measures implemented from 2021 onwards, including the deactivation of the safeguard clauses. The primary balance is expected to be more than 3 percentage points lower than planned last autumn, of which approximately 60 per cent due to the effects of lower GDP growth in the two years 2020-21.

After seven years of decline, interest expenditure will rise again. In 2020, the increase in nominal terms is estimated to be very limited; the increase of 0.3 percentage points in relation to GDP (to 3.7 per cent) will mostly reflect the fall in the denominator. The expansion in nominal terms is expected to be more sustained in 2021 (in the order of €4 billion), almost entirely due to the higher borrowing requirement forecast for the two years 2020-21; however, due to the marked increase expected in the denominator, expenditure in relation to GDP would remain stable at 3.7 per cent. Compared with last autumn's estimates, debt service expenditure would be higher by 0.4 and 0.6 percentage points of GDP respectively in 2020 and 2021.

The debt-to-GDP ratio would rise by 21 percentage points this year to 155.7 per cent. Nearly half of this increase would be due to lower growth: the contraction in nominal GDP included in the DEF (around 7 per cent) implies an increase of around 10 points in the debt-to-GDP ratio. An additional explanatory factor for the increase is the higher deficit resulting from the downturn in economic activity. The ratio will fall by 3 percentage points in 2021; the economic recovery will help to reduce it by 9 percentage points, more than offsetting the increase due to the deficit (of almost 6 points) and to factors that do not affect net borrowing.

According to the European Commission's spring forecasts, Italy's net borrowing will reach 11.1 and 5.6 per cent of GDP respectively in 2020 and 2021. The debt-to-GDP ratio is expected to reach 158.9 percentage points in 2020, and then fall to 153.6 per cent in 2021. The Commission recommended that Italy implement all the measures necessary for effectively tackling the pandemic and supporting the economy, in line with the general safeguard clause.

The measures approved during the year. – The emergency situation under way since the end of February called for a strong fiscal policy response. The interventions had two purposes: on the one hand, to increase the resources available for the healthcare and civil protection system to deal with the medical and epidemiological consequences of the pandemic, and on the other hand, to provide economic support for workers,

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[15] In its 'Report to Parliament for 2020' published in March, the Government requested authorization to increase the 2020 deficit by €20 billion compared with what had been authorized in the previous budgetary session to finance the initial emergency interventions. Around the same time as it presented the DEF, the Government asked Parliament to authorize an additional increase in this year's deficit of up to €55 billion and in the deficits for 2021 onwards of around €30 billion a year on average compared with the current legislation estimates.

households and businesses to limit the effects of the cyclical slowdown and the forced interruption of economic activity in many sectors.

Following the first measures targeting the hardest hit areas (funded with resources already available under current legislation and therefore with no impact on the deficit), the fiscal policy response set out three decree laws adopted between March and May. Overall, the measures increase the 2020 deficit by around €75 billion. Just under €20 billion are attributable to Decree Law 18/2020, converted into Law 27/2020 ('Cure Italy' decree),[16] the remaining €55 billion to Decree Law 34/2020. According to official assessments, Decree Law 23/2020 (the 'Liquidity Decree'), though containing significant measures to support firms' liquidity, has zero impact on the deficit, (see the boxes 'The financial support measures for firms' and 'The measures adopted to deal with the public health emergency in Italy' in *Economic Bulletin*, 2, 2020).[17]

Many interventions are temporary in nature and their effects are limited to the current year. However, the third decree foresees spending €26.1 billion in 2021, of which approximately €20 billion to cancel the expected increases in indirect taxation connected with the safeguard clauses.

As mentioned above, the measures that do not increase the deficit in 2020 in the official assessments concern above all those to support firms' liquidity, which include extending the deadlines for the main tax returns from March onwards and a significant strengthening of public guarantees on loans. In any event, the suspended tax payments are expected to be recouped by the end of the year; the non-standard guarantees granted have no impact on the deficit if they are not called in.

The total amount of the guarantees available based on the three measures exceeds €500 billion (more than 30 per cent of GDP), about six times the value of those in place at the end of 2019.

[16] For a description of the main measures contained in Decree Law 18/2020, see the box 'The measures adopted to deal with the public health emergency in Italy', in *Economic Bulletin*, 2, 2020 and the Bank of Italy's Report prepared for the Fifth Committee (Economic Planning and Budget), 'Draft Law A.S. 1766, conversion into law of Decree Law 18/2020, setting out measures to strengthen the national health service and provide economic support for households, workers and firms in connection with the COVID-19 emergency', Senate of the Republic, Rome, 25 March 2020 (only in Italian).

[17] 'Conversion into law of Legislative Decree 23/2020 (urgent measures concerning access to credit and tax obligations for firms, special powers in strategic sectors, health and labour measures and an 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).

12. BUSINESS ACTIVITY REGULATION AND THE INSTITUTIONAL ENVIRONMENT

In 2019, the functioning of the civil justice system continued to improve gradually: cases pending before the courts decreased by 4 per cent compared with the previous year. The number of calls for tenders continued to rise, increasing by about 10 per cent compared with 2018.

The COVID-19 epidemic has had mixed effects on the regulated sectors. While there was an increase in demand in some sectors (such as food, essential goods, and telecommunications), in most cases the obligatory suspension of business activity and the decrease in turnover have made it necessary to adjust the regulatory framework and to adopt specific support measures, for example, for public transport and professional services. Provisions have been made for instruments that will enable public participation in the capital of distressed firms; the scope of the Government's special powers (its 'golden power') has been expanded in strategically important sectors.

The slowdown in economic activity could translate into an increase in the number of distressed firms in the coming months. This risk could be mitigated by the measures adopted by the Government to support firms' liquidity and to keep liquidations to a minimum. A rise in the number of distressed firms could intensify the problems that already plague the crisis management system: bankruptcy proceedings are still very lengthy and the evidence available indicates that the use of restructuring tools is limited to larger companies and does not always give satisfactory results.

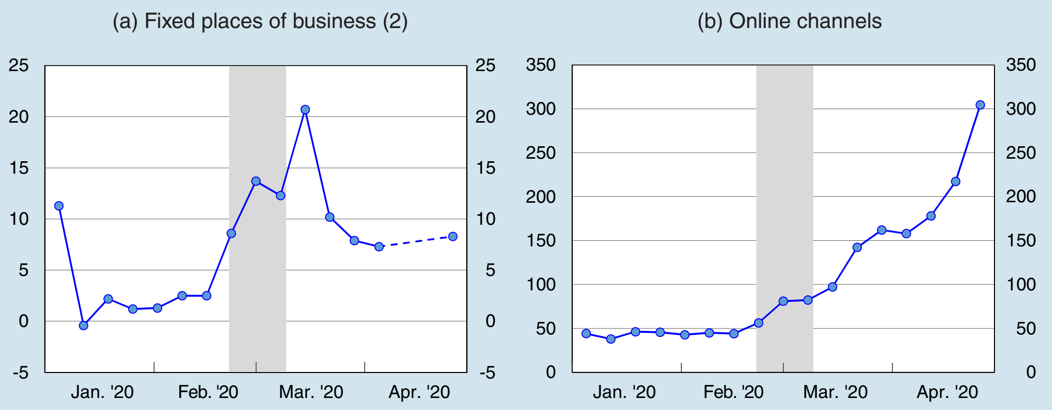
The COVID-19 epidemic has also affected the functioning of general government and the justice system; the slowdown in activity would have been less had the process of digitalizing the public sector been at a more advanced stage.

Regulated sectors and public intervention

Regulated sectors. – In addition to a general drop in consumption, retail trade has been affected by closure measures involving three fifths of firms and almost half the employees in the sector. In contrast, trade in food and essential goods, which was not touched by the measures, has seen a growth in revenue only partly attributable to the increase in prices. According to Nielsen data, in March and April 2020, the value of sales of these goods by large retail chains grew by over 8 per cent compared with the same period in 2019, against 5 per cent in the first two months of the year (Figure 12.1.a). Only hypermarkets, which have probably been affected to a greater extent by the restrictions on mobility, have seen sales decrease.

Figure 12.1

Sales of food products and essential goods by large retail chains (1)
(weekly data; per cent)



Source: Nielsen.
(1) Change in the value of sales compared with the corresponding week of the previous year. The grey area indicates the period in which containment measures were gradually adopted (from when 11 municipalities in Lombardy and Veneto became red zones, under the Prime Minister's Decree of 23 February 2020, until the extension of the restrictive measures throughout Italy, under the Prime Minister's Decree of 9 March 2020). – (2) The figure excludes the weeks corresponding to Easter 2019 and 2020, which had predictably anomalous values.

Again for large chains, there was a marked acceleration in online sales of food and essential goods during the same period; they rose by almost 170 per cent on an annual basis (Figure 12.1.b). By international standards, e-commerce had previously been less widespread in Italy: according to Eurostat data, only 38 per cent of Italians had made online purchases in 2019, against a European average of 63 per cent. Growth triggered in this way could lead to a structural change in consumer preferences to the benefit of this distribution formula, with possible effects on market structure and on regulatory developments.

Public transport recorded a sharp fall in revenues, partly because of the measures restricting travel. At least in the short term, activity in this sector will be at a lower level than in the past, owing to the need to ensure adequate physical distancing between passengers.

With regard to air transport, the International Civil Aviation Organization estimates a reduction in passenger traffic on international air routes of up to 65 per cent in 2020. Decree Laws 18/2020 and 34/2020 provided for the creation of a public operator in this sector, with a total contribution of €3 billion from the Ministry of Economy and Finance. The new company will be able to purchase and lease business branches of firms holding air transport licences, including those under special administration, such as Alitalia and Alitalia Cityliner; it may also take over (directly or via subsidiaries) service contracts signed by these firms. This legislation also established measures to compensate operators in the sector for damages resulting from the COVID-19 epidemic.

Many local public transport operators, most of which are controlled by local and regional authorities, may encounter difficulties. According to the latest available balance sheet data, one in seven of the roughly 150 firms controlled by general government closed the financial year with a loss in 2018. To ensure the continuity of public service provision, DL 18/2020 and DL 34/2020 established compensation for lost revenue; in addition, the operators can continue to manage the service beyond the deadlines fixed by the existing contracts.

Self-employed professionals may have been affected by the decline in their clients' business. For those belonging to professional bodies and contributing to pension funds, DL18/2020 provided a fund for income support, which was refinanced by DL 34/2020. Unlike other interventions aimed at the self-employed (see Chapter 8, 'The labour market'), selective criteria for access to benefits, based on income earned in 2018 and on declining business levels in 2020, were set out from the beginning for this category. The monthly subsidy of €600, recognized from March 2020, accounts for about one third of the average net income of the professionals included in the measure.

However, as a result of the restrictive measures, there has been a marked growth in the demand for internet connections owing to the increase in the work, education and leisure activities carried out remotely. DL 18/2020 established that electronic communications operators should take steps to ensure and enhance network functioning and continuity of services. The need to create new generation digital infrastructure is reinforced by the prospect of its increasing use in the post-health crisis phase (see the section 'Considerations on the economy in the medium term after the epidemic', Chapter 15). There is currently very uneven coverage across the country as regards high-speed broadband networks; the development of the most technologically advanced infrastructure in the fixed network is proceeding slowly in both the potentially profitable areas and where public intervention has become necessary (see the box 'Italy's ultrafast broadband network').

ITALY'S ULTRAFAST BROADBAND NETWORK

During the pandemic, internet and telecommunications networks have played a crucial role, enabling, among other things, teleworking, remote schooling and online shopping for essential goods. According to the Milan Internet Exchange, since the beginning of March 2020 data traffic has increased by 70 per cent with respect to the 2019 average. This increase has sometimes led to malfunctions and slower network connections at local level, highlighting the problem of the time lag in developing the infrastructure for Italy's ultrafast broadband network.

According to the Digital Economy and Society Index (DESI) compiled by the European Commission, Italy is 19th out of 28 countries for connectivity, just above France but well below Germany and Spain, which are in 11th and 9th places respectively (see the figure). On the supply side, Italy's lag is due to the fixed network's limited coverage, especially as regards the ultrafast network (over 100 Mbit/s), which is only partly mitigated by mobile network coverage.[1]

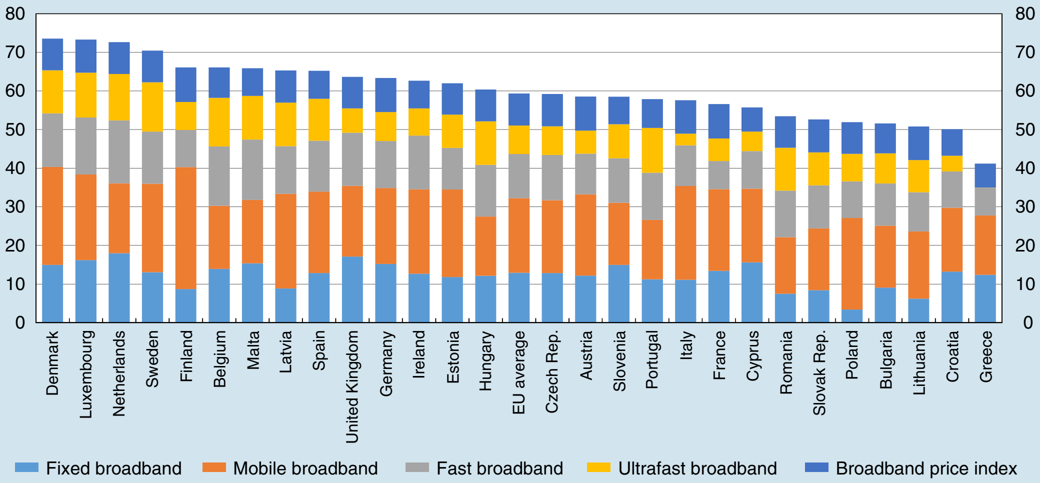
Italy's poor ranking is the result of various factors, such as a pre-existing high-quality copper network, the country's topography, and its population distribution, which have all reduced the incentives for investing in fibre optics.

Our country inherited an extensive telephone network using copper cables from the post-war period, which allowed a relatively rapid expansion of first-generation broadband

1 E. Ciapanna and G. Roma, 'Connected Italy', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 573, 2020.

Figure

The Digital Economy and Society Index (DESI) – Connectivity (1)
(values from 0 to 100)



Source: European Commission
(1) Higher values correspond to better results. The index is the weighted average of five sub-dimensions: 'Fixed Broadband' (18.5 per cent), measuring the coverage and subscriptions to fixed broadband connections; 'Mobile broadband' (35 per cent) considers 4G coverage, subscriptions to mobile broadband and the degree of readiness for 5G; 'Fast broadband' (18.5 per cent), refers to the coverage of new generation networks and subscriptions to fast broadband connections; 'Ultrafast broadband' (18.5 per cent) measures the coverage and subscriptions to ultrafast broadband connections; 'Broadband price index' (9.5 per cent) includes the prices of 12 broadband products and services in relation to per capita income.

connections (digital subscriber line, DSL). The European regulator has, moreover, stated that companies with a dominant position should lease the copper network to other operators. On the one hand, this decision has led to an expansion in supply and a reduction in the prices of broadband connection services but, on the other, it has removed the incentive to invest in the new fibre optic technologies.[2] In this way operators have favoured the development of the mixed technology 'fibre to the cabinet' (FTTC), which uses fibre connections as far as the street cabinets and then copper cables to reach the final users. The penetration rate[3] of the latest generation and fastest system known as 'fibre to the premises' (FTTP), is only 23.9 per cent.

To encourage the extension of fibre to less densely populated areas, where high costs and low returns discourage private investment, the Ultrafast Broadband Strategic Plan was drawn up in 2015. Funding of €3 billion was earmarked for projects to extend the fibre optic network to 7,000 municipalities, with the tender for the works going to the

[2] This is explained by three concurrent effects. Firstly, there is a substitution effect whereby given the low cost of access to the existing network, new entrants prefer to use that one rather than investing in new networks. Secondly, there is a wholesale revenue effect that discourages the incumbent from investing in a higher quality network when the access price is low. Lastly, there is a migration effect: when the price of access to the copper network is low, the retail prices of services go down. As a result, in order to encourage customers to migrate from copper to fibre, the operators would have to offer low prices for fibre services as well, thus reducing the expected profitability of their investment. For more details, see W. Briglauer, 'The impact of regulation and competition on the adoption of fiber-based broadband services: recent evidence from the European Union member states', *Journal of Regulatory Economics*, 46, 1, 2014, 51-79.

[3] Total number of available fixed broadband lines (residential and business) per 100 households.

company Open Fiber. There have been long delays in implementing the plan, mainly for bureaucratic reasons such as restrictions on permits from local authorities for excavations and fibre deployment. This has led to the expected completion date being postponed.

The search for synergies and economies of scale on the part of operators is producing a higher level of concentration. In the mobile telecoms sector, in 2016 there was a merger between Wind and H3G. In March 2020, the European Commission approved a joint venture between INWIT (part of TIM) and Vodafone Towers (active in the management of mobile telephone infrastructure). Moreover, the creation of a single fixed network operator is being discussed. This would combine the passive infrastructures of Open Fiber and TIM to avoid duplications and potentially achieve efficiency gains, although it would limit competition on infrastructure.

Public intervention. – The Temporary Framework on State Aid,[1] adopted at European level on 19 March 2020 and amended on 3 April and 8 May 2020, lays down the conditions for direct public participation in the capital of firms experiencing difficulties as a result of the COVID-19 epidemic. This kind of intervention is seen as a last resort, justified by the need to avoid the serious consequences of firms leaving the market if they play an important role in the production system (e.g. because of their size or because they provide an essential public service). Public participation must be of a temporary nature and must be properly remunerated. The European rules also establish some safeguards at governance level, such as the ban on distributing dividends to private shareholders and on increasing the remuneration of the company's management. DL 34/2020 provides that Cassa Depositi e Prestiti SpA, through a separate and specific fund, shall carry out operations, including capital increases, in companies (including listed ones) with a turnover of more than €50 million. The access terms and the intervention arrangements will be defined by a decree of the Minister of Economy and Finance, after consulting the Minister for Economic Development.

The extension of public participation in firms' capital runs counter to previous regulatory measures to rationalize direct intervention in the economy and to the trends seen in recent years. Between 2011 and 2018, the number of government-owned companies in Italy decreased by about one fifth (from almost 5,000 to fewer than 4,000). Regarding directors' professional skills, there are differences between government-owned and private companies with similar characteristics: the directors of the former have less experience and are more likely to have held political office, factors which are negatively correlated with indicators of operational efficiency.[2]

DL 23/2020 extended the scope of the 'Golden Power Regime' to include the credit and insurance sectors in the areas of strategic importance, sectors not mentioned in the relevant European legislation. In addition, the Government's powers have been strengthened and it can proceed automatically if operations for which the special

[1] European Commission, 'Temporary framework for State aid measures to support the economy in the current COVID-19 outbreak', Communication C(2020) 1863, 2020, amended by Communications C(2020) 2215 of 3 April 2020 and C(2020) 3156 of 8 May 2020.

[2] S. Mocetti and G. Roma, 'From 8,000 to 1,000? Rationalization and governance of Italian government-owned enterprises', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 570, 2020.

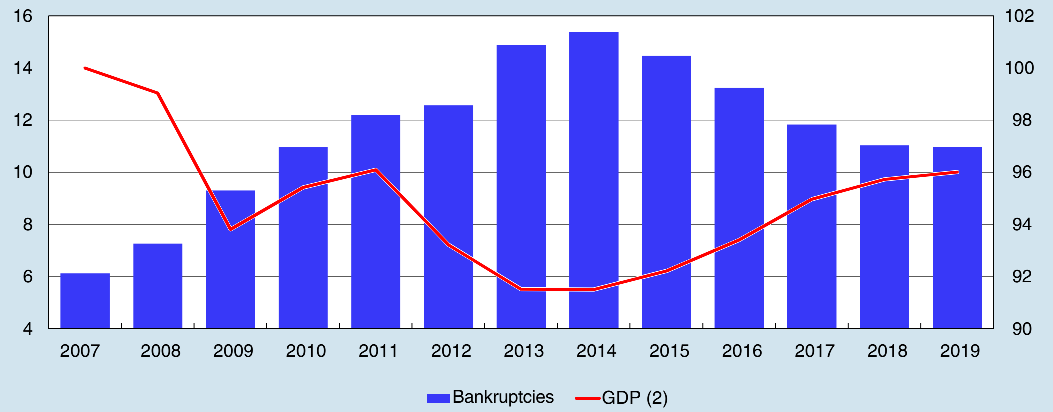
powers may be exercised are not notified by the investor or the firm; the transparency requirements for listed companies have been expanded. Finally, until 31 December 2020, there are constraints on the acquisition of corporate control positions by entities from other EU Member States.

Business crisis management

The number of bankruptcies increased significantly during the years of the global financial and sovereign debt crises (Figure 12.2). In the absence of public intervention, it is estimated that, assuming a reduction in GDP of 10 per cent, the number of bankruptcies could rise to 14,000 in 2020 (from about 11,000 in 2019). In addition, the number of limited companies likely to face bankruptcy ('in crisis')[3] could exceed 80,000 (13 per cent of the total, with almost 800,000 employees; Table 12.1), compared with 50,000 in 2018 (the latest year for which balance sheet data are available). Analyses based on the years 2010-15 show that more than half of companies tend to exit the market within three years of a crisis situation arising.

Figure 12.2

Bankruptcies and the economic cycle (1)
(thousands of units and index numbers)



Sources: Based on Ministry of Justice data and Istat, national accounts.
(1) Bankruptcies registered with the courts. – (2) Chain-linked volumes; indices: 2007=100. Right-hand scale.

Since March 2020, numerous measures have been adopted to support the liquidity of firms in difficulty as a result of the COVID-19 epidemic (DL 18/2020, DL 23/2020 and DL 34/2020; see the box 'The financial support measures for firms in response to the pandemic', Chapter 7), which could contain the risk of insolvency. Our estimates show, for example, that the enhancement of wage supplementation instruments and the moratorium on loan repayments (DL 18/2020) could reduce the number of companies in crisis by 10 per cent and that of the affected workers by 20 per cent compared with the situation without any public intervention.

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[3] The notion of 'crisis' as a situation making a debtor's insolvency probable was introduced by the Business Crisis and Insolvency Code under Legislative Decree 14/2019, whose entry into force has been postponed until 1 September 2021. Equity below the legal limit is the main quantitative criterion for identifying a crisis, as laid down by the National Council of Commercial Experts and Accountants based on the indications in the Code itself.

Table 12.1

Limited companies in crisis *(thousands of units and percentage points)*						
	2018		2020 without the measures in Decree Law 18/2020 (1)		2020 with the measures in Decree Law 18/2020 (1)	
	Number	Share (2)	Number	Share (2)	Number	Share (2)
Firms	50.4	7.9	81.7	12.8	73.2	11.5
Workers	351.3	3.9	788.2	8.8	631.6	7.0

Sources: Based on Cerved and INPS data.
(1) Limited to the measures for reinforcing wage supplementation and to the moratorium on loan repayments. – (2) Compared with the total number of limited companies active in 2018, excluding those operating in the public utilities sectors.

In order to check the risk of sudden liquidations for firms hit by the crisis, DL 23/2020 introduced a moratorium on bankruptcies until 30 June 2020 and extended the deadlines for implementing the ongoing restructuring plans by six months. In view of the possible capital imbalances caused by the health crisis, the application of certain provisions of company law, such as recapitalization obligations to reduce share capital and the subordination of shareholders' funding to other creditors, has also been suspended for 2020.

In order to avoid the transition to a new regulatory framework in conjunction with an expected growth in the number of insolvency proceedings, with the consequent adjustment costs for those involved, DL 23/2020 postponed the entry into force of most of the provisions of the Business Crisis and Insolvency Code until 1 September 2021, including the early warning procedures. These warnings, activated only a few months after the presentation of the 2020 balance sheets, will still be based on indicators relating to the current year and may involve a large number of firms.

The expected increase in the number of firms in difficulty indicates the limited effectiveness of the current crisis management system. Bankruptcy proceedings are still very lengthy and the available evidence on the use of the restructuring tools shows that they have so far been used mainly by large companies and the results have not always been satisfactory (see the box 'Business continuity arrangements: debt restructuring agreements and compositions with creditors in Italy').

BUSINESS CONTINUITY ARRANGEMENTS: DEBT RESTRUCTURING AGREEMENTS AND COMPOSITIONS WITH CREDITORS IN ITALY

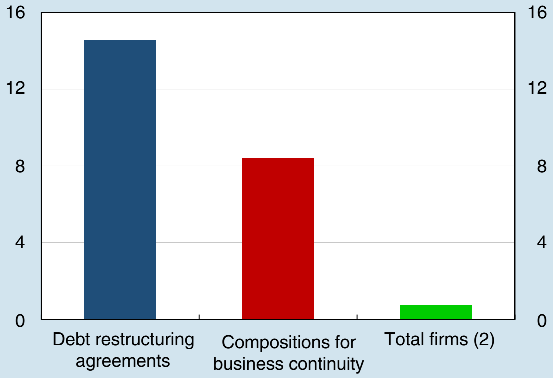
The Italian legal system provides for several procedures designed to overcome crises for firms, avoiding their liquidation, by means of restructurings based on an agreement between the debtor and creditors.

Since the 2005-06 reform of insolvency law, out-of-court settlements (recovery plans) and semi-judicial instruments (debt restructuring agreements) have been introduced for restructuring firms, together with new court procedures that do not involve winding up (compositions with creditors for business continuity). The increasing involvement of the judicial authorities has formalized the procedures further and provided wider scope for extending the content of the restructuring plans to dissenting creditors.

Surveys conducted in some Italian courts have made it possible to set up a database containing information at individual procedure level on a sample of debt restructuring agreements and compositions with creditors for business continuity.[1] This sample covers about one third of the agreements and compositions initiated in Italy in the years 2009-16 and is mainly made up of observations from the courts of the Centre and North, where these instruments are used most.

Figure

Firms' stocks of assets before proceedings begin (1)
(median values; millions of euros)



Sources: Based on data from CoDiRe, Cerved and InfoCamere.
(1) For firms involved in insolvency proceedings, the stock of assets is measured by the average value for the three years prior to the proceedings. For the others it is measured by the average value for the years 2009-16. – (2) Excludes firms not subject to insolvency proceedings.

By making use of this information database, a recent paper provides some guidance on the characteristics of companies that use these procedures and on their outcomes.[2]

In part because of the high fixed costs, the procedures considered are mainly used for restructuring large companies.[3] The median size of firms that use restructuring agreements is approximately 20 times bigger than the median size of all limited companies, excluding those not subject to insolvency proceedings (approximately 10 times bigger for compositions for business continuity; see the figure).

The median duration of the period of financial distress (identified by the existence of non-performing loans vis-à-vis the banking system) prior to the procedure is two years for restructuring agreements; it is shorter (one year and three months) in compositions for business continuity. In the latter cases, however, soon after the start of the procedure, firms display worse profitability and less robust capital, as a result of a faster decline.

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[1] The collection and preparation of the data were carried out as part of the 'Contractualised Distress Resolution in the Shadow of the Law' project (CoDiRe), coordinated by the University of Florence, in which various institutions participated, including the Bank of Italy. Given their out-of-court nature, the survey did not deal with recovery plans, for which there is still very little structured information available.

[2] A. Danovi, I. Donati, I. Forestieri, T. Orlando and A. Zorzi, 'Business continuity in times of distress: debt restructuring agreements and compositions with creditors in Italy', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 574, 2020.

[3] Recovery plans also typically involve large firms; see L. Carpinelli, G. Cascarino, S. Giacomelli and V. Vacca, 'La gestione dei crediti deteriorati: un'indagine presso le maggiori banche italiane', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 311, 2016.

The evidence on the outcomes of the procedures shows, for both the instruments considered,[4] that the interventions included in the restructuring plans were only sometimes effective as regards the objective of a full recovery for firms.[5] The share of enterprises that have been wound up within three years of the start of a restructuring agreement is 56 per cent. This share is lower (31 per cent) in compositions for business continuity; however, for the latter, it has been found that 70 per cent of the firms that remain active three years on are still involved in the procedure.

As regards both restructuring agreements and compositions with creditors for business continuity, the firms that are still active three years after the procedures began only show a partial improvement in their economic performance. Their productivity and profitability are still lower than the averages for all firms subject to insolvency proceedings. In addition, in almost all cases, their credit relationships remain classified as non-performing, confirming that it takes a long time to complete the restructuring process.

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[4] The analyses presented here exclude 'indirect' continuity procedures, in which the restructuring plan provides for the transfer of the firm or its merger with another entity. These account for 12 per cent of restructuring agreements and 70 per cent of compositions with creditors for business continuity.

[5] In the United States, the liquidation rates for companies that were being restructured are slightly below those of Italy; see S. Bernstein, E. Colonnelli and B. Iverson, 'Asset allocation in bankruptcy', *The Journal of Finance*, 74, 1, 2019, 5-53, and A. Bris, I. Welch and N. Zhu, 'The costs of bankruptcy: Chapter 7 liquidation versus Chapter 11 reorganization', *The Journal of Finance*, 61, 3, 2006, 1253-1303.

The institutional environment

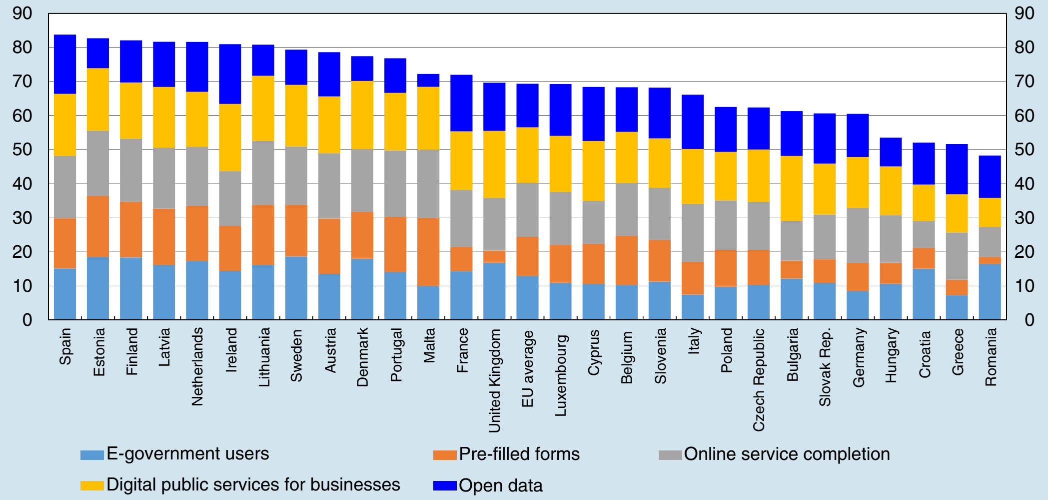
General government. – Due to the COVID-19 epidemic, the deadlines for conducting administrative procedures were suspended for almost two months, with the exception of those relating to payments (DL 18/2020 and DL 23/2020). Smart working has been indicated as the default way to work; in cases where it is not an option, the exemption of staff from work (DL 18/2020) is envisaged.

The lag in the digitalization process and the limited use of smart working in the past may have had a negative impact on the functioning of those administrations less well-prepared for people working from home. According to the European Commission's DESI index, Italy is below the EU average in the provision of digital public services (Figure 12.3). This is particularly owing to the poor level of online interaction between general government offices and the public, both because of the low percentage of citizens and businesses using electronic channels and the reduced availability of pre-filled forms.

The high average age of general government employees may have slowed down the introduction of new technologies and limited the potential for exploiting them. In 2018, the average age of employees was over 50, which is high by international standards and has increased by more than 7 years compared with 2001. The measures taken over the last decade to limit public spending have contributed to this, including the partial freeze on hirings, which led to a reduction in the public sector workforce of

Figure 12.3

Digital Economy and Society Index (DESI) - Digital public services (1)
(values from 0 to 100)



Source: European Commission.
(1) Higher values correspond to better results. The index is the simple average of five sub-indicators: 'e-government users' corresponds to the percentage of people that have used internet over the last year and have sent forms to general government offices electronically; 'pre-filled forms' indicates the amount of data pre-filled in the forms made available online by general government for a series of procedures: 'online service completion' is the share of administrative steps in these procedures that can be carried out online; 'digital public services for businesses' reflects the share of public services necessary for starting and running a business activity that are available online; and 'open data' measures the existence of an open data policy, an estimate of its political, social and economic impact and the features of the relative national portal.

almost 300,000 (about 8.3 per cent) between 2008 and 2018, and the gradual raising of the retirement age.[4]

Our calculations based on labour force survey data show that in 2019, less than 1 per cent of public sector employees worked from home at least once in the interview reference month (against over 5 per cent of private sector employees). Public sector employees who have experienced smart working are on average significantly younger, have more qualifications and are employed in more highly-skilled occupations.

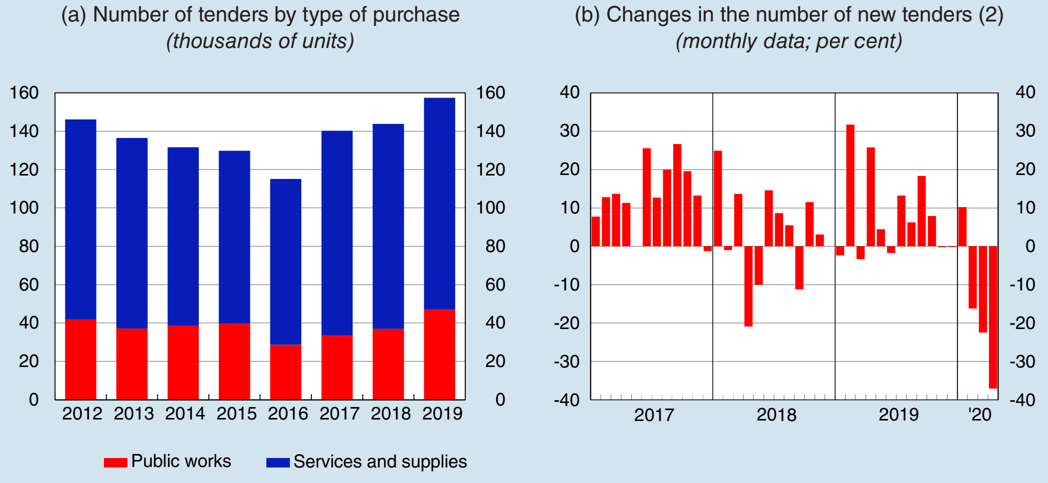
Public contracts. – In 2019, almost 160,000 calls for tender worth more than €40,000 were published, an increase of around 10 per cent compared with 2018 (Figure 12.4.a). As a result of the COVID-19 epidemic, there was a sharp fall in new calls for tender: the numbers were 20 and 30 per cent lower in March and April 2020 respectively than in the corresponding months of 2019 (Figure 12.4.b).

The partial interruption in the awarding of public contracts is attributable to the difficulty in managing tenders during the health emergency and the limited use of online procedures, as well as to administrations probably having to reprogramme their needs and expenditure.

[4] L. Rizzica, 'The Italian public sector workforce: recent evolution in the light of the rules on turnover', Banca d'Italia, Questioni di Economia e Finanza, (Occasional Papers), 560, 2020.

Figure 12.4

New public contract tenders (1)



Source: Based on data from the National Anti-Corruption Authority (Anac).
(1) Tenders for contracts for more than €40,000. – (2) Change in the number of new tenders compared with the corresponding month of the previous year. The anomalous figure for May 2017 (an increase of 78 per cent), caused by the freeze on tenders in the same month of 2016, is not shown.

The regulatory framework remains very complex and contains significant legislative uncertainties. Last year, DL 32/2019 (the 'Sblocca Cantieri' or 'Unblocking Construction Sites' decree) introduced measures to simplify and speed up supply processes, either through amendments to or temporary deviations from the Public Procurement Code and the use of extraordinary commissioners. However, the single implementing regulation envisaged has not been issued yet and the works to be assigned to these commissioners have not been decided. Furthermore, four years after the entry into force of the Code, two of its pillars – raising the profile of the contracting authorities and introducing company ratings – are still not operational.

Civil justice. – In 2019, the gradual improvements in the functioning of the civil justice system continued. Pending court cases were reduced by 4 per cent compared with 2018, reflecting a further contraction in filed cases. The length of civil hearings continued to decrease, although proceedings are still very long.

The outbreak of the COVID-19 epidemic led to a partial disruption of the activities of courts and tribunals for about two months (Decree Laws 11/2020, 18/2020, 23/2020 and 28/2020); until 31 July 2020, specific measures dictated by the need to comply with the health rules may be adopted in individual judicial offices, including the suspension of hearings.

This situation will lead to an increase in the number of pending cases at the end of the year: given the same number of cases filed, if the number of those completed by end-2020 were reduced by one sixth (in proportion to the two months' suspension), the number of pending cases would increase by 12 per cent over the previous year, returning to a level just below that of 2016. The two months' interruption could also be followed by a slowdown in order to comply with the current health regulations, in the absence of an adequate degree of digitalization. The weakness of the economic cycle could also lead to an increase in new proceedings linked to the difficulty in fulfilling contractual obligations.

The risks of organized crime infiltrating the economy. – Organized crime tends to infiltrate the sectors that are more exposed to the risk of money laundering, the sectors most involved with the public sector, where corruption and other ways of influencing people can be employed, and the most financially vulnerable firms.[5]

The sudden and marked reduction in the turnover of firms has led to a significant increase in their borrowing needs (see Chapter 7, 'The financial conditions of households and firms') and with it the risk of infiltration, especially where criminal organizations are able to meet these needs in a rapid and substantial way. Among the activities suspended as a result of the health emergency, those that suffer most from liquidity problems are also the sectors most exposed to the risk of infiltration (in particular, retail trade, catering and construction).

In order to access the liquidity support measures introduced by DL 23/2020, accelerated procedures are envisaged that could increase the risk of favouring the illegal economy. In implementing such instruments, the need to act swiftly must be balanced with the need to monitor effectiveness and legality.[6]

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5 L. Mirenda, S. Mocetti and L. Rizzica, 'The real effects of 'ndrangheta: firm-level evidence', Banca d'Italia, Temi di Discussione (Working Papers), 1235, 2019.

6 'Conversion into law of DL 23/2020 (urgent measures concerning access to credit and tax obligations for firms, special powers in strategic sectors, health and labour measures and an extension of administrative and procedural deadlines', testimony before the Chamber of Deputies by F. Balassone, Head of the Bank of Italy's Structural Economic Analysis Directorate, Rome, 27 April 2020 (only in Italian).

13. BANKS AND INSTITUTIONAL INVESTORS

In 2019, banks' balance sheets continued to strengthen. The reduction in non-performing loans (NPLs) continued at a swift pace, with sales of the latter contributing significantly. The new NPL rate remained at historically very low levels.

Lending to firms fell as a result of low demand for loans as the economy weakened; growth in lending to households was in line with that observed in the three years 2016-18. Intermediaries slightly reduced their investment in Italian government securities, a significant share of which was allocated to the portfolio of assets valued at amortized cost.

Total funding rose due to sustained growth in deposits by residents; bond placements on international markets returned to growth and yields at issue fell.

The reduction in net interest income and the increase in tax expense affected profitability, which for the main groups was slightly lower than that of the main European banks.

Italian banks, especially the large ones, proceeded to reorganize the distribution network by cutting the number of branches and employees. In the first half of the year, the reform of the cooperative credit banks (BCCs) sector was completed and most of the cooperative banks joined the ICCREA or Cassa Centrale Banca banking groups. Our analyses show how initiatives to increase the size of Italian banks can lead to significant efficiency gains, especially if combined with greater use of new technologies and a streamlining of the distribution network.

The effects of the spread of the COVID-19 epidemic on the economy are exposing the banking system to new risks but compared with when the global financial crisis started, banks are in a stronger position this time. In part thanks to the comprehensive revision of the prudential regulations undertaken in recent years by the Basel Committee on Banking Supervision (BCBS), banks' capacity to handle adverse economic conditions has improved: between 2007 and 2019, the ratio of common equity tier 1 to risk-weighted assets (CET1 ratio) of Italian banks almost doubled. The net non-performing loan ratio dropped by two thirds from its 2015 peak; the impact on capital due to changes in the value of government securities has been mitigated by the decrease in the proportion of those measured at fair value; loans have been funded entirely by deposits. The wide range of possibilities for Eurosystem refinancing are helping to alleviate pressure on funding.

The crisis triggered by the epidemic is having an impact on lending to households and firms. Lending to households slowed, and is expected to continue to do so in the coming months. By contrast, lending to firms picked up again significantly as a result of the higher need for liquidity caused by the interruption in production. Firms' access conditions will benefit from the extensive public guarantees on loans.

The recession will likely lead to a deterioration in credit quality and put pressure on profitability. Persistent tensions in financial markets could translate into a further drop in subscriptions of asset management products, thereby reducing fees. The extent of these effects is, however, still uncertain and will depend on the length of the recession and the speed of the recovery. The measures taken by the supervisory authorities are designed to contain the effects of the pandemic on banks' capacity to finance the economy and to avoid procyclical effects.

In the first quarter of 2020, Italian open-ended investment funds recorded significant net outflows; the drop in funding has, however, begun to slow since the last week of March. The funds have been able to satisfy requests for redemption, in part thanks to the relatively high degree of liquidity of their portfolio; this is partly due to national legislation, which restricts investments in illiquid assets.

TRENDS IN 2019

The structure of the Italian banking industry

In the first half of 2019, the reform of the cooperative credit banking sector was completed. ICCREA and Cassa Centrale Banca became the parent companies of two banking groups, joined by all the BCCs active in the market, except for 39 banks of the Cassa Centrale Raiffeisen of the Trentino-Alto Adige region, which instead opted for the establishment of an institutional protection scheme. The Cassa Centrale Banca group became a significant bank within the Single Supervisory Mechanism (SSM). The ICCREA banking group was already classified as significant prior to the reform.

The cooperative credit reform significantly altered the structure of the banking system, which at the end of 2019 consisted of 55 banking groups and 98 stand-alone banks, 229 fewer than one year earlier. There were 80 Italian subsidiaries of foreign banks. The 12 banking groups classified as significant accounted for more than 80 per cent of the total assets of the banking system.

In 2019, the number of branches decreased by 4.3 per cent, to 24,300; the workforce increased by 1.5 per cent, to around 286,000, owing to the incorporation by a large intermediary of a service company belonging to the same group. Without this operation, the total number of employees would also have fallen, by 1.2 per cent.

Over the past decade, the streamlining of the branch network has led to an increase of almost 40 per cent in the average number of inhabitants per branch, which now stands at around 2,300, higher than in France and Spain (around 1,800 in both countries) but less than in Germany (almost 3,000). Thanks to corporate restructuring measures, average labour productivity, measured by net value added per employee, fully recouped the marked decline that followed the global financial crisis. More than 90 per cent of the significant banks achieved a reduction in the number of branches and employees; until the end of 2019, these banks accounted for approximately 60 per cent of branches and employees (a little more than two thirds in 2009).

Digital banking channels are playing an increasingly important role in customer interactions. In 2019, the share of customers accessing banking services via these channels rose by 4 percentage points, reaching 80 per cent. The digitalization of financial services helps to bring down costs, including those borne by customers: the operating expenses for an online current account opened and administered digitally on average amount to around one fifth of the costs of a traditional bank account.

Banks are also providing more and more traditional services online. Responses to the regional bank lending surveys conducted by the Bank of Italy's branches indicate that between 2013 and 2019, the share of banks offering payment services via mobile devices, and asset management and lending to households through digital channels, increased to 65, 64 and 37 per cent respectively (in 2013 these shares were 6, 55 and 17 per cent). By contrast, only 16 per cent of intermediaries offer loans to businesses through internet portals.

Based on the results of one of our surveys conducted in the first half of 2019 on a sample of 120 banks, in the four years 2017-20, investment by the banking system in new technology applied to the provision of financial services (FinTech) was estimated at €620 million. More than half of this was spent on applications for mobile devices, whose adoption was promoted by the revised Payment Services Directive (PSD2). Banks are also investing heavily in projects that exploit big data, technologies for the development of digital platforms, cloud computing and artificial intelligence.

The digitalization of financial services makes it possible to expand supply and improve profitability, also by reducing the costs of production and distribution of services and by achieving economies of scale (see the box 'Economies of scale in the Italian banking system').

ECONOMIES OF SCALE IN THE ITALIAN BANKING SYSTEM

In the past, cost benefits associated with an increase in bank size have mostly been documented under low thresholds of activity. More recently, the application of digital technologies to the production and distribution of banking services has led to significant changes in the cost structure of intermediaries and may have introduced substantial economies of scale and diversification in the banking industry. For some services, however, technology uptake remains low, and their supply continues to be highly dependent on the distribution network.

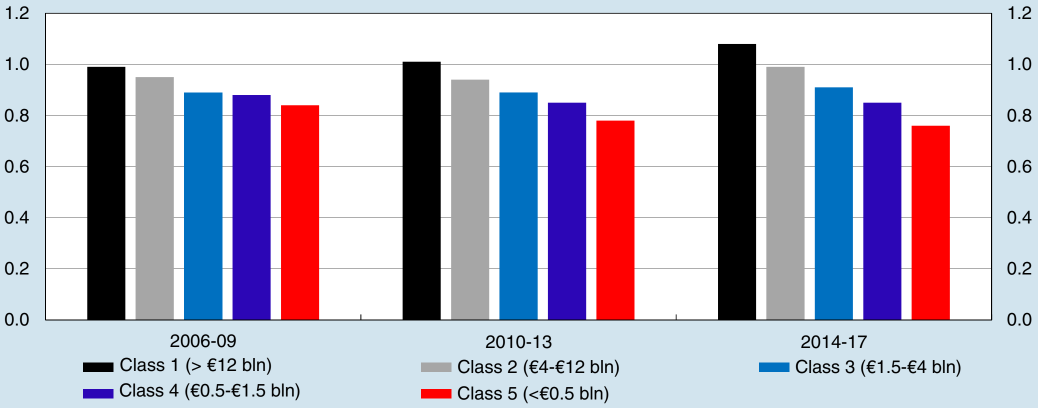
An analysis on a sample of Italian banks over the period 2006-17,[1] shows that the marginal costs of production and distribution of highly standardized services that require significant use of new technologies – such as payment services and deposits – decrease as volumes increase. By contrast, there are very small economies of scale in lending and asset management activities, where the use of new technologies has been more limited to date.

[1] E. Bonaccorsi di Patti and F. Ciocchetta, 'Economies of scale revisited: evidence from Italian banks', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 568, 2020. The analysis is based on the estimation of a production function that connects operational costs with different banking products, including bank branches and technology capital among the inputs. Economies of scale are measured using the ray scale economy (RSE) indicator, defined as the percentage change in operating costs corresponding to a change of 1 percentage point in banking outputs as a whole.

The analysis also indicates significant economies of scale for most small and medium-sized banks (see the figure). For larger banks, on average, there appears to be no cost savings as the scale of operations increases, but the results of the estimates are uneven. More specifically, the achievement of economies of scale seems to depend on how costs are affected by both the management of the distribution network and the use of new technology: the threshold beyond which the increasing returns from economies of scale would level out is lower for intermediaries whose activities are concentrated in low-tech segments and that operate primarily through a branch network. It appears, instead, to be higher for those with a greater diversification of services and with a small number of branches.

Figure

Economies of scale by size of bank (1)



Source: Supervisory reports.
(1) Average value of the RSE indicator by bank size and sub-period. A RSE value below 1 indicates that the costs grow proportionally less than output (economies of scale), while a value greater than 1 indicates that the costs grow more than proportionally (diseconomies of scale). The sample excludes the Unicredit and Intesa Sanpaolo banking groups and branches of foreign banks. The size classes are identified by the following percentiles of distribution of the banks' assets: 95, 90, 75 and 50. The average RSE values are estimated in three sub-periods. The first ends with the start of the recession that hit Italy following the global financial crisis, the second coincides with the sovereign debt crisis, the third with an improvement in the economic and financial position of banks and the recovery of economic activity.

In conclusion, the expansion of the scale of production, either through mergers or through the pooling of products and services, could deliver substantial efficiency gains for small and medium-sized intermediaries, especially if accompanied by the rationalization of the distribution network and more intensive use of new technologies in the production of services. The analysis only quantifies savings in operating costs, leaving aside, for example, any savings in the cost of fund raising, nor does it take account of possible savings associated with diversification on the revenue side.

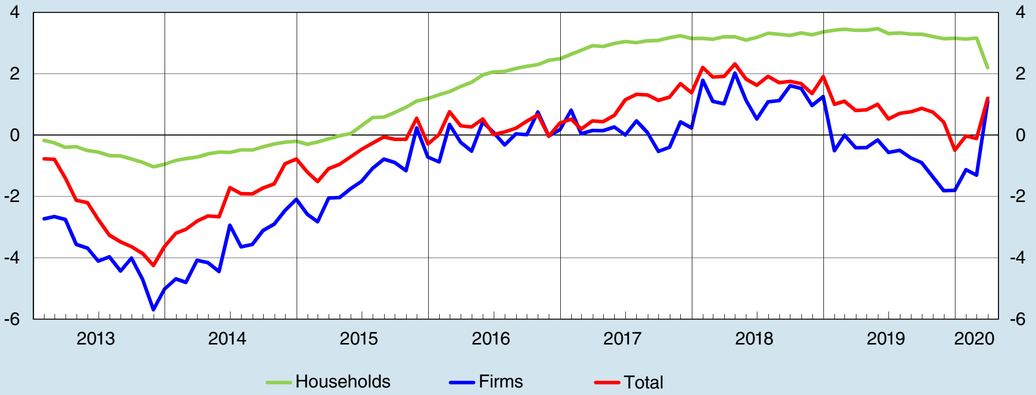
Banks' assets

Lending. – In 2019, lending by Italian banks declined by 0.5 per cent (Figure 13.1). The decline marks the end of a phase of moderate growth that began in 2016.

The growth in credit to households (3.2 per cent) was due to the 2.5 per cent rise in loans for house purchase and the 8.6 per cent increase in consumer credit which, net of renegotiations, amounted to €50.4 billion and €43.5 billion respectively.

Figure 13.1

Bank lending to customers (1)
(monthly data; 12-month percentage changes)



Source: Supervisory reports.
(1) The data for March 2020 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.

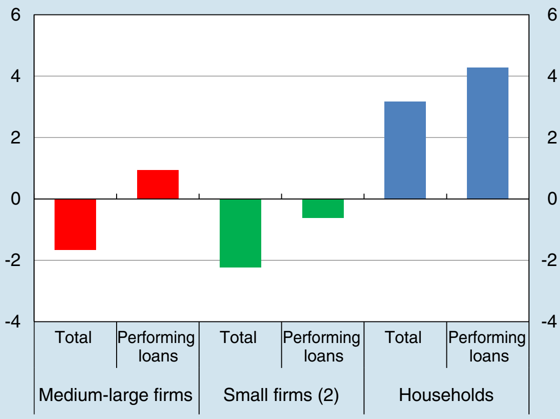
Demand for mortgage loans was supported by the fall in interest rates (see *Economic Bulletin*, 1, 2020). During the year, the difference between the average interest rates applied on fixed and variable-rate loans declined from 56 to 10 basis points; the smaller cost differential stimulated demand for fixed-rate loans, whose share in total new disbursements increased by 10 percentage points, reaching 72 per cent, the highest value ever recorded in Italy.

As a share of total lending to the non-financial private sector, loans to consumer and producer households rose by 2 percentage points, to 50 per cent; this is still about 7 percentage points below the euro-area average, reflecting Italian banks' smaller share of residential mortgages (30.3 per cent as against 43.5 per cent).

Business lending contracted by 1.8 per cent. The decline steepened in the course of the year, owing to weak demand caused by the cyclical slowdown (see *Economic Bulletin*, 1, 2020); it was greatest for construction and service companies, and for those deemed riskier (see Chapter 7, 'The financial situation of households and firms'). The share of performing exposures to small businesses declined, while for larger companies it increased slightly (Figure 13.2). Mostly as a result of the lower cost of fixed-rate loans, interest rates on new

Figure 13.2

Growth rate of total bank loans and performing loans at December 2019 (1)
(12-month percentage changes)



Sources: Supervisory reports and Central Credit Register.
(1) Performing exposures at December 2018 that showed no signs of impairment in the 12 months considered. Percentage changes are adjusted to take account of the effects of securitizations, reclassifications, write-downs and other changes not due to transactions. The sectors are classified according to Ateco 2007. – (2) Limited partnerships, general partnerships, simple partnerships, de facto companies and sole proprietorships with fewer than 20 workers.

business loans decreased on average by 10 basis points, reaching a historical low of 1.7 percentage points.

Since 2013, the share of loans maturing in under twelve months has gradually declined, from 37.3 to 31.3 per cent; it nonetheless remains higher than in Germany, France and Spain, where it amounts to 15.1, 16.9 and 21.7 per cent respectively. The decrease in the share of short-term loans mitigates demand for renewal of loans by businesses, which was particularly acute in the wake of the economic crisis triggered by the COVID-19 epidemic.

Non-performing loans. – In 2019, the flow of new non-performing loans (NPLs) in proportion to total loans fell to 1.2 per cent, a very small percentage by historical standards and almost 1 percentage point lower than at the end of 2007, before the double-dip recession of 2008-13. In recent years, the lower average riskiness of loans has benefited from the, albeit moderate, recovery in economic activity, low interest rates and greater selectivity of intermediaries in loan disbursement.

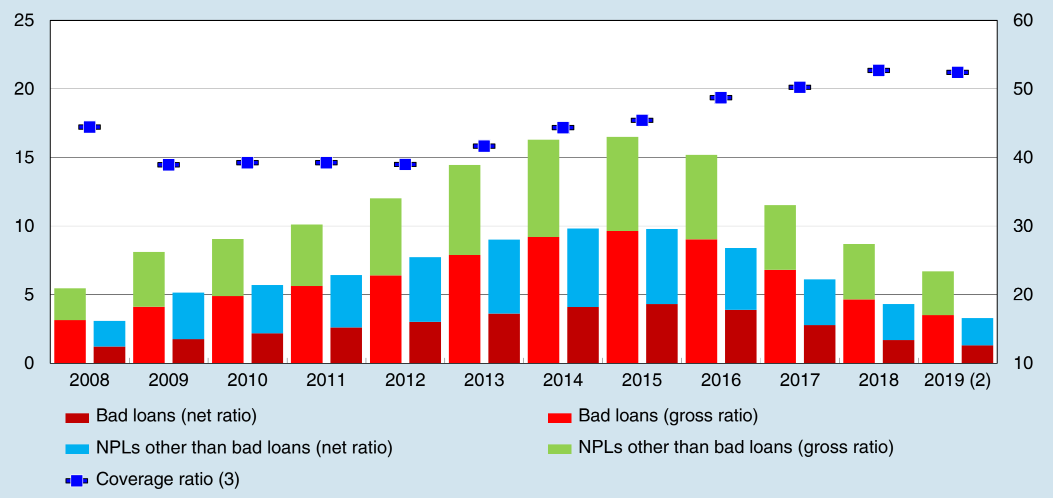
The stock of non-performing loans continued to decline throughout the year. Sales amounted to €31 billion; compared with 2018, the largest increase was in sales of unlikely-to-pay positions (which rose from €5 billion to €8 billion).

In the past few years, Italian banks have made very substantial disposals of NPLs in response to calls from both the supervisory authorities and the market. Since 2016, when the share of transactions on the NPL market started to become significant, sales have amounted to €154 billion gross of loan loss provisions. The disposals, made by both significant and less significant banks, have exceeded the targets indicated in the annual plans submitted by the intermediaries.

Figure 13.3

Credit quality of Italian banks and banking groups: shares and coverage ratios of non-performing loans (1)

(per cent)



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. The aggregate is in line with that used by the ECB and differs from the one used in the Annual Report up to 2017 ('customer loans'). Includes banking groups and subsidiaries of foreign banks; excludes branches of foreign banks. The coverage ratio is measured as the ratio of loan loss provisions to the corresponding gross exposure. – (2) Provisional data. – (3) Right-hand scale.

At the end of 2019, net of loan loss provisions, NPLs amounted to €70 billion, down by 22 per cent on the previous year; their share in total lending declined from 4.3 to 3.3 per cent (Figure 13.3).[1]

Holdings of securities. – In 2019, banks' holdings of debt securities grew by 1.5 per cent; at the end of the year, securities other than those related to their own securitized assets and those issued by resident banks were worth just under €550 billion.

The stock of Italian public sector securities amounted to €383 billion. Their share in total assets declined for the significant banks (from 8.6 to 8.2 per cent), while they were substantially unchanged for the less significant banks, at 21.5 per cent. Public sector securities issued by euro-area countries amount to 87 per cent of the total sovereign bonds held in Italian banks' portfolios, a higher proportion than those held by French and Spanish banks (79 per cent in both cases) and by Germany (63 per cent).

Last year, intermediaries made €8 billion worth of net sales of Italian public sector securities; this only partly offset the increase in holdings of more than €50 billion recorded in 2018, at a time of heightened tension in the market for public sector securities (see *Annual Report for 2018,* 2019). Net purchases resumed at a significant pace from March 2020 onward, when the yield spread between Italian and German bonds began to increase again following the spread of the epidemic (see Chapter 14, 'The money and financial markets').

Over the year, intermediaries continued to allocate a growing amount of public sector securities to the portfolio of assets measured at amortized cost, whose share in this portfolio's total assets rose from 55.4 to 68.4 per cent. While this choice leads to constraints on the sale of these assets, it nevertheless reduces the impact of the changes in the value of public sector securities on the economic and capital accounts. The average residual maturity of government securities held in banks' portfolios, equal to 5.2 years at the end of 2019, increased a little.

Funding

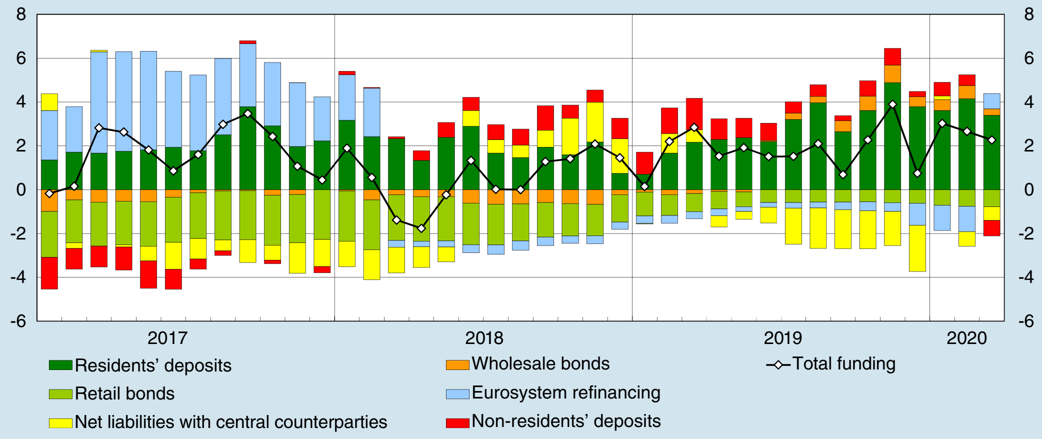
In 2019, total bank funding grew by 0.8 per cent (Figure 13.4). The increase in retail funding (4.8 per cent) more than offset the decline in wholesale funding and in liabilities with the Eurosystem, which fell by 6 and 9.8 per cent respectively.

Retail funding continued to be supported by growth in residents' deposits, which partly increased as a result of households' disinvestment from asset management products. Since 2011, deposits have risen consistently and their share in total funding has expanded by almost one fourth, to 66.5 per cent. During this time, larger stocks of deposits have more than made up for the decline in bonds held by households, which at the end of 2019 amounted to a very small share (2.6 per cent of total funding compared with 15.9 per cent in 2011).

[1] In the same period, gross NPLs fell from €190 billion to €147 billion.

Figure 13.4

The growth in funding in Italy: contributions of the main components (1)
(percentage points; 12-month changes)

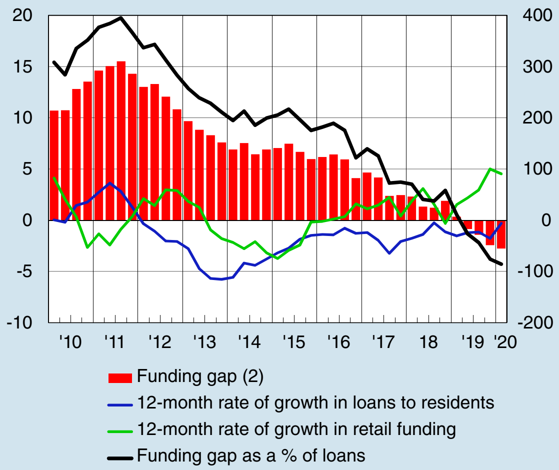


Source: Supervisory reports.
(1) The sum of the contributions is equal to the 12-month percentage change in total funding. The percentage changes in the individual components are calculated net of the effects of reclassifications, changes in exchange rates, write-downs, and other changes not due to transactions. Does not include liabilities with resident Monetary Financial Institutions. Net liabilities with central counterparties represent repo funding with non-residents carried out through central counterparties.

The current liability structure poses limited risks to the financing of loans. On the one hand, banks can easily access Eurosystem refinancing through the third series of targeted longer-term refinancing operations (TLTRO III); on the other, intermediaries can now fully cover the financing of the loans with retail funding (Figure 13.5).

Figure 13.5

Italian banks' funding gap (1)
(billions of euros and per cent)



Source: Supervisory reports. Excludes Cassa Depositi e Prestiti SpA and branches of foreign banks in Italy.
(1) Loans to residents minus retail funding (residents' deposits plus bonds placed with households). The latest data refer to the end of March 2020. – (2) Right-hand scale.

Last year, the decline in wholesale funding, which represents just over one fifth of the total, was entirely attributable to the reduction of about two thirds in net liabilities with central counterparties. After rising sharply in 2018 in order to finance purchases of government bonds at low rates (see *Financial Stability Report*, 2, 2018), these liabilities returned to historically low levels, thanks to greater flows of deposits and to the reduction in purchases of Italian public sector bonds. By contrast, bond funding on the capital markets grew by 6.5 per cent, interrupting the decline that began in 2015 and, especially in the second half of the year, benefited from the favourable issuance conditions (see *Financial Stability Report*, 1, 2020).

In 2019, the average cost of funding fell slightly compared with 2018, reaching a historical low of 0.16 per cent. The decrease is almost entirely due to the reduction in the average cost of liabilities on the interbank market (from -0.3 to -0.4 per cent) and of bonds (from 2.4 to 2.1 per cent). Deposit and refinancing rates with the Eurosystem remained broadly stable.

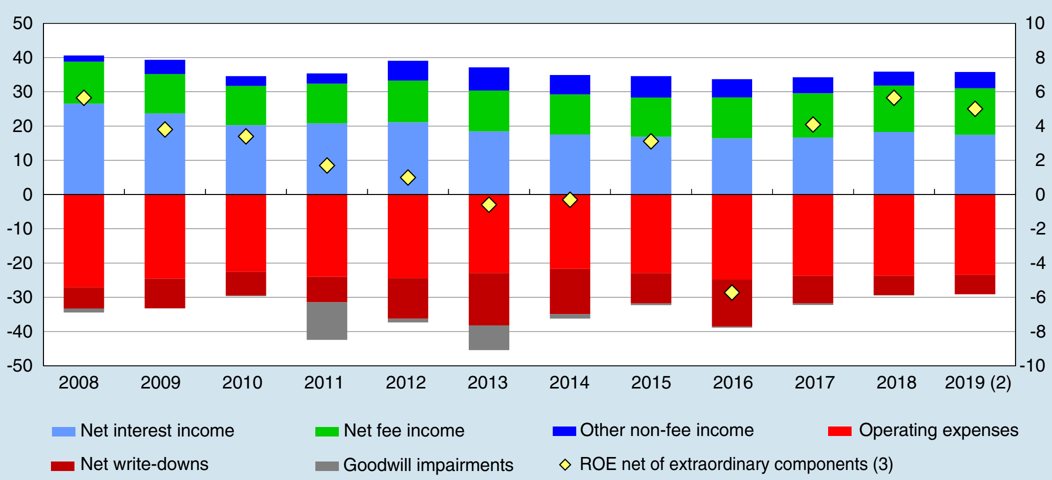
Banks' capital and profitability

Profitability. – In 2019, the profitability of Italian banks was down slightly compared with the previous year, mainly as a result of the reduction in net interest income and the increase in tax expense (Figure 13.6). The return on equity (ROE), net of extraordinary components, was equal to 5.0 per cent (5.7 per cent in 2018).

Figure 13.6

Main profit and loss items of Italian banks and banking groups (1)

(per cent)



Sources: 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.

Operating costs continued to decline and the cost-income ratio fell to 65.5 per cent.[2] Thanks to low new NPL rates, the cost of credit risk, measured by the ratio of loan loss provisions to the average value of loans, stayed at modest levels (75 basis points). The increase in taxes had a negative impact on ROE, due to the lapse of the benefit tied to the introduction of the IFRS 9 accounting standard that was recognized in 2018.

For the significant banks, ROE declined by more than 1 percentage point, to 4.9 per cent (it was 5.8 per cent on average for the main European groups).[3] For the less significant banks, ROE instead grew by more than 3 percentage points, to 6.5 per cent, thanks above all to fees and gains related to the sale of financial assets. The results vary considerably, however, owing to the different business models of the less significant intermediaries. Those whose primary focus is on lending to

[2] At the end of the year, the cost-income ratios of the significant groups and of the less significant banks were substantially aligned: while that of the former rose slightly compared with 2018, for less significant banks it came down by almost 9 percentage points.

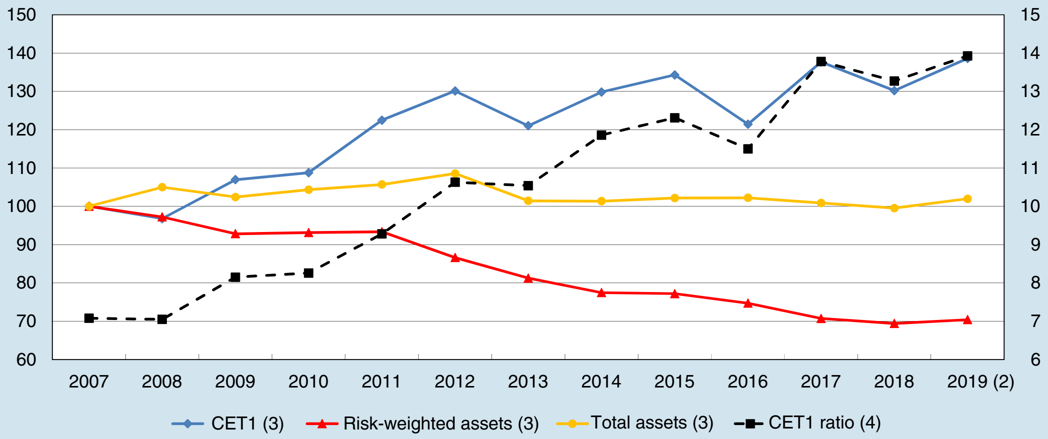
[3] EBA, 'Risk Dashboard.Data as of Q4 2019', April 2020.

households and firms reported a lower than average ROE, while banks specialized in investment services and in specific segments of the credit market reported higher levels of profitability.[4] About 70 per cent of the less significant banks improved their profitability compared with 2018; the share of those that closed the financial year with a loss declined from 18 to 14 per cent.

Capital. – In 2019, banks' balance sheets began to strengthen again. At the end of December, common equity tier 1 (CET1) averaged 13.9 per cent of total risk-weighted assets (RWA), up by more than 60 basis points compared with the end of 2018 (Figure 13.7).

Figure 13.7

Trend of CET1 and risk-weighted assets of Italian banks and banking groups (1)
(per cent)



Sources: Consolidated supervisory reports for banking groups and individual supervisory reports for stand-alone banks.
(1) Up to December 2013, it shows the performance of Core Tier 1; from March 2014, that of Common Equity Tier 1. – (2) Provisional data. – (3) Index: 2007=100. – (4) Right-hand scale.

The improvement is mostly attributable to the increase in CET1, which benefited above all from the positive economic result for the year and the revaluation of assets measured at fair value. At the end of the year, the gap between the average CET1 ratio of Europe's significant banks and that of their Italian counterparts was equal to 0.8 percentage points (1.7 percentage points in 2018).[5]

Last year, the IMF concluded its financial stability assessment (see the box 'The IMF's Financial Stability Assessment Program (FSAP) for Italy'). The assessment, which takes place periodically, probed several aspects, including systemic risks, the supervision of less significant banks, macroprudential arrangements and bank crisis management.

4 The intermediaries that focus on leasing, factoring, consumer credit and NPL management.

5 See the ECB's website, 'Supervisory banking statistics'.

THE IMF'S FINANCIAL STABILITY ASSESSMENT PROGRAM (FSAP) FOR ITALY

On 20 March 2020, the International Monetary Fund (IMF) published the results of its Financial Sector Assessment Program (FSAP) for Italy.[1] The assessment focused on systemic risks, the supervision of less significant banks, the macroprudential framework, and crisis management; it was conducted between 2018 and 2019, involving the national supervisory authorities, the European Central Bank, the Ministry of Economy and Finance, intermediaries and trade associations.

The IMF highlighted the significant reduction in systemic risks in Italy, also owing to the measures taken by the authorities, which strengthened the corporate governance of intermediaries, and encouraged capital increases and improvements in the quality of banking sector assets. However, the report also noted that capitalization levels below the European average and the still high share of non-performing loans are sources of vulnerability, which are exacerbated by low profitability margins.

The IMF found that the supervision of the less significant banks, for which the Bank of Italy is directly responsible, was of high quality, while simultaneously recommending faster and more effective action against those intermediaries whose activities are affected by imbalances in balance sheets and structural profitability problems. It also acknowledged the improvements made in the last five years in the Italian regulatory framework and in practices for handling bank crises. Among the recommendations, one has been broadly endorsed and applied in Italy, namely that of limiting the use of public resources to cases where financial stability could be endangered.

The IMF also advised against the use of deposit guarantee schemes (DGS) for preventive interventions in favour of ailing banks, save for exceptional cases. The Ministry of Economy and Finance and the Bank of Italy disagreed with this assessment, recalling that preventive interventions, provided for both in European legislation and in the Core Principles developed by the International Association of Deposit Insurers, are a useful tool for the prompt management of banking crises. These measures can help to prevent problems from escalating and crises from ending in liquidation, with potentially high costs for the parties involved and for the DGS themselves. In Italy, this tool proved to be effective in the vast majority of cases, making it possible to overcome banking crises without requiring public intervention.[2]

On the macroprudential front, the IMF was critical of the failure to establish a national macroprudential authority; it also recommended that prudential measures be taken to mitigate the risks stemming from the sovereign-bank nexus. The last recommendation, as noted by the Italian authorities, is based on an overly simplistic

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[1] IMF, *Italy.Financial System Stability Assessment*, IMF Country Report, 20/81, March 2020.

[2] See also, *Italy: 2020 Article IV Consultation-Press Release; Staff Report; and Statement by the Executive Director for Italy*, IMF Staff Country Report, 20/79, March 2020.

view of the relationship between these risks and does not take into account the Basel Committee's decision at end-2017 to delay the review of the prudential treatment of banks' exposures to sovereign debtors. Studies conducted by the Bank of Italy also contributed to the debate on the issue at international level.[3]

[3] P. Angelini, G. Grande and F. Panetta, 'The negative feedback loop between banks and sovereigns', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 213, 2014; M. Lanotte, G. Manzelli, A.M. Rinaldi, M. Taboga and P. Tommasino, 'Easier said than done? Reforming the prudential treatment of banks' sovereign exposures', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 326, 2016. I. Visco, 'The Governor's Concluding Remarks for 2018', Bank of Italy, 2019.

Non-bank financial intermediaries and loan guarantee consortiums

In 2019, loans by non-bank credit intermediaries operating in the consumer credit segment or that offered loans secured by pledge of one fifth of salary or pensions, rose by 8 and 17 per cent respectively, to €27 billion and €8 billion, while loans from leasing and factoring companies declined by 6 per cent overall, to €83 billion.

Credit quality continued to improve. Gross of loan loss provisions, the ratio of new non-performing loans to total loans granted by these intermediaries as a whole fell by 2.4 percentage points, to 8 per cent. The reduction in risk-weighted assets and the increase in own funds facilitated capital strengthening. The ratio of supervisory capital to risk-weighted assets increased by 2 percentage points, to 13.3 per cent.

The amount of guarantees issued by the credit consortiums listed in the single register increased by 3.8 per cent, to €7 billion. Non-performing positions as a share of the total guarantees issued amounted to 29.6 per cent (30.2 per cent in 2018). The ratio of supervisory capital to risk-weighted assets remained basically unchanged, at 27.4 per cent.

Institutional investors

Funding. – Last year, institutional investors raised €21 billion in net funds, the lowest figure recorded since 2012 (Table 13.1 and Figure 13.8).

The decline concerned the investment fund and asset management segments, with net subscriptions down by €10 billion and €5 billion respectively (to -€4 billion and -€0.4 billion). The volume of funds raised by insurance companies and pension funds remained basically unchanged.

Episodes of high volatility in the international financial markets in the early months of 2019 led households to channel their investments towards low risk and very liquid investments, such as bank and postal deposits. The marked decline in Italian investment fund subscriptions, which was entirely confined to open-ended funds, was almost wholly attributable to retail investors' redemptions of shares.

Table 13.1

Institutional investors: net flows and assets under management
(millions of euros and per cent)

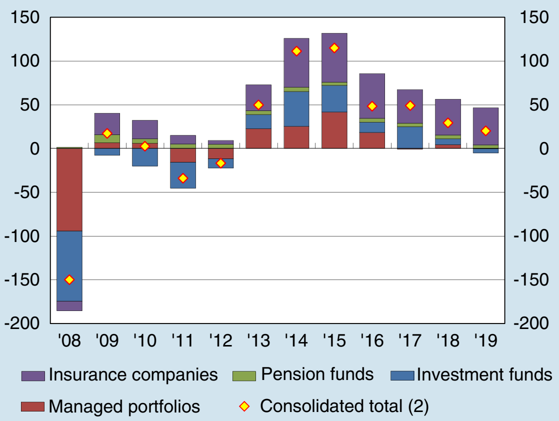
	Net flows		Assets under management			
	2018	2019 (1)	2018	2019 (1)	Composition	
					2018	2019 (1)
Investment funds (2)	6,369	-4,399	320,114	339,365	15.5	14.9
Insurance companies (3)	40,926	42,342	736,300	788,859	35.7	34.6
Pension funds (4)	4,519	4,283	167,145	185,121	8.1	8.1
Individually managed portfolios	4,537	-416	840,249	968,768	40.7	42.4
Total	**56,351**	**41,810**	**2,063,808**	**2,282,113**	**100.0**	**100.0**
Consolidated total (5)	**29,264**	**20,841**	**1,503,307**	**1,696,150**	**–**	**–**
(per cent of GDP)	1.7	1.2	85.1	94.9	–	–
Memorandum item:						
Foreign investment funds (6)	-2,458	14,399	737,459	845,380	–	–
of which: operated by Italian intermediaries (7)	12,134	8,353	166,846	188,901	–	–

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. It does not include Italian branches of EU insurance companies and includes Italian branches of non-EU insurance companies. – (4) For assets under management, balance sheet assets. – (5) Net of investments in Italian investment funds by the various categories of financial intermediary, investments by insurance companies and pension funds in portfolios managed on an individual basis 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 based on the value of the units held and subscribed by Italian investors respectively. – (7) Investment funds of management companies headquartered in Luxembourg or Ireland.

Investment funds set up under the rules governing individual savings plans (*piani individuali di risparmio* or PIR funds) all but ceased to raise funds following the changes introduced by the 2019 Budget Law, which placed new limits on investment in these instruments (see the box 'The impact of recent changes in the rules on PIR funds', *Financial Stability Report*, 1, 2019). Redemptions of shares in PIR funds were modest owing to tax legislation that encourages investors to hold the shares for at least five years.

Figure 13.8

Net inflows of institutional investors (1)
(billions of euros)



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 2019, provisional data. – (2) See the notes to Table 13.1.

Closed-end funds raised €2 billion, equal to 3 per cent of assets under management. Most of the growth was in funds reserved to professional investors operating in the real estate market and in mini-bonds. Several asset managers were authorized to establish European long-term investment funds (ELTIFs), whose assets under management nonetheless are still relatively modest.

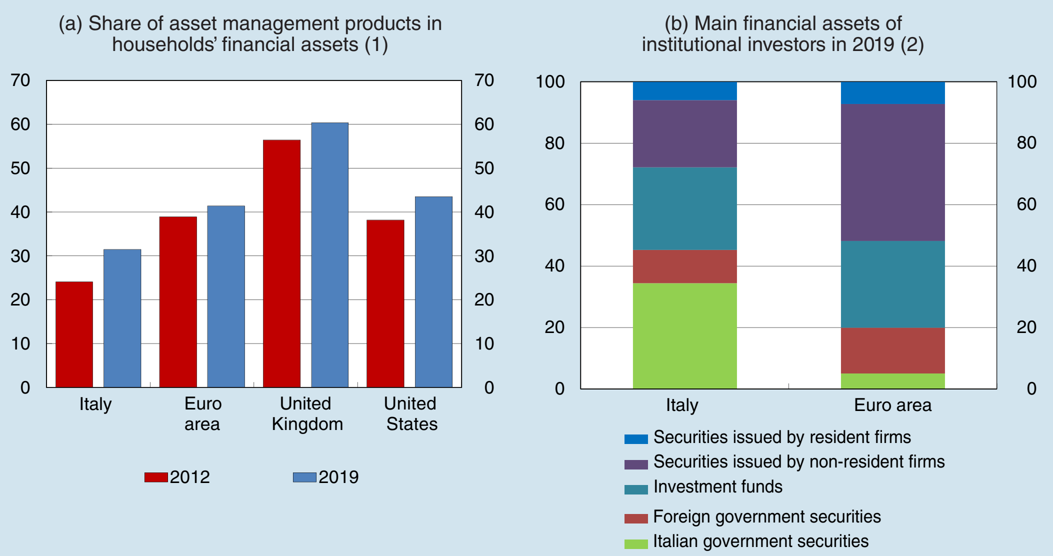
The expansion of closed-end real estate funds, which raised resources amounting to €5 billion in 2019, was mostly supported by foreign investment and, to a lesser extent, by resources invested by Italian social security institutions and insurance companies. In recent years, potential earnings from real estate rentals for commercial use and rising prices in some areas of Italy have favoured a marked expansion of this segment. In 2015, closed-end investment funds established in Italy raised funds amounting to €30 billion, corresponding to 50 per cent of assets under management at the end of 2019. A considerable proportion of these flows was investment in properties for commercial use and offices in Northern Italy, especially in the province of Milan.

Net funds raised by insurance companies remained basically stable in both the life and non-life sectors (at €13 billion and €30 billion respectively). Uncertainty about financial market developments prompted households to channel demand towards low-risk products. Gross purchases of unit-linked and index-linked insurance policies, where the investment risk is borne primarily by policy holders, fell by 7 per cent, to €28 billion, while purchases of policies in class I insurance, which offer guaranteed minimum returns, increased by 10 per cent, reaching €73 billion.

Capital. – The strong growth of the institutional investors sector, facilitated since 2013 by the reallocation of portfolios of Italian households towards investment funds and insurance products, stalled in 2019. The share of households' financial assets managed by institutional investors reached 31.5 per cent, about 10 percentage points higher than at the end of 2012 (see Chapter 7, 'The financial situation of households and firms'). This share remains below the average for the euro-area countries and that of the United Kingdom and the United States (Figure 13.9.a).

Figure 13.9

Asset management
(per cent)



Sources: for panel (a), Bank of Italy, ECB, OECD, BEA and Federal Reserve; for panel (b), ECB.
(1) 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; excludes federal pension funds. Includes foreign funds held by residents. – (2) Excludes individually managed portfolios; data for the euro area do not include Italy.

Last year, as government bond prices and the potential capital gains stemming from their sale turned upwards again, institutional investors reduced their related holdings. The share of their portfolio invested in these assets fell by approximately 2 percentage points, to 34.4 per cent, while investment in public sector securities and foreign investment funds increased. This share nonetheless remains high by comparison with the euro-area average (Figure 13.9.b).

Profitability. – In 2019, the profits of asset management companies rose by 36 per cent. The recovery in stock prices in the main financial markets supported growth in net fee income, more than compensating for that in operating costs. The ratio of supervisory capital to the overall capital requirement went from 7.8 to 8.1.[6]

Inflows of resources to closed-end real estate funds had a positive impact on the profitability of asset managers specializing in this sector, whose profits almost doubled.

The profitability of insurance companies improved, mainly due to the increase in the prices of Italian government bonds. The rise in prices resulted in a significant improvement in ROE in the life insurance sector, which went from 5 to 14.5 per cent.

EARLY 2020 AND THE MEDIUM-TERM OUTLOOK

The impact of the spread of the COVID-19 epidemic on economic activity exposes the banking system to new risks, both now and in the medium-term. Italy's banks are nonetheless facing this crisis with better capitalization and liquidity conditions and higher asset quality than in the past. The long process of adapting the prudential regulations, in which the Bank of Italy has been actively involved, has played a decisive role. The reforms implemented to date have made it possible to increase the quantity and raise the quality of bank capital by supporting more comprehensive risk coverage, limiting the degree of financial leverage, improving liquidity management, and building up capital buffers against macroprudential risks.

The sharp economic downturn is expected to lead to a slowdown in lending to households. Preliminary information on trends in the housing market point to a significant contraction in sales, which will presumably be reflected in a decrease in new mortgage loan disbursements. In March, lending to households grew at a pace of 2.2 per cent, compared with 3.1 per cent in February.

To help firms cope with the increased demand for liquidity following the halt in productive activity, the government adopted a wide-ranging and comprehensive package of measures, introducing the possibility for all firms to avail of public guarantees on loans (see *Financial Stability Report*, 1, 2020 and *Economic Bulletin*, 2, 2020). The earliest available data suggest there is strong demand on the part of firms for these loans (see the box 'The financial support measures for firms in response to the pandemic',

[6] The minimum capital resources required of asset management companies are commensurate with the volume managed by investment and pension funds, the operational risks arising from the type of activity carried out, and risks arising from professional liability.

Chapter 7). In March, the growth rate of lending to firms rose by 2.4 percentage points compared with February, reaching 1.1 per cent.

The impact on economic activity of the spread of the epidemic could lead to a significant deterioration in the quality of bank assets, with increased loan loss provisions also following the application of the new rules on calendar provisioning.[7] The legislative provisions on moratoriums, the suspension of loan instalments and measures to support household income and business continuity should help to curb insolvencies; public guarantees will also make it possible to limit the amount of loan loss provisions on both new disbursements and on renegotiated loans. It is likely, however, that in the coming months the economic impact of the epidemic will also be seen on loans already classified as unlikely-to-pay, which benefit very little from the measures introduced by the Government and account for approximately half of the net non-performing loans on banks' balance sheets.[8] The sharp economic downturn due to the spread of COVID-19 is also expected to increase the riskiness of non-bank intermediaries' loans. In the longer term, the impact of the pandemic on credit quality will inevitably depend on the duration of the recession and the speed of the recovery.

The main national and international supervisory and regulatory authorities have taken prudential and accounting measures to prevent clients' temporary difficulties and the consequent weakening of bank balance sheets from triggering an abrupt contraction in lending, leading to dangerous pro-cyclical effects (see the box 'Measures adopted by the supervisory authorities and effects on banks', *Financial Stability Report*, 1, 2020). These interventions have made it possible for intermediaries to operate temporarily below the level of some capital and liquidity buffers; in any event, at the end of 2019, the average CET1 surplus of Italian banks above the minimum capital requirement was significant (5.7 percentage points).[9]

The SSM and the Bank of Italy also recommended that the groups and supervised banks refrain from distributing dividends or engaging in share buy-backs aimed at remunerating shareholders; both the significant and the less significant banks have complied with the recommendations. The non-distribution of dividends will free up around €7 billion in additional highest-quality capital which, if necessary, can be used to absorb negative cyclical impacts.

Financial market tensions have emerged since mid-February and the yield spread between Italian and German ten-year bonds has widened. As happened in other periods of market turbulence, in March Italian banks made €20 billion worth of net purchases of Italian public sector securities. Following the ECB's announcement of new securities purchase programmes, the yield differential with German bonds decreased (see *Economic Bulletin*, 2, 2020).

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[7] Regulation (EU) 2019/630 of the European Parliament and of the Council of 17 April 2019 sets out a calendar for write-offs of loans classified as non-performing: three years for unsecured exposures and seven years for secured NPEs (this can be extended by up to nine years for exposures secured by immovable property).

[8] Based on our simulations, if the totality of the unlikely-to-pay loans were classified as bad loans, the increase in loan loss provisions would amount to around €15 billion, with an average reduction in the highest quality capital of 1.1 percentage points in terms of risk-weighted assets.

[9] This minimum is set following the Supervisory Review and Evaluation Process (SREP).

At the end of March, bank funding had been affected only slightly by the tensions on the financial markets, owing to the relatively high shares of retail funding (68 per cent) and of refinancing with the Eurosystem (10.5 per cent). To date there have been no signs of lack of confidence in the banking system and no bank has recorded anomalous outflows of deposits, even though digital channels permit customers to transfer their funds rapidly; deposits continued to expand even after the outbreak of the epidemic.

The increase in bank bond yields observed on the secondary market has nonetheless halted new issuances, slowing the process of lengthening the average maturity of liabilities. The impact on funding was effectively countered by the decision of the Governing Council of the ECB of 12 March to expand funding channels at the central bank by introducing a third series of targeted longer-term refinancing operations (TLTRO III), which guarantee loans to intermediaries with a duration of up to three years.

The crisis sparked by the pandemic will have a negative impact on banks' profitability. The economic slowdown is likely to accentuate the drop in net interest income and to push up the cost of credit risk; persistent tensions in the financial markets could translate into a decline in subscriptions of asset management products, and of the associated fees. For small intermediaries and for those with traditional business models, which even before the epidemic had been experiencing difficulties in maintaining satisfactory levels of profitability, the loss of income could be particularly significant.

Compared with the period immediately prior to the spread of the epidemic, the expected profits of the main listed Italian banks relative to 2020 are down by 62.7 per cent; for the largest European banks, the expected decline is slightly smaller (52.4 per cent). For listed Italian and European banks, ROE is expected to decline slightly (by 4.5 and 3.7 percentage points respectively, to 2.4 and 4.1 per cent).

The effects on the activity of the consortiums will depend on trends in firms' demand for credit and on the quantity of guarantees granted under the Government's programme of initiatives. In fact, the consortiums will be able to extend State guarantees on loans to firms for up to the full amount funded, obtaining reinsurance from the Central Guarantee Fund (see the box 'The financial support measures for firms in response to the pandemic', Chapter 7).

In the first quarter of 2020, Italian open-ended investment funds recorded significant net outflows of €3.3 billion. Since March, greater demand for liquidity on the part of institutional investors has been reflected in a marked increase in redemptions of shares of money market, equity and bond funds specialized in securities characterized by high risk and low liquidity. The funds have been able to satisfy requests for redemptions in the normal way.

According to our survey of the major Italian asset management companies, since the last week of March, redemptions have abated in almost all sectors. Funds specializing in high-yield and emerging economy bonds, for which considerable outflows were observed in March, recorded net positive inflows, while outflows from funds that invest in euro-area government bonds continued throughout April.

Increased investor risk aversion is likely to lead to a reduction in funding on the part of investment funds in the next few months, especially of those that primarily invest in less liquid markets, whose share in total assets is nonetheless small. In the medium term, PIR funds could benefit from the changes introduced by the 2020 Budget Law, which eliminated the constraints on investment brought in by the reform of the previous year.

The drop in funding and in the prices of financial assets will have a negative impact on the profitability of institutional investors.

14. THE MONEY AND FINANCIAL MARKETS

Conditions on the Italian financial markets improved in 2019. The yield on ten-year government bonds on the secondary market fell significantly, benefiting both from the easing of monetary conditions by the European Central Bank and from the decrease in sovereign risk, to which the reduction of the component relating to the risk of redenomination contributed.

Since the end of February 2020, these conditions have been strongly affected, as they have in other countries, by the outbreak of the COVID-19 epidemic and by the expectations regarding its effects on the economy and on the public finances.

Tensions reached a peak around mid-March, when there was a sharp decline in prices in all markets, exacerbated by a negative spiral between volatility and illiquidity. Expectations of an increase in government bond issues translated into higher sovereign risk premiums. The increase in spreads, which was common to most euro-area countries, was more pronounced for Italian securities.

The turbulence subsequently eased thanks to the measures adopted by the ECB; the economic support policies introduced by governments, which gradually became more incisive, also contributed. However, market conditions remained fragile, with strong price fluctuations.

The money market and the public sector securities market

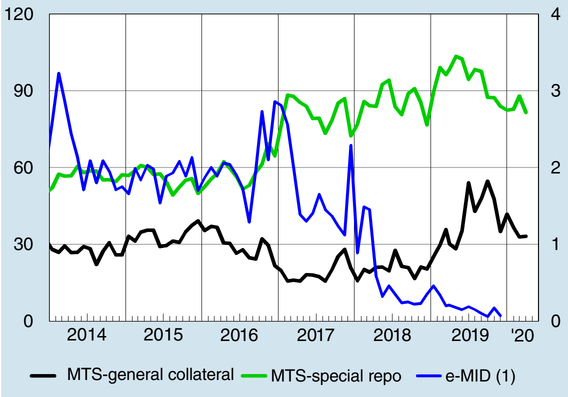
The money market. – In 2019, money market conditions remained relaxed. In the first quarter of 2020, the outbreak of the COVID-19 epidemic had a limited impact, partly because of the immediate monetary stimulus provided by the ECB.

On the MTS platform, trading in the repo market for government bonds intensified in 2019 compared with the previous year, with the value of average daily trades reaching an all-time high in July (Figure 14.1). The increase in trading over the year was mainly due to growth in the general collateral segment (91 per

Figure 14.1

Money market trades

(monthly averages of daily data; billions of euros)



Sources: Based on e-MID SIM SpA and MTS SpA data.
(1) Right-hand scale. The latest data available refer to 31 December 2019.

cent over 2018), facilitated by the redistribution of excess liquidity among Italian intermediaries, and to a lesser extent in the special repo segment (up by 11 per cent).

In 2019, the interest rates of very short-term repos on Italian government bonds remained essentially aligned with the Eurosystem's deposit facility rate. After the entry into force of the two-tier system for remunerating banks' reserves (see *Economic Bulletin*, 1, 2020), there was a rise in Italian banks' foreign funding with no significant increases in interest rates. In March this year, when volatility in financial markets was at its highest, there were temporary rises in money market rates. However, there were no significant repercussions on the proper functioning of the market.

Supply and demand for public sector securities. – Placement on the primary market, which was orderly during 2019, continued at a steady pace in the first part of 2020 as well, despite the difficulties engendered by the COVID-19 emergency.

In the two months March-April 2020, although the Treasury offered higher issuance amounts, demand at the auctions was always much higher than supply; for the types of security issued in the same months of 2019, the cover ratio remained on average at the values observed in the two-month period of last year (around 1.5 per cent). However, the variability of the bids submitted at auctions increased significantly.

The allotment rates – that had fallen to a historical low for various maturities between the end of January and mid-February – have risen significantly since mid-March, reflecting developments on the secondary market; they have also returned to positive values for short-term securities. However, the average cost at issuance in the first quarter remained much lower than in the corresponding period of 2019; for all the outstanding securities, the average cost at the end of April was stable at 2.5 per cent, a historical low for Italian public debt.

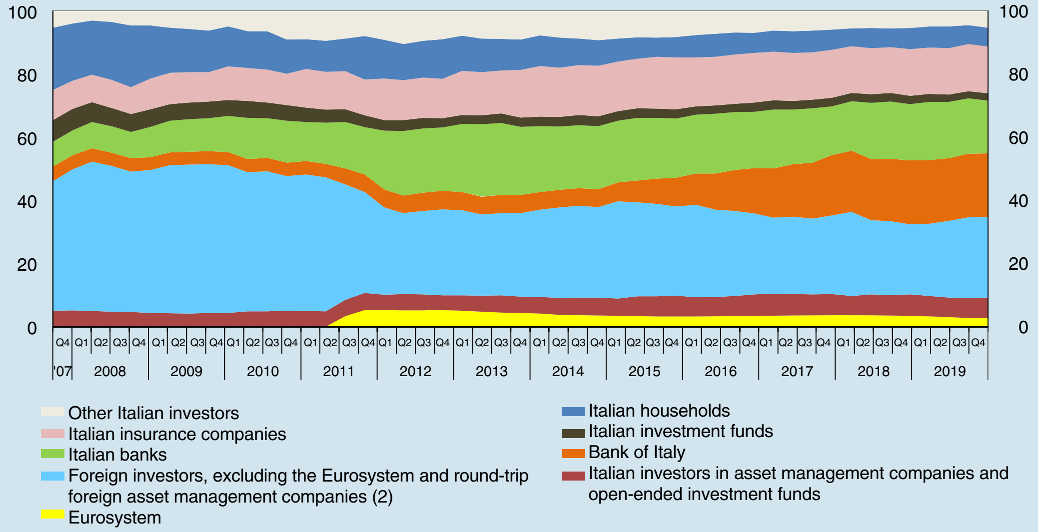
Last year, the Bank of Italy's holdings of Italian government securities fell slightly, to 20.1 per cent, from 20.3 per cent at the end of 2018. (Figure 14.2).[1] In the first ten months of the year, the capital repaid on maturing securities under the expanded asset purchase programme (APP) was fully reinvested. Following the decision of the ECB Governing Council, net purchases have resumed since November (see Chapter 3, 'Monetary policy in the euro area'). The share of securities in Italian banks' portfolios decreased in 2019 too, by 1 percentage point to 16.8 per cent; the shares held by Italian households and by Italian investment funds also declined slightly. The share of securities held by foreign investors rose by 2.4 percentage points to 34.8 per cent, reflecting the easing of tensions on the Italian government securities market. According to our estimates, excluding the securities held by the Eurosystem central banks (except for the Bank of Italy) and those in individually managed portfolios and foreign investment funds attributable to Italian investors, this share increased by 3.4 points to 25.6 per cent.

[1] Compared with what is reported in the section 'The public finances in 2019', in Chapter 11, the shares presented here are calculated with reference to the market value (not to the face value) and to the securities component (not to the full amount of the debt).

Figure 14.2

Italian public sector securities: by category of holder (1)

(quarterly data; per cent)



Sources: Bank of Italy and estimates based on Assogestioni and ECB data.
(1) Shares calculated based on values at market prices and excluding securities held by general government in Italy. The data refer to a subset of holders. Latest available data: Q4 2019. – (2) Securities held by foreign investors excluding those held by the Eurosystem (not including the Bank of Italy) and by Italian investors in foreign asset management and investment funds.

In the first three months of 2020, the share of securities held by Italian banks rose to 17.8 per cent, while that of foreign investors fell to 33.5 per cent. Over the same period, the Bank of Italy's share increased to 20.9 per cent, as a result of the extensive net purchases made under both the public sector purchase programme (PSPP), strengthened in March, and the new pandemic emergency purchase programme (PEPP; see Chapter 3, 'Monetary policy in the euro area'). In March and April, net purchases under the PSPP exceeded €10 billion per month (bringing the total value of the stock of Italian government securities purchased through this programme to €393 billion at the end of the first quarter). By contrast, the total public and private sector securities issued in the euro area and purchased under the PEPP amounted to €182 billion in mid-May.

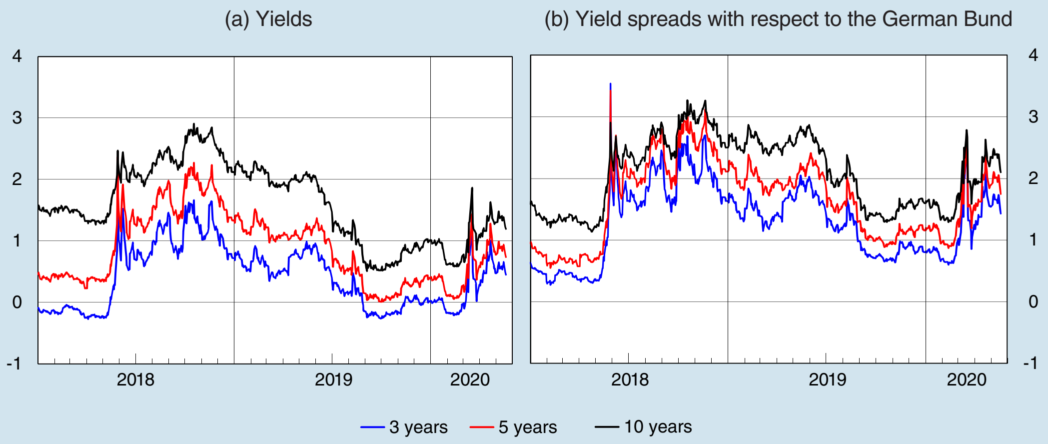
Yields on government securities. – Overall in 2019, the yield on Italian government securities on the secondary market decreased by around 135 basis points, to 1.41 per cent at the end of the year (Figure 14.3.a), benefiting, as did the corresponding securities in the other euro-area countries, from the ECB's easing of monetary conditions. The spread with respect to the corresponding German securities (Figure 14.3.b), though recording temporary increases, stood at around 160 basis points at the end of 2019, around 90 points lower than at the beginning of the year, in part due to the reduction in the redenomination risk, assessed according to the ISDA basis indicator.[2]

[2] The International Swaps and Derivatives Association (ISDA) is an organization for participants in the OTC derivatives market. The ISDA basis proxies the assessment of the markets according to whether the sovereign debt of the reference country can be redenominated in a new currency. This indicator is given by the difference between the credit default swap (CDS) spread regulated by ISDA rules introduced in 2014 – in which debt redenomination is explicitly covered – and the CDS spread under the 2003 rules, which did not envisage this possibility (see the box 'The trend in Italian government bond spreads', Chapter 14, *Annual Report for 2018*, 2019).

Figure 14.3

Yields and yield spreads on BTPs at different maturities

(daily data; percentage points)



Source: Based on Bloomberg data.

According to our assessments, the value of the spread between the interest rate on Italian and German ten-year government bonds, consistent with Italy's economic fundamentals, which was around 260 basis points in December 2011, has gradually decreased in subsequent years. In February 2020, before the outbreak of the COVID-19 epidemic in Italy, this value was estimated at around 100 basis points.[3] The fall compared with the peaks recorded during the sovereign debt crisis largely reflected the considerable increase in the current account surplus, together with the significant improvement in labour market conditions.

The yields on Italian government securities have risen sharply since mid-February, as have those in most euro-area countries (see the box 'The reactions of financial markets to the spread of the epidemic'), affected by the rapid increase in investors' risk aversion and the resulting shift in portfolios towards assets deemed to be safer. In a context of high volatility and reduced liquidity, the yield spreads of all the countries considered to be most vulnerable increased. In mid-March, the uncertainty, measured by the volatility of 10-year BTP futures, reached the highest values recorded during the most acute phase of the sovereign debt crisis.

The decisions of the ECB Governing Council, and especially the announcement of the PEPP on 18 March, stopped the Italian yield spread from widening further; after reaching an intraday peak of 320 basis points on 18 March, it decreased to 193 points the following day. These measures also led to a significant decline in volatility and a gradual improvement in liquidity.

[3] The estimates are based on a model that includes macroeconomic variables (debt-to-GDP ratio, deficit, growth, current account balance of the balance of payments, unemployment and inflation) and indicators of financial market conditions (volatility and interest rates). The model distinguishes between the economic drivers of the long-term value of the spread and other factors that only have a temporary effect. Investors' concerns about the resilience of the EMU are also taken into account, particularly between autumn 2011 and summer 2012 (see A. Di Cesare, G. Grande, M. Manna and M. Taboga, 'Recent estimates of sovereign risk premia for euro-area countries', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 128, 2012.

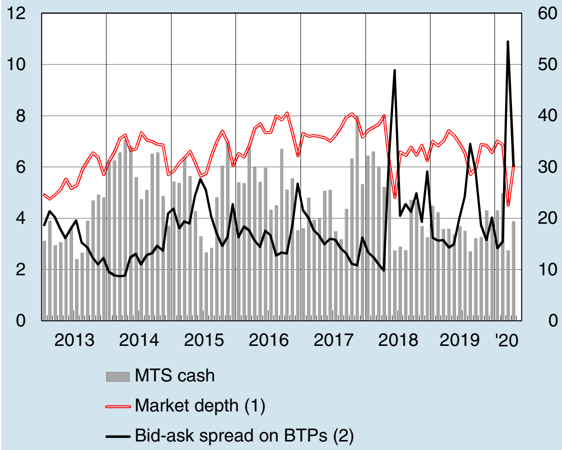
However, market conditions remained relatively tense: on 19 May, the yield on the ten-year Italian government bond stood at 1.64 per cent, with a spread of 210 basis points compared with the corresponding German Bund.

Trading in the secondary market. – In 2019, liquidity conditions on the secondary market for Italian government bonds remained generally relaxed. The volume of average daily trading on the MTS cash market amounted to €3.6 billion (-20 per cent compared with 2018; Figure 14.4). The quantities quoted remained constant at €6.7 billion and the bid-ask spread fell to 20 basis points. The average cost of special repo trading in Italian government securities, measured by the difference between the general collateral and special repo rates, referred to as specialness, declined further (from 6.7 basis points in 2018 to 2.7 basis points), also owing to lower demand for securities to hedge short positions on Italian sovereign debt.

Figure 14.4

Government securities trading in the secondary market

(monthly averages of daily data; billions of euros and basis points)



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.

Since the end of February, with the heightened turbulence on the financial markets, market liquidity has rapidly decreased, albeit to a lesser extent than in the most acute phases of the sovereign debt crisis. Market makers have decreased their contribution to market liquidity by expanding bid-ask spreads and reducing the quantities quoted; trading on the MTS cash market has contracted significantly.

Liquidity conditions in the secondary market have gradually improved since the announcement of the PEPP. However, as happened during other episodes of tension, the increase in the depth of the market and the drop in bid-ask spreads could have a delayed effect on trade, both in terms of the volume of transactions and the average size of contracts (see *Financial Stability Report*, 1, 2020).

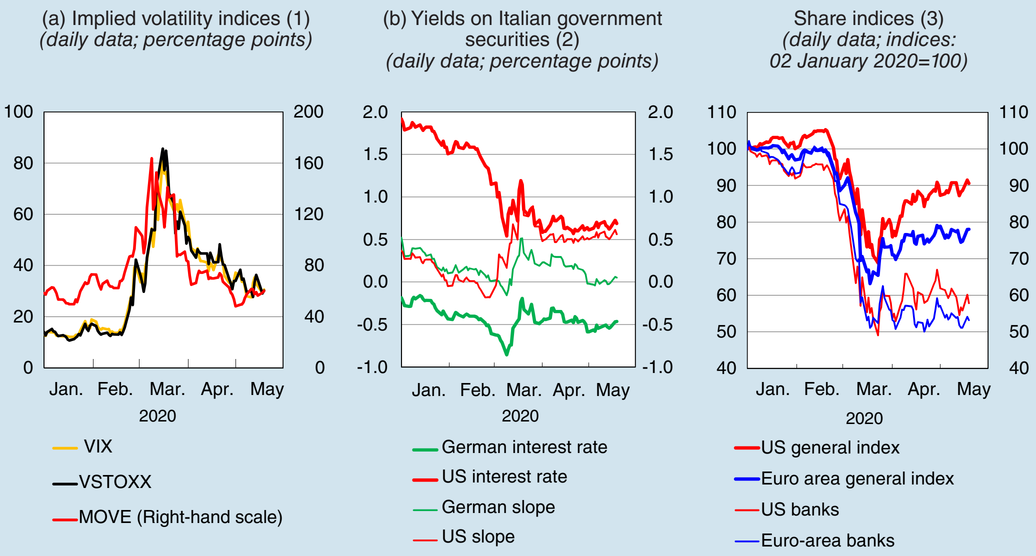
THE FINANCIAL MARKETS' REACTION TO THE SPREAD OF THE EPIDEMIC

The first tensions on the financial markets linked to the COVID-19 epidemic had already appeared in January (Figure A), when news of the containment measures adopted in China led to a downward revision of the expected growth in international trade. This triggered a fall in the prices of crude oil and other raw materials, an increase in the prices of gold and of currencies used as safe-haven assets, as well as higher prices for the government securities considered safer.

Tensions escalated in the second half of February and the first half of March, with the rapid spread of the epidemic in Europe and the United States and the introduction of containment measures, including suspensions of economic activity, in a growing number of countries. Investors' risk aversion increased (see panel (a) of Figure A), with large reallocations of international portfolios towards assets deemed to be safer. In the United States, the yields on long-term government bonds fell to historic lows (see panel (b) of Figure A). When tension was at its highest, around the second week of March, the liquidity needs of market operators increased; sales extended to assets considered to be more secure, also creating tensions in the US government bond market,[1] where volatility rose sharply and longer-term yields went up (see panels (a) and (b) of Figure A). In the United States, the tensions also affected the interbank market, as indicated by the marked increase in the T-Bill EuroDollar (TED) spread, although to levels well below the peaks observed during the global financial crisis.[2]

Figure A

Volatility indices, interest rates and share prices



Sources: Based on Refinitiv and Bloomberg data.
(1) Indices of implied volatility in the share markets: VSTOXX for the euro area and VIX for the United States. Indices of implied volatility in the government securities markets: MOVE index for the United States. The latter is an index weighted by the implied volatilities inferred from 1-month options on the interest rates on US Treasury bonds with varying maturities. – (2) Yields on government securities: yield on the 10-year German Bund for the euro area and yield on the 10-year US Treasury bond; the slopes are calculated as the difference between the 10-year and the 3-month rates on the securities of the countries considered. – (3) Share indices: general stock exchange and banking indices for the jurisdictions considered.

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1 A. Schrimpf, H.S. Shin and V. Sushko, 'Leverage and margin spirals in fixed income markets during the Covid-19 crisis', Bank of International Settlements, *BIS Bulletin*, 2, 2020.

2 The TED spread is calculated as the difference between the yield on the three-month LIBOR (i.e. the cost of raising funds on the interbank market for a large bank) and that on the T-Bill (i.e. the return on the short-term Treasury bill); See M.K. Brunnermeier, 'Deciphering the liquidity and credit crunch 2007-2008', *Journal of Economic Perspectives*, 23, 1, 2009, 77-100; R.J. Caballero, E. Farhi and P.-O. Gourinchas, 'Financial crash, commodity prices and global imbalances', NBER Working Paper, 14521, 2008.

The main global stock indices recorded sharp falls during this phase (see panel (c) of Figure A), in part as a result of the downward revision of the forecasts for corporate profitability, especially in the cyclical sectors (finance, consumer goods, transport and tourism), amounting to around 35 per cent between 21 February and 23 March (in both the euro area and the United States; and to 46 and 48 per cent respectively in the banking sector).[3] In some jurisdictions, the implied volatility of options was slightly higher than in 2008 following the collapse of Lehman Brothers (see panel (a) of Figure A). The speed and breadth of the stock market corrections often triggered temporary halts in trading ('circuit breakers') in the main financial centres (see *Financial Stability Report*, 1, 2020).

Corporate bond spreads widened considerably in the investment grade sector, and even more so in the high-yield sector; in the euro area, the spreads in this sector reached levels close to those seen during the most acute phases of the sovereign debt crisis. Similar tensions also affected other debt instruments issued by firms, such as commercial paper and leveraged loans.

Expectations of a marked increase in government bond issues in most countries led investors to request higher sovereign risk premiums. The spreads with respect to safer securities, together with credit default swap (CDS) spreads, rose in Italy and in other euro-area countries, albeit to levels well below the peaks reached during the sovereign debt crisis; this was accompanied by a considerable increase in volatility and a decrease in liquidity, in a context of extremely thin market trading. The perception of the risk of redenomination for euro-area countries, as measured by the ISDA basis, increased in many countries, though to a lesser extent than in previous periods of tension (Figure B).

The turmoil on the financial markets abated in the second half of March, following the sizeable expansionary measures adopted by the fiscal and monetary authorities (see the boxes 'The fiscal policy response to the COVID-19 emergency' and 'Central banks' response to the COVID-19 emergency', Chapter 1). The ECB's announcement of the new pandemic emergency purchase programme (PEPP) on 18 March halted the rise in euro-area sovereign risk premiums (Figure B). As a result of the measures introduced by the Federal Reserve, liquidity conditions on the US government bond market also became more favourable.[4]

Since the end of March, liquidity conditions have also improved in many markets, though they remain tense, and volatility has decreased; corporate bond issues have also resumed, although mainly in the investment grade sector. Share indices have recovered some of the losses recorded in February and in the previous weeks of March. However, the conditions on the stock and bond markets have

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[3] Several sectors of the US stock market recorded the fastest corrections on record.

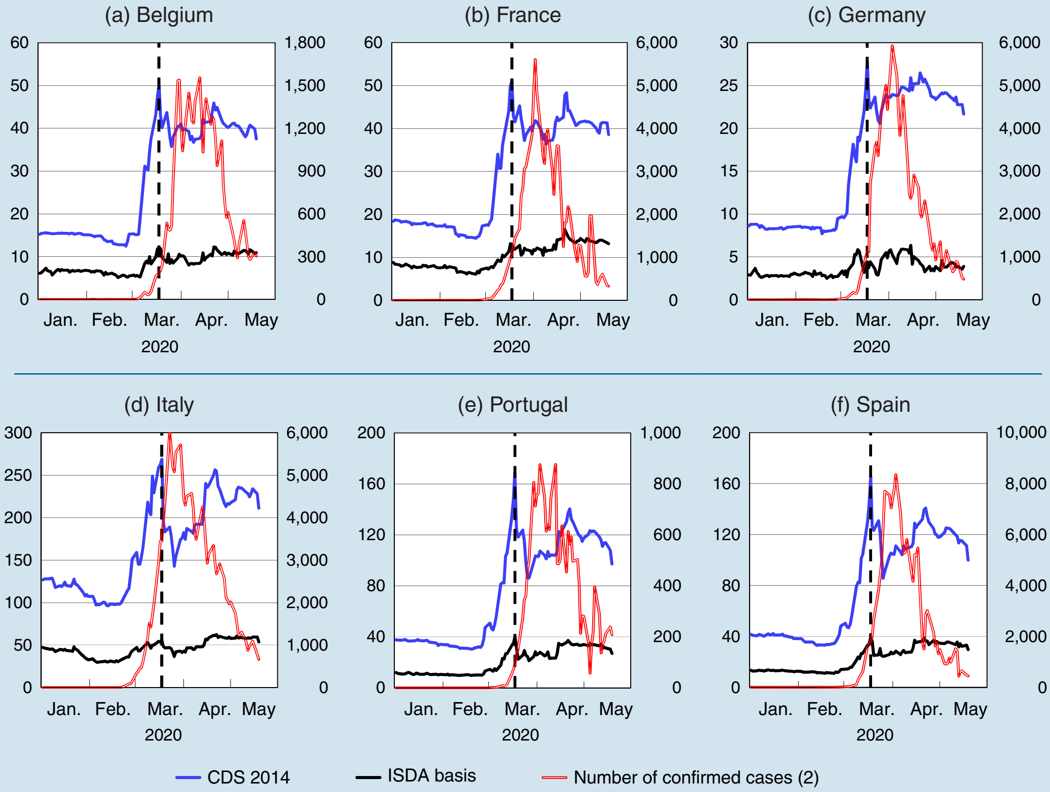
[4] Targeted measures such as the Repurchase Agreement Facility for Foreign and International Monetary Authorities, and the change to the Supplementary Leverage Ratio Rule announced between end-March and early April, also contributed to the significant improvement in the liquidity conditions on the US government bond market, as did the Federal Reserve's large public sector purchase programme.

remained fragile; prices have continued to record strong fluctuations, affected by the high level of uncertainty about the scale of the longer-term recessionary effects of the pandemic.

Figure B

CDS, ISDA basis and the number of coronavirus cases in the euro area (1)

(monthly averages of daily data; billions of euros)



Sources: Based on data from ICE, CMA and the European Centre for Disease Prevention and Control.
(1) CDS 2014: 5-year CDS spread on the debt of a country regulated by the 2014 ISDA Definition. Number of cases confirmed: number of new cases of COVID-19 reported daily (3-day moving average). The vertical bar indicates 18 March, when the ECB announced the PEPP. – (2) Right-hand scale.

Corporate bonds and bank bonds

Issuance. – In 2019, Italian non-financial corporations increased their recourse to the bond market, motivated by the reduction in funding costs. Gross placements amounted to €21 billion, up from €15 billion in 2018 (Table 14.1). However, thanks to redemptions of €25 billion (from €19 billion), the net balance is in line with that of 2018. The stock of bonds issued remained essentially stable as a share of GDP, at 8 per cent, against 12 per cent in the euro area.

Net redemptions of bonds by Italian banks continued, though to a much lesser extent than in 2018 (down from €30 billion to €2 billion; Table 14.1), thanks to the fall in gross redemptions (from €119 billion to €91 billion) and stable gross placements (from €89 billion to €88 billion), for which the share of unsecured bonds increased with respect to covered bonds. At the end of the year, bonds issued by banks reached 25 per cent of GDP (the euro-area average was 37 per cent).

Table 14.1

Medium- and long-term bonds of Italian banks and firms (1)
(nominal values; millions of euros)

	Net issues (2)			Stocks			% of GDP
	2017	2018	2019	2017	2018	2019	2019
Banks	-64,910	-29,516	-2,048	481,873	450,984	447,274	25
Other financial institutions	15,780	10,781	25,906	199,689	211,525	236,926	13
Non-financial corporations	21,705	-4,156	-3,801	144,589	140,492	136,714	8
Total	**-27,425**	**-22,891**	**20,057**	**826,151**	**803,001**	**820,914**	**46**

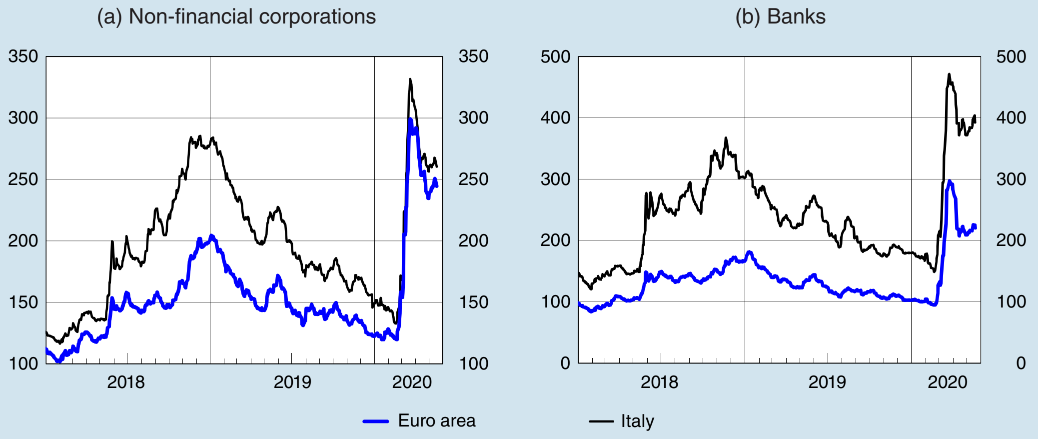
(1) The nationality and sector refer to the issuer and not to its parent company. Refers only to securities with a maturity at issue of more than one year. – (2) Difference between the nominal values of issues and redemptions.

After a favourable performance in January-February 2020, the gross issuance of bank bonds fell sharply in March compared with the corresponding period in 2019, leading to a negative balance of net placements in the first quarter (-€14 billion). The trend was similar for the gross issues of non-financial corporations, for which net redemptions of around €3 billion were recorded for the first quarter overall.

Yield spreads. – Corporate financing costs decreased significantly in 2019, due both to lower interest rates on risk-free loans (in line with the gradual easing of monetary conditions) and to the compression of corporate spreads, which reflected a greater risk propensity among investors (Figure 14.5.a). Spreads on bank bonds also narrowed (Figure 14.5.b).

Figure 14.5

Yield spreads on corporate bonds (1)
(daily data; basis points)



Source: Based on ICE Bank of America Merrill Lynch data.
(1) Option-adjusted spreads weighted by the market capitalization of the companies' individual securities.

From the beginning of 2020 to 20 May, against a backdrop of tension due to the epidemic, the spreads on Italian firms' bonds widened by 115 basis points, slightly below the increase for the euro area as a whole (122 basis points). The increase was more pronounced for firms with lower creditworthiness and for the sectors most exposed to the containment measures and the contraction of demand. The decision taken in April by the ECB Governing Council to also accept as collateral any bonds that may have been downgraded to high yield after 7 April, provided that their rating does not fall below the top two levels (notches) in that category, helped limit the widening of spreads (see *Financial Stability Report*, 1, 2020).

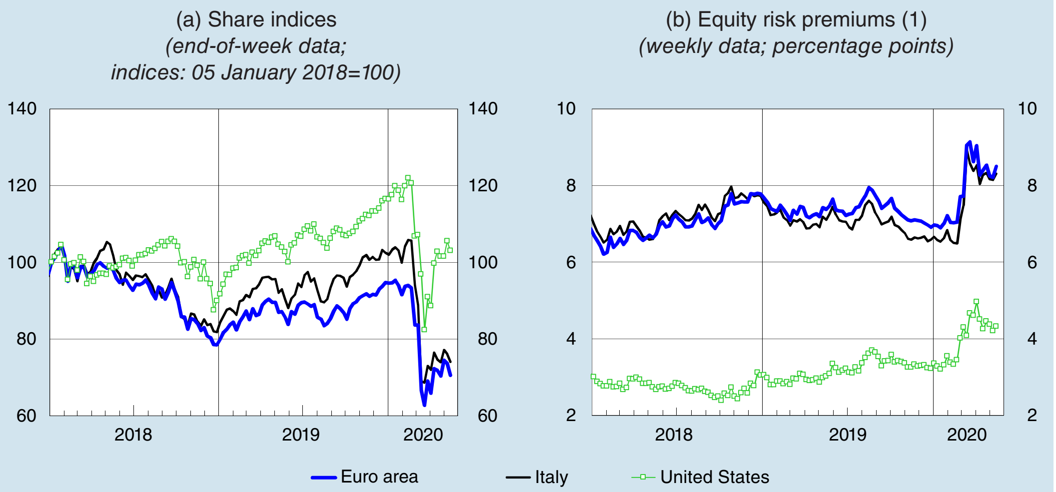
Over the same period, also due to fears of a sharp deterioration in earnings prospects, the spreads of Italian bank bonds widened (by 213 basis points), more than the euro-area average (118 basis points), despite their financial conditions having remained more favourable than those during previous periods of tension (see *Financial Stability Report*, 1, 2020).

The equity market

Share prices. – In 2019, the Italian stock exchange index rose by 25 per cent (Figure 14.6.a). Despite the reduction in firms' expected earnings, share prices were buoyed by the improvement in global financial conditions and the easing of political uncertainty in Italy after the summer, which led to a fall in risk premiums (Figure 14.6.b).

Figure 14.6

Equity markets



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.

Financial sector share prices – a sector accounting for a significant share of the capitalization of the Italian stock exchange index (see the box 'The Italian stock market's performance in recent years', Chapter 14, *Annual Report for 2018*, 2019) –

rose by 31 per cent over the year, thanks to the increase in expected profitability and to the improvement in the conditions of the Italian government securities market. Strong performances were also recorded in the industry and public goods and services sectors, characterized by good income prospects.

In early 2020, especially between the end of February and mid-March, the leading global indices fell sharply, accompanied by a rise in volatility to historic highs. These trends particularly affected company share prices, including credit institutions, whose future prospects are more exposed to the impact of measures to contain the pandemic. Between 21 February and 18 March, the general Italian stock market index fell by 38 per cent (Figure 14.6.a), in line with the changes recorded in the main euro-area countries; volatility exceeded the levels reached during the global financial crisis. In the same period, the share prices of Italian credit institutions decreased by 44 per cent, slightly less than those of the other euro-area countries. The increase in the risk premium and the decline in expected profits resulted in a sharp reduction in the price-to-book ratio. In the second half of March, share prices in Italy and the euro area were boosted by monetary policy and public finance measures, as well as by signs that the epidemic was slowing down; they weakened again in April due to the growing uncertainty over longer-term profitability.

Overall, between the end of 2019 and 19 May 2020, the Italian stock exchange index decreased by around 27 per cent (compared with 22 per cent on average in the euro area). Banking stocks recorded a sharper fall than the general index did, both in Italy (-39 per cent) and on average in the euro area (-47 per cent).

Supply of shares. – In 2019, the number of initial public offerings rose compared with the previous year (35 against 31 in 2018; Figure 14.7.a), for a total value of €2.5 billion, up from €2 billion. Last year too, these operations mainly involved the Alternative Investment Market (AIM) Italia segment for small and medium-sized enterprises. The average market capitalization of the 129 companies in this segment continued to be limited, standing at €50 million in December 2019, against the 2,800 companies in the electronic equity market (MTA), which includes more traditional and highly capitalized companies. However, the degree of liquidity – measured by the average, weighted by the free float, of the turnover velocity of individual firms – rose by 25 percentage points compared with the previous year.

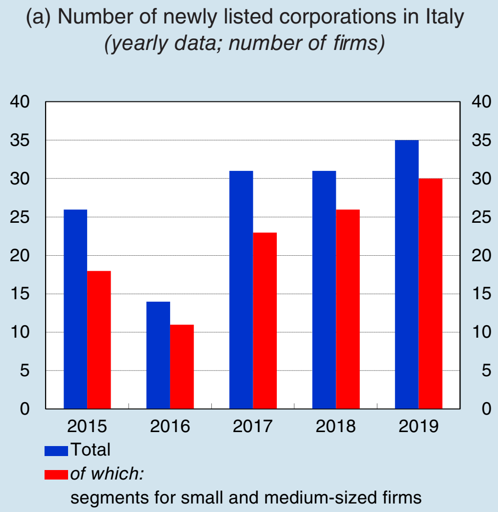
Total funding through the issue of shares by Italian firms increased to around €4.9 billion, from €2.5 billion in 2018. The total value of gross share issues by non-financial corporations was essentially unchanged in Italy, but fell significantly in Germany and France, and grew in Spain (Figure 14.7.b).

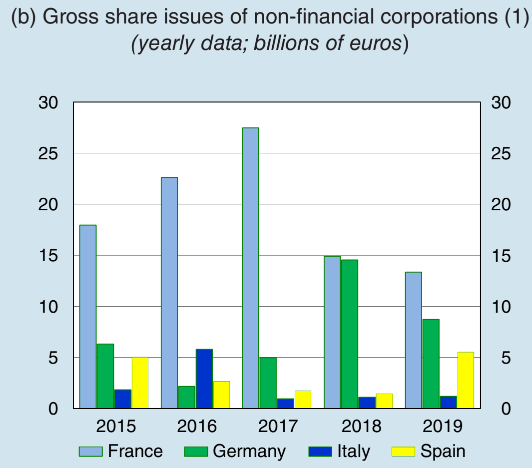
In the first three months of 2020, IPOs were heavily affected by the spread of the COVID-19 epidemic and there was only one new listing, compared with six in the same period in 2019.

In the first two months, the total value of gross share issues by Italian companies increased significantly compared with the same period in the previous year, mainly because of the recapitalization operations carried out by non-financial corporations in February; gross share issuance was zero in March.

Figure 14.7

IPOs and their breakdown by sector





Sources: Based on Borsa Italiana SpA and ECB data.
(1) Includes both new capital raised through IPOs and capital increases by listed companies.

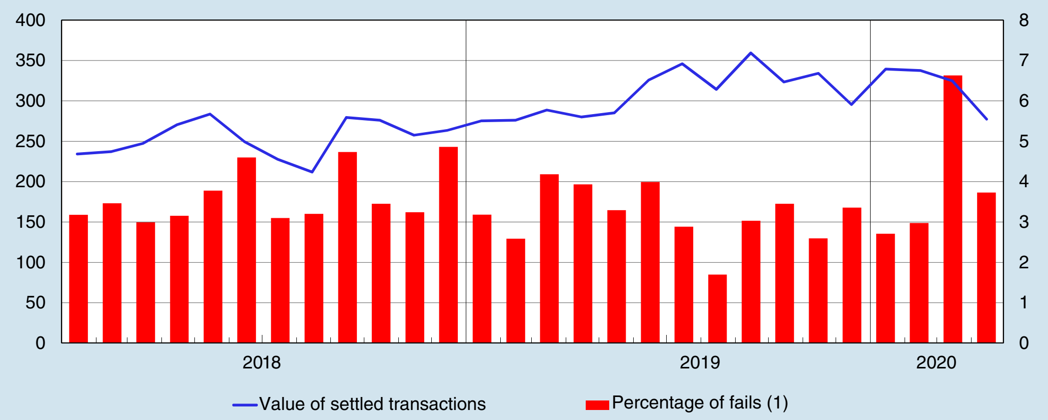
Market infrastructure

In 2019, TARGET2-Securities (T2S) averaged over 700,000 transactions per day (100,000 more than in 2018), with an average value of around €1,000 billion (up by €250 billion). Similar values were recorded in the first two months of this year. In March, the average number of transactions settled rose to more than one million, with a corresponding increase in the total value, as a result of more intensive trading due to the heightening of market tensions; this did not affect the average percentage of transactions settled, which remained at the levels of the previous months (around 97 per cent).

In 2019 – given the higher average daily volume of trades on the MTS repo market, which have been expanding since last year – the value of the transactions settled in T2S through Monte Titoli SpA, Italy's central securities depository, averaged €309 billion per day (up by 21.6 per cent compared with 2018), equal to about 28 per cent of the total registered on the European platform and slightly lower than the amount for 2018. The share of transactions not settled through Monte Titoli SpA owing to the non-delivery of securities or cash within the allotted time frame (*fails*) declined, with average daily percentages of around 3 per cent (Figure 14.8). Similar levels were also observed in the first two months of 2020, while the share settled fell by about 4 percentage points in March, to 93.5 per cent. Fails increased on average to €25 billion per day in March (from €10 billion in the first two months of 2020), and then gradually decreased from the end of the month, returning to normal levels in April.

Figure 14.8

Monte Titoli: value of orders placed and percentage of fails
(monthly data; billions of euros and percentage points)

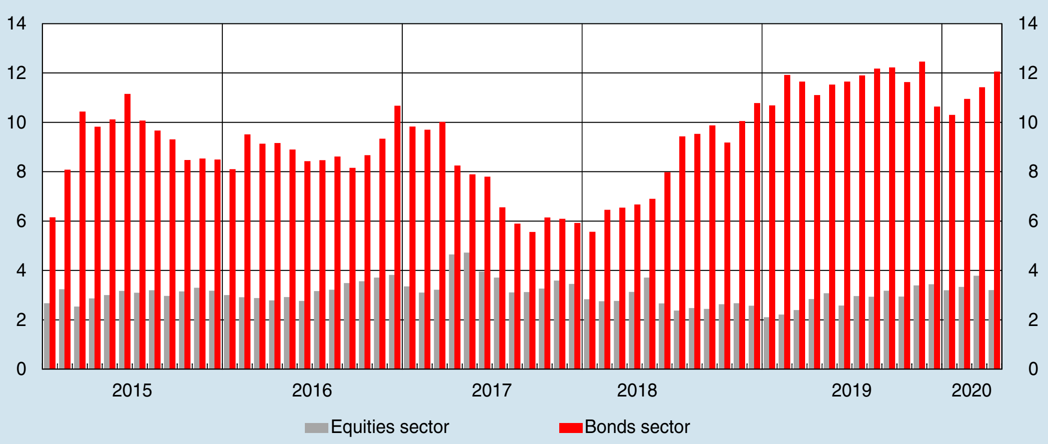


Source: Based on Monte Titoli SpA data.
(1) Right-hand scale.

Last year, the margins collected by Cassa di Compensazione e Garanzia SpA (CC&G) increased further, growing by 30 per cent (Figure 14.9), thanks above all to the increase in the value of guaranteed operations (up by 25 per cent). Volatility remained at low levels and margins were more than sufficient to cover price changes.

Figure 14.9

CC&G: value of the initial margins deposited
(monthly averages of daily data; billions of euros)



Source: Based on CC&G data.

The turmoil in the early months of 2020 did not create any particular problems for CC&G; however, it did cause it to revise upwards the parameters used to calculate the margins on equity securities. This adjustment was made gradually in order to limit any procyclical effects. There was no need to change the parameters for Italian government securities.

The high volatility of the guaranteed markets resulted in margin calls for large amounts, which were paid regularly. The intraday margins on the critical days of 13 and 18 March exceeded €2 billion, compared with an average of €380 million in 2019.

SPECIAL FEATURE

15. THE COVID-19 EPIDEMIC AND THE ECONOMY

Since the early months of 2020, the world has been facing the most serious pandemic of the last 100 years. The severity of the emergency reflects the highly contagious nature of the virus and how lethal it is for those most vulnerable. Its rapid spread has placed sudden and considerable pressure on healthcare systems due to the increase in demand for treatment and the need to place the most serious cases in intensive care. In the absence of vaccines or effective treatments, the countries hit hardest have adopted strict social distancing measures and have restricted people's movement in order to contain the epidemic. The actions taken have slowed down the spread of the infection and have significantly reduced the number of deaths with respect to the epidemic's natural evolution.

The repercussions of the pandemic on the economy and world aggregate demand have been heavy, amplified by the great uncertainty over how it will evolve. The spread of the economic effects has followed that of the contagion, hitting China and other parts of Asia first, then Europe and the United States. The epidemic reached other areas later, such as Latin America, and in many cases, containment measures were only strengthened early in May. The severity of the effects is a reflection of the strictness of the restrictions imposed in each country and of the differences in economic systems. The impact on production has varied depending on the sector: it has been very strong on the restaurant, hospitality and entertainment industries, but more limited on agriculture and on financial and insurance services.

Fiscal and monetary policies have responded swiftly and in an expansionary manner; compared with previous crises, these policies are characterized by being exceptionally broad in terms of the interventions taken or announced, and by the specific nature of the shock, which requires that limits be imposed on production and on consumption, making traditional demand support instruments less effective. In addition to strengthening the healthcare systems, the measures taken everywhere have focused on supporting households' income and firms' liquidity and on guaranteeing orderly monetary and financial market conditions.

The impact of the pandemic on the global economy will persist for quite some time, due also to the time it takes to develop possible vaccines or effective methods of treatment. Some trends that have become apparent in the last few months will affect future economic policies: the possible slowdown in the globalization process, the spread of smart working, digitalization in the provision of many private and public services, and sectoral reallocations.

The spread and evolution of the epidemic

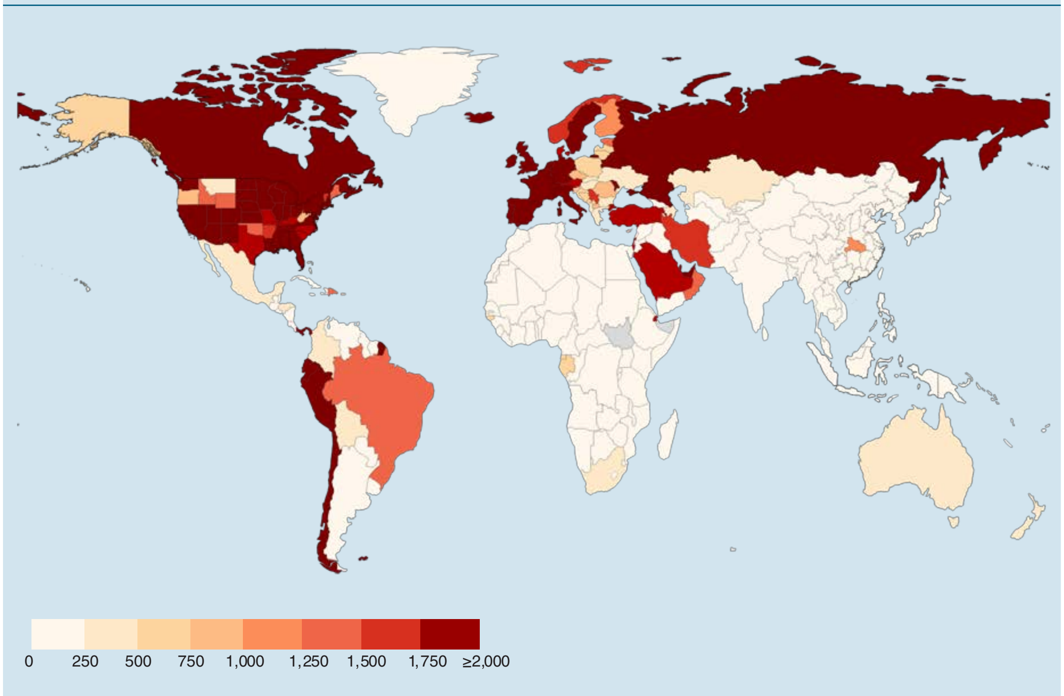
Global spread. – On 12 January 2020, the World Health Organisation announced that a novel coronavirus (SARS-CoV-2), which causes an acute respiratory disease called COVID-19, had been detected in the Chinese city of Wuhan. The infection, probably already in circulation since mid-November of last year, rapidly spread in the Chinese province of Hubei; the drastic containment measures implemented by the Chinese authorities curbed its transmission to other parts of the country. Up until the end of February, in addition to China, the epidemic mainly affected a few countries in South East Asia, Japan and South Korea; in this last country, most cases remained confined to an outbreak in the Daegu metropolitan area.

On 20 February, Italy became the first European country where the virus was found to have spread widely, having made inroads in the preceding weeks due to the high number of carriers who were asymptomatic or who had mild symptoms, which are not easy to distinguish from those of the common flu. Over the course of ten days, when the cases in Italy already numbered over 1,000, the epidemic quickly started to emerge in the rest of Europe and in the Middle East. Outbreaks also occurred in France, Germany, the United Kingdom and Spain one or two weeks later than in Italy. Since mid-March, the virus has also started to spread on a large scale in the United States, especially in New York, which in May was the city with the most cases at global level, and in the other metropolitan areas along the northeast coast. Between the end of March and the start of April, the contagion spread to many other countries, including Canada, Russia, Turkey and those of Latin America.

According to official statistics, the epidemic is present in all countries, albeit with varying degrees of intensity (Figure 15.1). As of 20 May, the total number of COVID-19 cases reported worldwide is almost 5 million, of which 31 and 33 per cent respectively in

Figure 15.1

Spread of the COVID-19 epidemic throughout the world (1)
(number of cases reported per 1 million inhabitants)



Sources: Based on data from John Hopkins University and the World Bank.
(1) For the United States, the individual states; for China, the individual provinces.

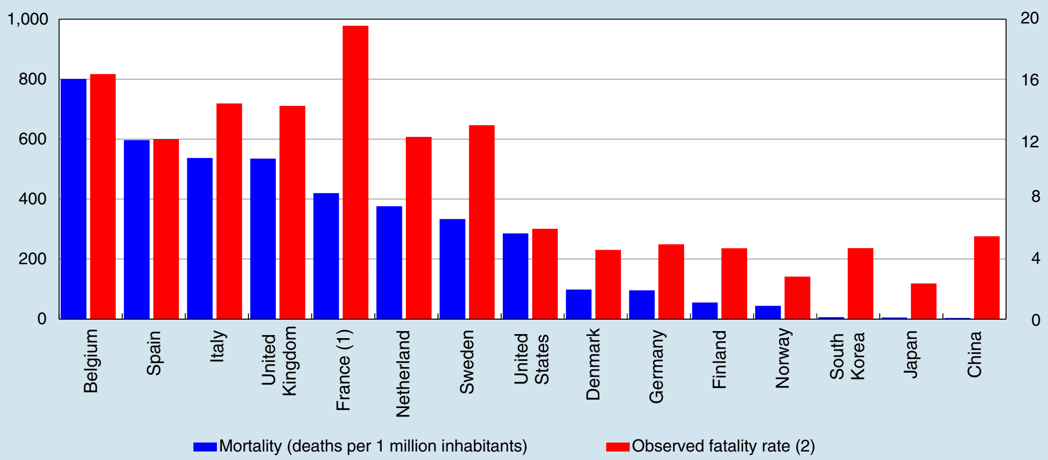
the United States and in Europe. The US has the highest number of persons infected, while Spain, Ireland and Belgium have the highest infection rates in proportion to population.

The official number of deaths attributed to the COVID-19 epidemic as of 20 May amount to almost 330,000 globally; the number is particularly high in Belgium, Spain, Italy, the United Kingdom, France and the Netherlands in proportion to population (Figure 15.2). The number of victims is also relatively high in Sweden, but lower in the other Nordic countries. The observed fatality rate, which is the ratio of the number of deaths to the number of cases reported, exceeds 10 per cent in most European countries, except in Germany, where it is slightly below 5 per cent.

Figure 15.2

Incidence of fatalities attributed to COVID-19

(number of deaths per 1 million inhabitants and per number of cases)



Source: European Centre for Disease Prevention and Control.
(1) For France, while the number of cases reported by the European Centre for Disease Prevention and Control only refer to those confirmed, the number of deaths reported also includes those that could plausibly be attributed to COVID-19, but that have not been confirmed by laboratory testing. If cases that are plausibly COVID-19 are also included in the denominator, the observed fatality rate falls to 15.5 per cent. – (2) Right-hand scale.

It is difficult to make international comparisons, given that countries have different policies for administering tests and different practices for recording deaths. Considering the difficulty of identifying the many cases with mild or no symptoms, the actual fatality rates for the disease could be significantly lower than those based on the number of cases detected.

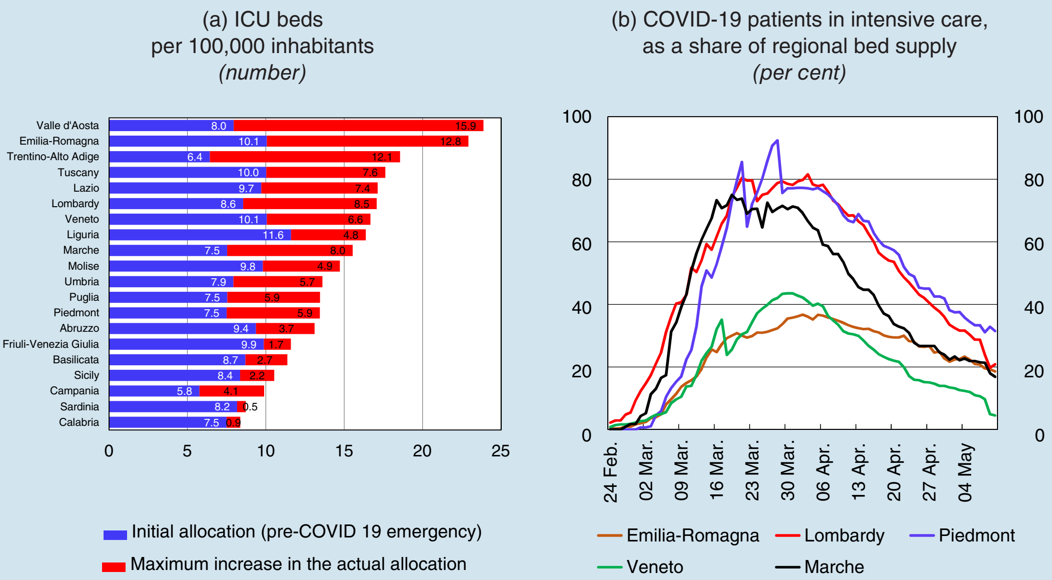
The response of the healthcare system. – In the absence of a vaccine or specific pharmacological treatments, many countries have increased the resources for their healthcare systems and taken measures to improve them. In addition to adding beds to intensive care units to handle the rise in the number of patients, they have implemented new protocols for rationalizing the use of existing resources and have postponed non-urgent surgical procedures. The increased need for healthcare workers has been met by hiring doctors and nurses; retired personnel (e.g. in the UK), doctors undergoing specialized medical training (the Netherlands) or doctors in other specialist fields have been recruited to staff intensive care units. In addition, measures have been put in place to increase the supply of personal protective equipment for healthcare workers and the population at large. These include:

subsidies for production (Japan) or conversion of manufacturing facilities (UK); the simplification of administrative procedures for imports (France); centralized purchasing (Germany); and regulating the selling price of certain devices (masks in France).

In Italy, as in other countries, the worst-affected regions suffer from critical shortages of beds and qualified staff in intensive care units. Before the start of the epidemic, the number of beds in these units was 8.6 per 100,000 inhabitants, in the mid-range among the OECD countries. Their number ranged from a minimum of 5.8 per 100,000 inhabitants in Campania to a maximum of 11.6 in Liguria (Figure 15.3.a), with a slightly higher average in the Centre and North of the country than in the South. The distribution of healthcare workers in hospitals and public health facilities (610,000 workers, of whom 12,000 are anaesthetists and resuscitators, specialists involved in the treatment of acute respiratory syndrome) varied greatly across regions, reflecting specific characteristics of regional health systems, such as the importance of accredited private facilities.

Figure 15.3

Allocation and occupancy of ICU beds in Italy's regions (1)



Sources: Based on data from the Ministry of Health, Istat and the Prime Minister's Office, the Civil Protection Department and on information gathered by the Bank of Italy's branches.
(1) The data on new intensive care unit beds, created to handle the emergency, were collected by the Bank of Italy's branches based on available official documents and published news items, which may not fully reflect the number of ICU beds available. This information is included in the calculations as of the date on which the beds are registered; this date is not necessarily when the beds began to be used. Some of the COVID-19 patients represented in the graph may have been treated outside of their home regions. Inter-regional transfers have been coordinated by the remote centre for the management of emergency health services (Cross), started up by the Civil Protection Department to alleviate the pressure on the ICU units of the regions hit the hardest by the contagion.

At the onset of the epidemic, both the central and regional governments quickly introduced measures to address resource shortages.[1] With Decree Law 34/2020 (the

[1] For more information, see the Bank of Italy's Report prepared for the Fifth Committee (Economic Planning and Budget), 'Draft Law A.S. 1766, conversion into law of Decree Law 18/2020, setting out measures to strengthen the national health service and provide economic support for households, workers and firms in connection with the COVID-19 emergency', Senate of the Republic, Rome, 25 March 2020 (only in Italian); L. Aimone Gigio, L. Citino, D. Depalo, M. Francese and A. Petrella, 'Tackling the emergency. The scaling up of productive capacity in the Italian health system: progress overview', Banca d'Italia, *Note Covid-19*, 21 April 2020.

‘Relaunch’ Decree) in May, the Government further expanded the availability of healthcare services (local health services and hospitals) mainly by recruiting new staff and making more intensive care unit beds available.

Many regions, especially those where the most cases have been reported, have essentially doubled the number of intensive care beds, including by using temporary solutions; some have planned further increases in the event of a resurgence of the epidemic. Along with the containment measures, increasing the number of intensive care beds has helped the country make it through the most critical phases, even in the most severely affected regions (Figure 15.3.b). The national health service has hired over 20,000 new employees, just under a quarter of whom with permanent contracts: the resulting increase in public healthcare workers (around 4 per cent) has more than made up for the decrease reported in the last five years (1.0 per cent). The Civil Protection Department has also distributed an enormous quantity of protective gear and swabs for conducting diagnostic tests, especially in the worst-hit regions in the North, adding to the procurement efforts of the regions.

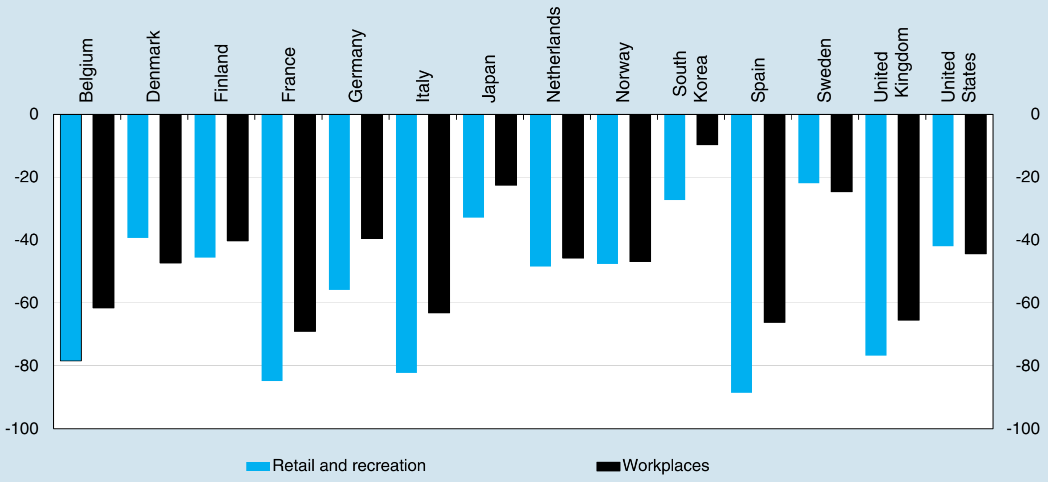
Containment measures. – Countries have sought to curb the transmission of the virus through policies aimed at reducing social contact and isolating the most-affected areas. The first drastic restrictions on people’s mobility were imposed by the Chinese authorities in the Hubei province. Other countries initially imposed entry restrictions and quarantine requirements on visitors from China and other areas deemed at risk; however, these measures failed to prevent the spread of the epidemic, due in part to their inconsistent application and the difficulty in identifying asymptomatic carriers.

To stem the contagion and ease the pressure on healthcare systems, most of the countries stricken by the epidemic have introduced physical distancing measures: shutting down schools and many business activities, cancelling public events, banning group gatherings, restricting internal travel, and forbidding persons from leaving their homes unless it is essential. Measures have been tighter in some countries, while in others they have been less strict or limited to the hardest hit areas. In Italy, the measures were initially imposed in the areas where the first outbreaks occurred, but were then extended across the entire country with the lockdown ordered on 9 March. The restrictions were eased first on 4 May and then on 18 May, allowing shops, personal care services and restaurants to re-open, with appropriate precautions in place.

The limitations have reduced community mobility in line with their degree of severity. For the second week following the issuance of stay-at-home orders in Belgium, France, Italy, the United Kingdom and Spain, Google Maps data indicate that mobility for recreational purposes or shopping fell by approximately 80 per cent compared with the averages prior to the lockdown, while that for commuting to and from work decreased by more than 60 per cent (Figure 15.4). In Germany, the Netherlands, the United States and some Nordic countries, mobility decreased by around 40 per cent. In South Korea, Japan and Sweden, where blanket closures and generalized restrictions were not imposed at national level, the decrease was smaller.

Figure 15.4

Change in mobility following the imposition of the lockdown (1)
(percentage change compared with the historical average in the second week following the imposition of restrictions)



Source: Covid-19 Google Community Mobility Reports.
(1) In the case of Sweden, where no lockdown was imposed, the reference date is 13 March, when the government issued a series of recommendations to limit people's movements. The reference date for South Korea is 24 February, when the decision was made to close schools and suspend activity for 180,000 workers; for Japan, it is 7 April, when a state of emergency was declared.

The lockdown measures and the consequent reduction in mobility were effective in containing the spread of the epidemic. In all countries, the contagion began to decline 16-20 days after the start of the lockdowns, in line with the incubation periods for the disease and the detection and reporting of cases (Figure 15.5). In Italy, according to the most common epidemiological models, in the absence of containment measures, daily infections could have been 15 to 40 times higher than during the peak days in March, with dire social and economic consequences.

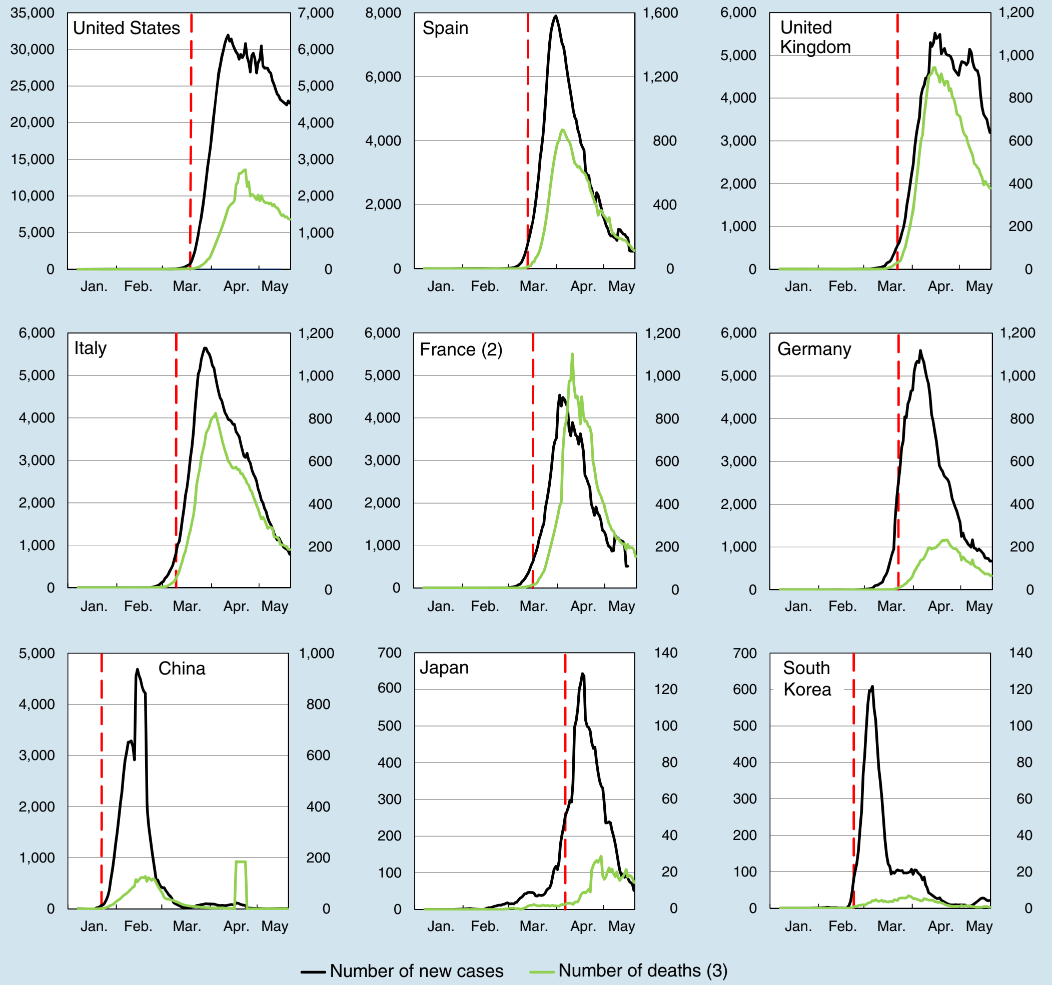
Some countries have contained the epidemic by using large-scale testing and extensive contact tracing, making it possible to quickly identify and isolate other possible cases. For example, South Korea and some other Asian countries have improved their ability to reconstruct social contacts by supplementing the traditional method of individual interviews with advanced technological solutions, including exposure notification apps built around features that can detect at low cost and in real time when two or more electronic devices are in proximity. To be effective, these tools need to achieve high rates of adoption and be incorporated into a comprehensive health monitoring system that is able to swiftly detect those who have contracted the disease (including asymptomatic cases), to provide testing to those who receive a notification of exposure and to prevent the uploading of false data to the apps. How the sensitive data collected by the devices are handled and whether the use of these apps could limit, even partially, freedom of movement, raise tricky questions about balancing the right to health and other individual rights, starting with an increasingly central one as the world becomes more digital, namely the right to privacy. In many countries, these issues have not yet been fully resolved.

In Europe, the use of these technological solutions is currently still in the testing phase. The Italian Government announced that these apps could be used, on a

Figure 15.5

New COVID-19 cases and deaths in select countries (1)

(7-day moving averages of new cases and reported deaths)



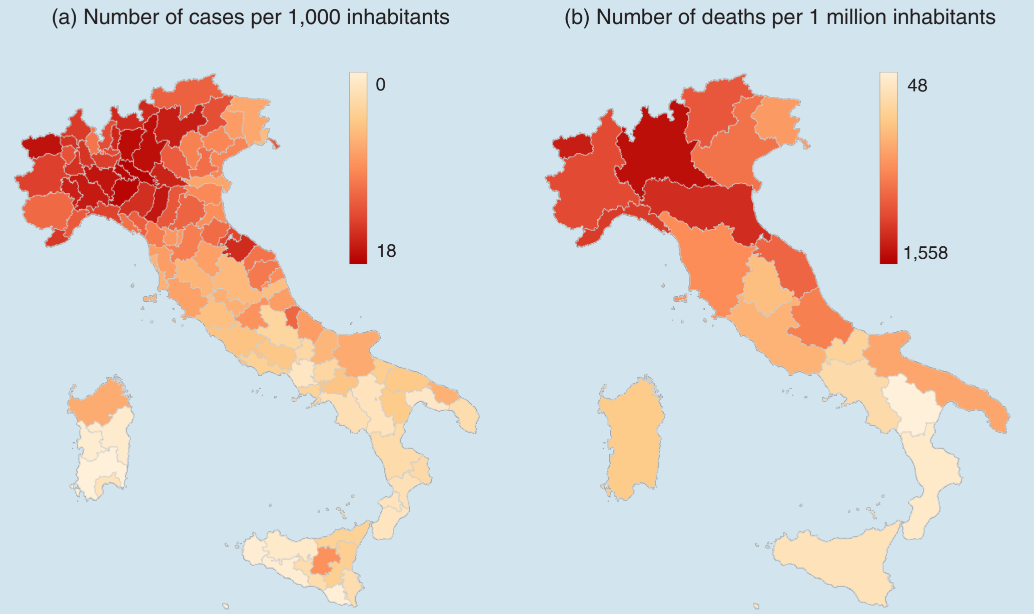
Source: European Centre for Disease Prevention and Control.
(1) The dashed vertical lines indicate the dates on which national lockdowns were imposed. In the case of South Korea, where no lockdown was imposed, the reference date is 24 February, when the decision was made to close schools and suspend activity for 180,000 workers; for Japan, it is 7 April, when a state of emergency was declared. – (2) The number of deaths reported also includes those that could plausibly be attributed to COVID-19, but that have not been confirmed by laboratory testing, while the number of cases only refers to those that have been confirmed. – (3) Right-hand scale. For all countries, the right-hand scale (number of deaths) is one fifth of the left-hand scale (number of cases); if the two curves are coincident, apart from a time lag, the observed fatality rate is 20 per cent.

voluntary basis, after the relaxation of the stay-at-home orders, which began on 4 May. During this stage, to avoid a further uncontrolled spread of the epidemic, which is still possible due to the high percentage of the population that is not immunized, it will be important to closely monitor new outbreaks through testing, tracing and rapid isolation of cases found. The effectiveness of these policies will determine whether it will be possible to keep large swathes of the economy open safely and to avoid as much as possible new lockdowns on a national scale.

The outbreak in Italy. – The epidemic developed unevenly across Italy. From the epicentre in Lombardy, the infection initially spread to the neighbouring provinces of

Figure 15.6

Geographical distribution of reported COVID-19 cases and deaths



Sources: The Prime Minister's Office and the Civil Protection Department.

Veneto, Emilia-Romagna, Piedmont and Liguria, due in part to the close links between the production systems of these regions. In the weeks that followed, the epidemic gradually spread to a large part of the North. The containment measures of 9 March were introduced when the spread of the disease was still in the early stages in the central and southern regions, thereby limiting the rate of infection in these areas (Figure 15.6.a). Despite having different starting points, after the containment measures were introduced, the epidemic developed in a fairly similar manner in the various regions (Figure 15.7). The number of new infections detected reached a peak around the end of March and then decreased slowly, with the exception of Piedmont, where it has been declining since mid-April. Mortalities have lagged a few days behind infections.

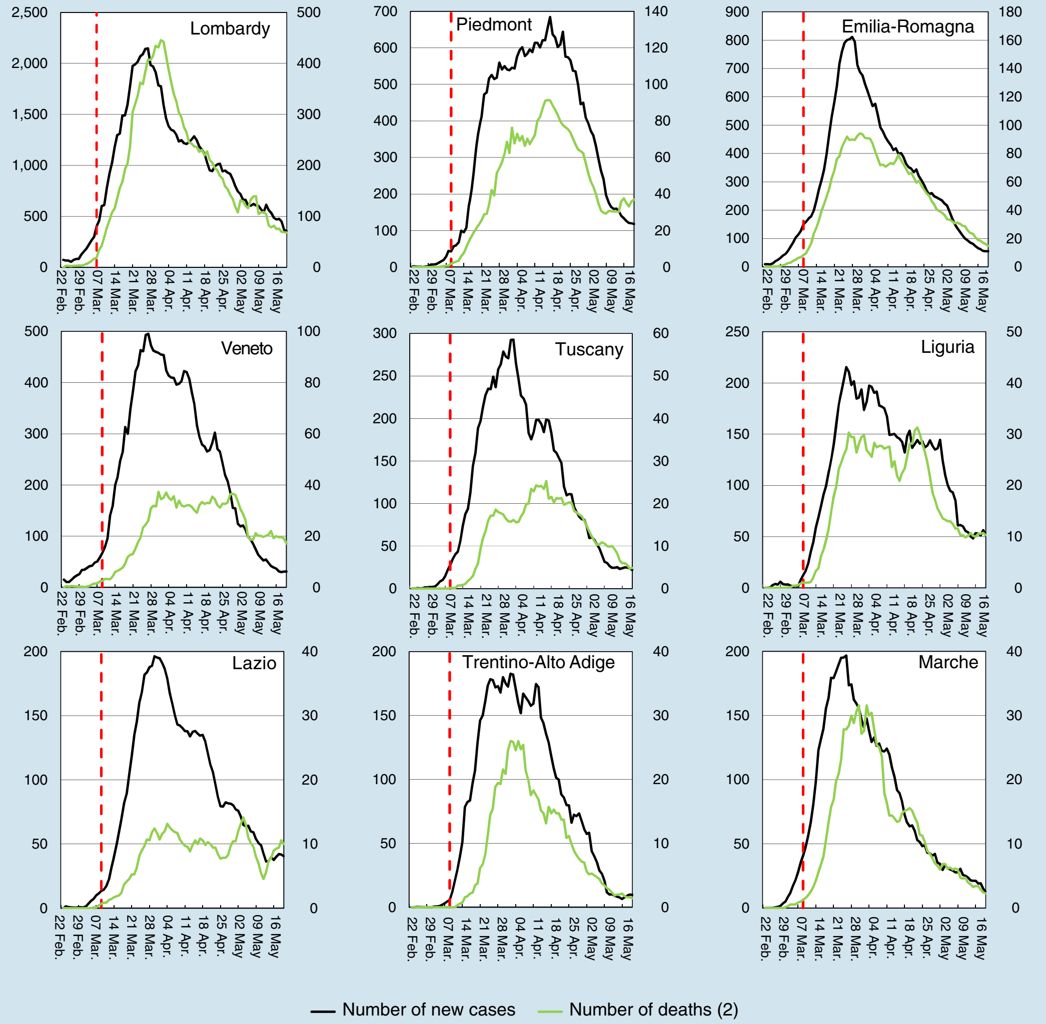
The mortality rate differs greatly from region to region. The observed fatality rate is above the national average in Emilia-Romagna, Liguria and Marche and especially in Lombardy; it is considerably lower in Campania, Lazio, Tuscany, Veneto and in the other regions of Southern Italy (Figure 15.8). Regional variability could reflect the fact that the actual lethality of the disease varies due to the pre-existing characteristics of the different areas (demographic composition, state of health) and to the circumstances surrounding the epidemic (intensity of the outbreak, ability to isolate and monitor persons most at risk, number of intensive care units). It may also be affected by the measurement problems mentioned earlier, in particular the underestimation of the number of cases (and deaths) where the epidemic was more intense, due to the difficulty in administering a sufficient number of tests: in this situation, most of the cases reported involved patients with more severe symptoms.

According to data published by Istat for 6,866 Italian municipalities (out of a total of 7,904), the mortality of persons aged 50 and over rose considerably

Figure 15.7

New COVID-19 cases and deaths in the most severely hit regions (1)

(7-day moving averages of new cases and reported deaths)



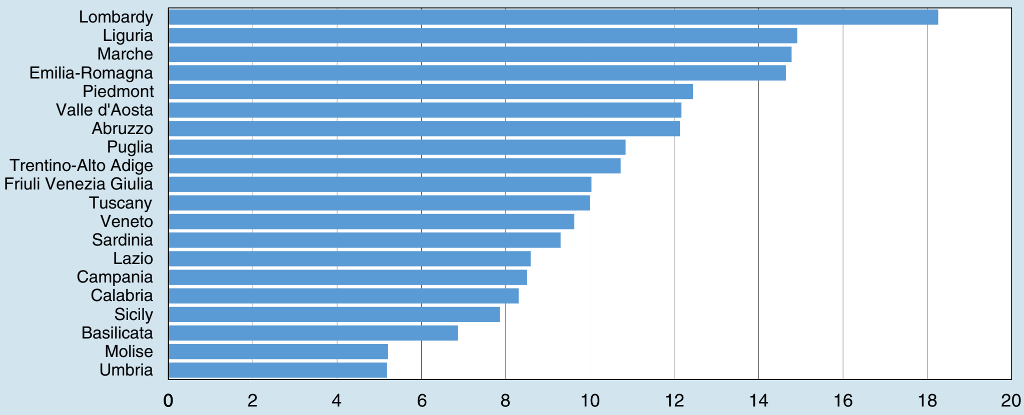
Sources: The Prime Minister's Office and the Civil Protection Department.
(1) The dashed vertical lines indicate the dates on which regional lockdowns were imposed (7 March for Lombardy; 9 March for the other regions). – (2) Right-hand scale. For all regions, the right-hand scale (number of deaths) is one fifth of the left-hand scale (number of cases); if the two curves are coincident, apart from a time lag, the observed fatality rate is 20 per cent.

between 21 February and 31 March, compared with the average for the previous five years. The increase was very strong in Lombardy, high in Emilia-Romagna, Liguria, Marche, Piedmont, Trentino-Alto Adige and Valle d'Aosta, and lower in Veneto and Friuli Venezia Giulia (Table 15.1). In regions where the spread of the infection has been limited, mortality is similar to and sometimes below the average for the previous five years, possibly as a result of the mild winter, which may have reduced the incidence of seasonal diseases, and the decline in deaths attributed to other causes (e.g. road accidents), which may partly be a consequence of the lockdown. In the regions where the epidemic was more severe, the number of deaths from COVID-19 is well below the estimated excess mortality for the segment of the population aged 50 and over.

Figure 15.8

Observed fatality rate attributed to COVID-19 in Italy's regions

(ratio of number of deaths to number of reported cases; per cent)



Sources: The Prime Minister's Office and the Civil Protection Department.

Table 15.1

Excess mortality among people over 50 years of age and deaths attributed to COVID-19 (1)

(per cent, number and percentage change)

REGIONS	Percentage of the population included in the sample	Excess mortality	Change in mortality	Change in mortality rate per 1,000 inhabitants	Deaths attributed to COVID-19 in the municipalities sampled	Difference between excess mortality and deaths attributed to COVID-19	Ratio of excess mortality to deaths attributed to COVID-19
Piedmont	93.3	2,313	39.2	1.2	1,018	1,295	2.3
Valle d'Aosta	91.2	80	48.3	1.6	70	10	1.1
Lombardy	97.1	16,086	147.0	3.7	8,362	7,724	1.9
Trentino-Alto Adige	92.4	584	54.6	1.5	281	303	2.1
Veneto	87.2	1,032	18.8	0.5	511	521	2.0
Friuli Venezia Giulia	73.4	148	8.7	0.3	57	91	2.6
Liguria	92.3	917	37.3	1.3	368	549	2.5
Emilia-Romagna	94.6	3,101	54.4	1.6	1,890	1,211	1.6
Tuscany	89.1	524	10.5	0.3	226	298	2.3
Umbria	93.8	47	3.9	0.1	37	10	1.3
Marche	83.4	750	37.3	1.3	328	422	2.3
Lazio	80.9	-277	-4.3	-0.1	158	-435	-1.8
Abruzzo	85.2	219	12.8	0.4	64	155	3.4
Molise	73.5	30	6.7	0.3	4	26	7.5
Campania	79.3	63	1.0	0.0	79	-16	0.8
Puglia	85.0	361	8.2	0.2	118	243	3.1
Basilicata	75.0	11	1.5	0.1	5	6	2.2
Calabria	77.0	81	3.4	0.1	18	63	4.5
Sicily	73.4	-43	-0.7	-0.0	77	-120	-0.6
Sardinia	75.6	249	13.0	0.4	39	210	6.4

Source: Istat and the Italian National Institute of Health (Istituto superiore di sanità), 'Impatto dell'epidemia Covid-19 sulla mortalità totale della popolazione residente. Primo trimestre 2020', 4 May 2020.
(1) The sample includes 6,866 Italian municipalities out of a total of 7,904. The reference period is from 21 February to 31 March 2020. Excess mortality and the change in excess mortality are calculated by comparing them with the average number of deaths during the same period in the previous 5 years.

The channels of transmission of the pandemic to the real economy

The economic shutdown has put a serious squeeze on China's foreign trade in goods, exacerbating the decline in world trade, as a result of its central position within global value chains. The impact of the supply disruption has been significant for Italian companies, which import almost 6 per cent of their intermediate goods from China (see Chapter 10, 'Competitiveness, foreign trade and the balance of payments').

The dramatic drop in international movement has directly affected transport services and tourism flows, interrupting the expansion of the component that, in recent years, had contributed most significantly to the growth in world trade. Based on data from the intergovernmental organization that coordinates air traffic at European level (Eurocontrol), in April and in the first half of May, total air traffic contracted by over 90 per cent compared with 2019. Most of the trade fairs scheduled for the spring were cancelled or postponed to the second half of the year, in Italy as in the rest of Europe, with potentially lasting negative effects on international links between businesses. The collapse of tourism has a very profound impact on the Italian economy: the World Travel and Tourism Council estimates that for 2017 – considering the indirect effects as well – the tourism sector represented 13.2 per cent of Italian GDP, compared with 14.6 per cent in Spain, 9.5 per cent in France and 8.6 per cent in Germany (see *Economic Bulletin*, 2, 2020). Since foreign tourism accounts for about one third of the total, the recessionary effects in Italy will continue to be considerable as long as international movement continues to be inhibited by regulations or by the perception of a higher risk of contagion in international travel.

The implementation of containment measures has amplified the decline in activity in sectors deemed 'non-essential' and that are therefore subject to lockdown in many countries; by turning to smart working, it has been possible to limit the loss of value added (see Chapter 6, 'Firms'). The closures have had a widely varying impact across sectors: for some, such as agriculture and financial and insurance services, it has been small; others, in particular catering, hospitality and entertainment services, have seen their turnover fall to almost zero.

Since the first signs of crisis, firms have made a significant downward revision of planned investment expenditure, which could lead to a considerable decline in the near future. The scaling back seems to be higher in construction and non-commercial services. Firms' liquidity needs have risen considerably (see the box 'The financial support measures for firms in response to the pandemic', Chapter 7). The measures introduced by the Government aim to prevent liquidity shortages from quickly turning into insolvency crises.

The impact of the crisis on employment has been substantial in all countries. In Italy, the halting of non-essential activities affected approximately one third of persons employed. Recourse to wage supplementation (*Cassa integrazione guadagni* or CIG), extended on an exceptional basis to all firms, should make it possible to protect permanent positions by reducing per capita hours worked (see Chapter 8, 'The labour market'). The decline in labour demand involved all the professional groups; the intellectual professions and white-collar jobs, which can more often be performed remotely, suffered less. The spread of the infection would probably have led to a steep drop in labour input even had business activity not been locked down, if many workers had fallen ill or been absent from the workplace to avoid infection or to care for sick family members.

The pandemic has had real and financial effects on households, as they are affected both by the fall in employment and income from work and by falling stock and bond prices, which has eroded their financial wealth. The effects on consumption expenditure may be substantial, notwithstanding the restrictions on shopping linked to containment measures. Disposable income has fallen to a greater extent among low-income households, for which the share of individuals employed in sectors subject to lockdown or other restrictions on business activity or in jobs that cannot be performed remotely is higher. The impact on income inequality should be partially eased by social safety nets, which have been extended to categories of persons traditionally excluded.

The lack of liquid financial assets among lower-income households means that an income shock could result in a significant increase in the number of households unable to maintain an acceptable standard of living.[2] Using the latest European Household Finance and Consumption Survey (HFCS), referring to 2016, it is possible to make an international comparison of the share of people in different income groups that are capable of living at the conventional poverty threshold by drawing only on their liquid financial assets (Figure 15.9). In Italy, among households where the reference person is less than 65 years old and whose income falls in the first income quantile group of the distribution of equivalized disposable income, about 80 per cent do not have sufficient liquid savings to remain above the poverty threshold for more than nine weeks. The corresponding share is higher in Spain (approximately 85 per cent), similar in Germany and lower in France (approximately 75 per cent). In the middle three quantile groups of income distribution, this share is lower in Italy than in other countries (35 per cent compared with figures of above 40 per cent).

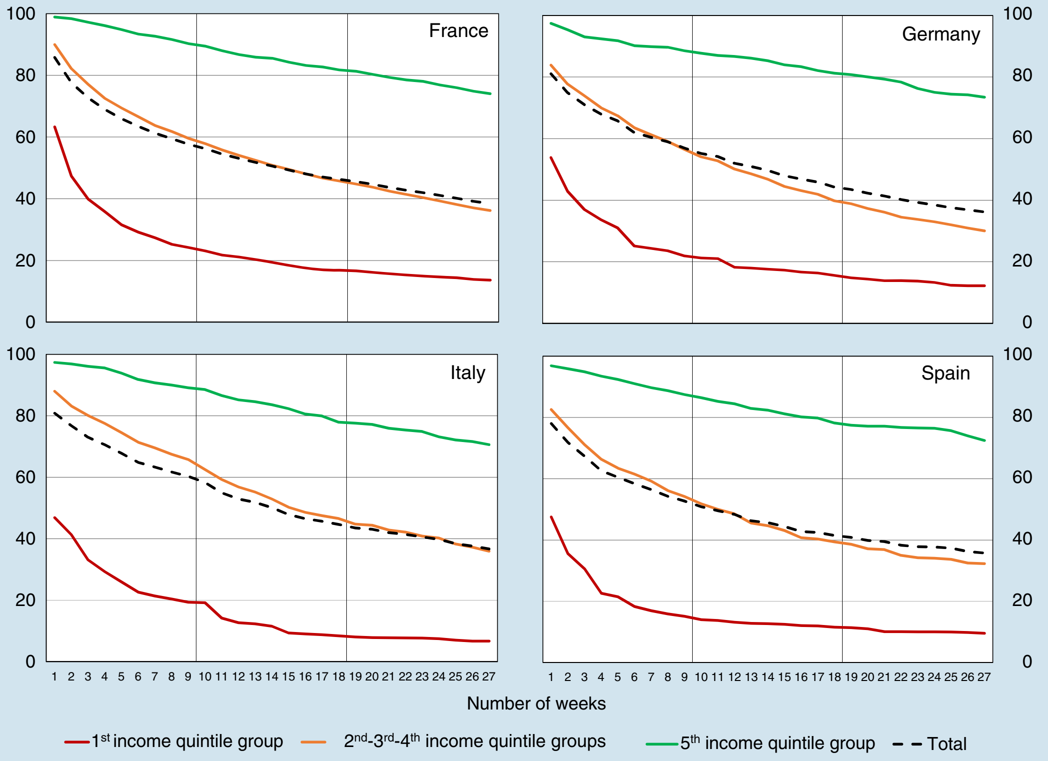
The crisis triggered by the pandemic has had negative consequences for younger people especially. As in recent recessions, the drop in hiring and the non-renewal of temporary contracts have hit particularly hard those who have recently joined the labour market. When schools and universities were closed, distance-learning solutions were implemented to fill the gap. However, the use of these arrangements has not been uniform across the country and has raised serious issues concerning equal access to education, since students living in households that do not have the necessary tools (computers, internet connection), or a suitable environment to follow distance-learning lessons, are shut out of the process. The potentially permanent impact on human capital accumulation and distribution may require action to provide all young people with the same opportunities and to ensure the acquisition of the skills needed for full integration into society and the world of work.

The economic effects of the epidemic may be amplified by a reigniting of financial tensions. These tensions worsened rapidly, peaking at around mid-March, owing to the spread of the epidemic in Europe and the United States. The major global stock market indices fell and investors' risk aversion jumped; expected volatility reached a peak similar to that recorded during the most severe phase of the global financial crisis (see Chapter 14, 'The money and financial markets'). Expectations of a rapid

[2] R. Gambacorta, A. Rosolia and F. Zanichelli, 'The economic conditions of European households as a result of the pandemic', Banca d'Italia, *Note Covid-19*, 2 April 2020.

Figure 15.9

Share of the population with sufficient liquid financial assets to withstand extreme negative income shocks: persons in households in which the main income earner is under age 65 (1)
(per cent)



Source: Based on HFCS-UDB 3.0 data.
(1) Each curve shows the share of persons who live in households with sufficient liquid assets to maintain their standard of living at the level of the poverty threshold for the number of weeks indicated on the horizontal axis in the event of complete loss of income. For each country, individuals are divided into five income groups based on the quintiles of the national distribution of equivalized incomes (OECD-modified scale) among the population; the poverty threshold is equal to 60 per cent of median equivalized income (gross of taxes). Liquid assets include deposits, listed shares, corporate bonds and government securities. The data refer to 2016 for France, Germany and Italy, and to 2014 for Spain.

worsening of public finance balances and of a sizeable increase in government bond issues in most countries have led investors to demand higher sovereign risk premiums. The tensions have been contained as a result of central bank actions and announcements of economic policy measures, but conditions in many markets remain fragile.

Economic policy stance

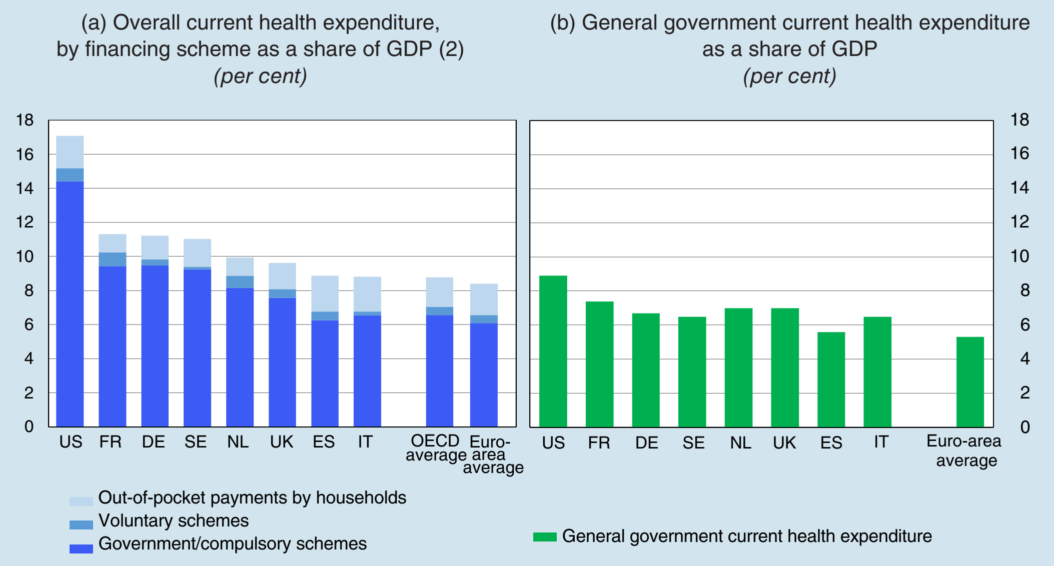
Traditional measures for supporting demand for consumption and investment could not be leveraged in a standard way to shape the economic policy response; actions have had to be designed to take account of the exceptional circumstances in which the production sectors have had to operate.

In all countries, fiscal and monetary policies have reacted quickly in an expansionary manner and with exceptionally large-scale measures. The different scales of the interventions in various countries reflected differences in their economic and financial situations when the health emergency began, the extent of the crisis and the room for manoeuvre. In general, measures everywhere have focused on strengthening healthcare systems, supporting households' income and firms' liquidity and guaranteeing orderly monetary and financial market conditions. In Italy and at European Union level as well, economic policy has developed along these lines, with far-reaching actions.

The intensity of the epidemic required additional resources for and organizational adjustments to healthcare systems, even in the wealthiest countries where these systems are already advanced and well-funded, although they differ in the amount of resources committed and the organizational models followed. For example, in Germany and France, overall spending on healthcare is around 11 per cent of GDP (Figure 15.10). Expenditure in Italy is smaller (slightly less than 9 per cent) and broadly in line with the average for the euro area and the OECD countries, with results in terms of population health indicators that are among the best for the advanced countries. Although general government spending is the main component in almost all countries, it is slightly higher in Italy and the United Kingdom (where healthcare is built around a national health system) compared with France and Germany. Total expenditure is only one factor to consider in assessing the efficiency and effectiveness of the delivery of healthcare services. In addition to financing arrangements (use of tax revenues, compulsory or voluntary insurance schemes, patients' out-of-pocket expenditure), much depends on the institutional structure (degree of decentralization, the role of the private sector and so on) and organization (degree of autonomy in the allocation of resources, volume and type of services to be guaranteed under normal and emergency conditions).

Figure 15.10

Health expenditure in the main euro-area and OECD countries (2017 or 2018) (1)



Sources: Based on data from the OECD (Health Data, *A System of Health Accounts*) and Eurostat (*A System of Health Accounts* and COFOG data).
(1) Country codes: US=United States; FR=France; DE=Germany; SE=Sweden; NL=Netherlands; UK=United Kingdom; ES=Spain; IT=Italy. – (2) Based on the statistical standards set out in *A System of Health Accounts 2011,* the government/compulsory schemes category includes all those for which participation is automatic and universal for all citizens/residents (e.g. national health services) or for which participation is mandatory by law or regulation for all of the population or for defined groups within the population (which may be the case for public health insurance or compulsory private insurance). Instead, participation in voluntary schemes is left to the discretion of individuals or of firms (e.g. individual- or group-based voluntary health insurance). For the United States, for which 2017 is shown (after the Affordable Care Act came into force in 2014), the government/compulsory schemes category includes Medicaid, the Indian Health Service, the Substance Abuse and Mental Health Services Administration, Medicare, the Children's Health Insurance Program, the Veterans Health Administration, the Department of Defense health insurance and Workers' Compensation and other government programmes, as well as insurance offered through employers or purchased individually.

The purpose of the support measures for households was to soften the fall in incomes and the unfavourable effects on employment. While they reflected the differences in existing income support schemes across countries, the measures focused primarily on encouraging firms to retain their employees (such as by strengthening the wage supplementation scheme in Italy) and on assisting self-employed persons whose business activity had been blocked or severely limited by containment measures. The EU supported these objectives by introducing a temporary instrument to mitigate unemployment risks due to the emergency (SURE), which was approved by the European Council at the end of April and adopted on 19 May by the Council of the EU (see Chapter 2, 'The economy and fiscal policies of the euro area'). The instrument will be operational as soon as all the countries have provided their guarantees.

The immediate measures in support of firms focused on ensuring that they continued to have sufficient liquidity. While their productive and institutional structures differ, in pursuit of this objective countries shared the approach of granting public loans and guarantees and adjusting certain payments, including tax and social security contributions. At the same time, in countries where measures have been implemented primarily through the banking credit channel, the degree of corporate indebtedness could increase in the medium term especially if, as is likely, some of the losses suffered will not be recovered. Increasing leverage could make the financial structure of firms more vulnerable,[3] weakening their capacity to carry out investment plans and delaying their recovery. Many countries have either launched or are considering policies to directly compensate for losses through public transfers or to strengthen capitalization.

Monetary policies have been exceptional in scope and strongly expansionary. In the main advanced countries, central banks acted to avoid a sudden drying-up of liquidity and interruptions in credit flows that could have worsened the effects of the crisis; this includes measures taken by decision of the ECB Governing Council. The actions taken by the central banks have been extensive and have involved the various available instruments: reference rate cuts, asset purchase programmes and opening lines of credit.

The global scale of the crisis has also been reflected in the activities of international financial institutions to enable all countries to respond adequately to the health emergency, to support productive sectors and to reignite growth. As a result of the emergency sparked by the epidemic, more than 100 member countries have requested access to IMF financing; funds have already been allocated for about half of the requests. In order to cope with increased demand for its financing, the IMF has expanded and reviewed the instruments at its disposal. The World Bank has announced initiatives to help out low-income countries in particular, and has encouraged, along with the IMF and with the approval of the G20, all bilateral official creditors to suspend debt service by these countries until the end of 2020. The G20 has also endorsed an action plan to tackle the health and economic emergency in a coordinated way.[4]

[3] G. Gobbi, F. Palazzo and A. Segura, 'Financial support measures for firms post COVID-19 and their medium-term implications', Banca d'Italia, *Note Covid-19*, 15 April 2020; it also appeared with the title 'Unintended effects of loan guarantees during the COVID-19 crisis' on VoxEU.org.

[4] G20, *Annex I: G20 Action Plan. Supporting the global economy through the Covid-19 pandemic*, 15 April 2020.

Economic considerations in the medium term after the epidemic

The time it takes and the ways in which the economic effects of the COVID-19 pandemic will be overcome are very difficult to predict, especially given the uncertainty about the time needed for a vaccine to be released or an effective treatment to be found and for them to be made available to the entire world community. Some trends that emerged in the first few months of 2020 – the possible slowdown in international economic integration, the faster digitalization of the economy and the different sectoral dynamics – could have a longer-term impact, affecting future economic policies.

International economic integration. – The recent experience could slow down the process of global economic and financial integration, accelerating a trend already partly under way in recent years. The pandemic has put a spotlight on the fragility of the current structure of global production chains that employ just-in-time planning models. A more prudent assessment of the risks stemming from such a close interdependence between economies could trigger more vertical integration and a shortening of global value chains, at the cost of forfeiting some of the benefits of production specialization and the diversification of supply networks.

State intervention could also expand into sectors that up to recently have been considered non-strategic, through direct holdings, the use of special powers and stringent controls on foreign investment, partly restricting the freedom to conduct business and the movement of goods and capital. National security considerations, such as dependence on imports for the provision of basic necessities or goods that are deemed strategic (e.g. food, energy, medicine, technology), could exacerbate the trend towards the reintroduction of trade barriers. Restrictions on the movement of people, which are now justified by the need to limit contagion risks, could lead to a change in individual behaviour or a tightening of immigration control policies. These dynamics could be mitigated by a renewed commitment to international cooperation.

In a context of weak trade between different geographical areas, membership of the European Union and the euro area will continue to be central to supporting growth by focusing, to a greater extent than in the past, on domestic demand and on enhancing member states' growth potential. Given the strong integration of the various economies, policy coordination could help the EU countries return to economic growth.

The digitalization of the economy. – In all countries, the use of digital technologies has been essential to mitigate the depressive effects caused by the need to prevent contagion (see Chapter 12, 'Business activity regulation and the institutional environment'). Smart working methods have been fully exploited, with potentially lasting effects on work organization, especially for white-collar jobs and the intellectual professions.

The change in consumption patterns associated with the need for social distancing, which will linger long after the restrictions imposed by the lockdown measures have been lifted, could benefit online purchasing channels at the expense of traditional distribution channels. The predictable rapid expansion of e-commerce could also foster the development of new entrants with innovative business models. The increasing use of remote interaction could also accelerate the ongoing restructuring of financial intermediaries and support the growth of online platforms for the distribution of financial services; it could reshape how general government delivers services to the public and lead to a rebalancing of in-class and distance learning in schools and universities.

If properly regulated, these developments could have positive effects in terms of reconciling work and family life, expanding consumption opportunities and providing easier access to services, but may also exacerbate the problem, already in existence prior to the pandemic, of the concentration of market power in the hands of a few large players, with significant implications for allocation and distribution, and with spillover effects on employment. These trends would also have an impact on, for example, the organization of transport networks, the property market and long-term phenomena, such as global warming and land and environmental management, creating opportunities for orienting the structure of economic systems towards more sustainable paths.

Sectoral reallocation. – The economic consequences of the pandemic have been different across sectors, both in the short term and in terms of possible future developments.

The sector most affected at this stage is tourism, in particular international tourism. It will only recover very gradually, given the difficulty of lifting restrictions on movement and the time needed to restore consumer confidence. In the coming months, Italy could find that its production capacity is under-utilized; in the longer term, the country can rely on its rich artistic and natural heritage, but it will have to prove that it is safe from a health standpoint, if tourist flows are to shift from countries perceived as more risky to those seen as being safer.

The retail sector, which had already been undergoing a restructuring, may also be affected by the change in distribution models, as already mentioned. Some manufacturing sectors could see a significant decline in demand, which might be long lasting; for example, shipbuilding, owing to the performance of the cruise ship sector, and the aeronautics sector, given the contraction in air traffic. The automotive sector, which has been moving towards electric vehicles, could find that its capacity to fund planned investment projects has fallen. How the investment cycle evolves will have an impact on the machinery sector, which is central to the Italian economy.

These structural adjustments will require a significant reallocation of the labour force. Retail workers, accommodation and food services, transport and personal services, which have been hit hard by the crisis, account for over 40 per cent of persons employed by firms with fewer than 10 employees and about one third are self-employed. The current emergency has revealed the limitations of the social safety net, prompting the introduction of extraordinary measures. In the medium term, it will be important to assess whether existing instruments will be able to safeguard the minimum income levels of persons affected by reallocation, including the self-employed, by ensuring that they have the necessary financial coverage. It will also be important to ensure that the labour force acquires the professional skills for which there will be increasing demand, and that public policies promote the accumulation of adequate human capital and life-long learning.

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* * *

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