BANCA D'ITALIA
EUROSISTEMA

Economic Bulletin

January 2023

1 | 2023

BANCA D'ITALIA
EUROSISTEMA

Economic Bulletin

Number 1 / 2023
January

Other economic publications of the Bank of Italy:

Annual Report
Account of the main developments in the Italian and world economy during the year

Financial Stability Report
Six-monthly analysis of the state of the Italian financial system

Economie Regionali
A series of reports on the regional economies

Temi di Discussione (Working Papers)
A series of empirical and theoretical papers

Questioni di Economia e Finanza (Occasional Papers)
Miscellaneous studies on issues of special relevance to the Bank of Italy

Newsletter
News on recent research work and conferences

Quaderni di Storia Economica (Economic History Working Papers)
A series of papers on Italian economic history

These publications are available online at www.bancaditalia.it
Printed copies can be requested from the Paolo Baffi Library: richieste.pubblicazioni@bancaditalia.it

© **Banca d'Italia, 2023**

For the paper-based version: registration with the Court of Rome No. 290, 14 October 1983
For the electronic version: registration with the Court of Rome No. 9/2008, 21 January 2008

Director
Sergio Nicoletti Altimari

Editorial committee
Claire Giordano and Guido Bulligan (coordinators), Lorenzo Bencivelli, Francesco Corsello, Emanuele Dicarlo, Salvatore Lattanzio, Federico Calogero Nucera, Maria Lisa Rodano, Stefano Schiaffi and Enrico Tosti

Daniela Falcone, Valentina Memoli and Rosanna Visca (editorial assistants for the Italian version)
Giuseppe Casubolo and Roberto Marano (charts and figures)

Boxes: Francesco Corsello, Francesco D'Amuri, Antonietta Di Salvatore, Tullia Padellini, Francesco Palazzo, Maria Lisa Rodano, Luca Rossi and Ilaria Supino

Address
Via Nazionale 91 – 00184 Roma – Italia

Telephone
+39 06 47921

Website
http://www.bancaditalia.it

All rights reserved. Reproduction for scholarly and non-commercial use permitted on condition that the source is cited

ISSN 0393-7704 (print)
ISSN 2280-7640 (online)

Based on data available on 13 January 2023, unless otherwise indicated

Designed and printed by the Printing and Publishing Division of the Bank of Italy

CONTENTS

OVERVIEW 5

1 THE WORLD ECONOMY

1.1 The global cycle 8

1.2 The euro area 11

1.3 Global financial markets 20

2 THE ITALIAN ECONOMY

2.1 Cyclical developments 22

2.2 Firms 23

2.3 Households 28

2.4 Foreign trade and the balance of payments 29

2.5 The labour market 32

2.6 Price developments 35

2.7 Banks 39

2.8 The financial market 42

2.9 The public finances 46

2.10 Projections 50

LIST OF BOXES

Recent developments in the labour market: the euro area and the United States 13

Rising energy prices and the implications for Italian firms 24

The pass-through of energy price increases to consumer price inflation in Italy and the euro area 36

Crypto-asset holdings of Italian households 44

The assumptions underlying the macroeconomic scenario 51

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;
()	provisional.

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

OVERVIEW

The global economy shows signs of weakness; energy prices fall

The global economic outlook started to deteriorate again in the fourth quarter of 2022. According to the available indicators, economic activity in the advanced economies has slowed as a result of the repercussions of the war in Ukraine and high inflation. This was also the case in China, following the measures imposed in October and November to contain the COVID-19 pandemic. International trade also seems to have slackened significantly. The slowdown in global demand has contributed to moderating the price of oil. Natural gas prices have fallen sharply in Europe but remain at historically high levels. International institutions expect global growth to weaken this year, mainly on account of still high energy prices, weak household disposable income and less favourable financial conditions.

Official interest rates continue to rise in the US and the UK though at a slower pace

At its meetings of November and December 2022, the Federal Reserve decided to raise the target range for the federal funds rate by 75 and 50 basis points respectively. At its last two meetings, the Bank of England also raised its reference rate again, by the same amount, and in November it began its balance sheet reduction programme. From mid-October, conditions on the international financial markets improved overall, despite deteriorating temporarily in the second half of December, when they were affected by the tighter than expected monetary policy stance adopted by the main central banks. By mid-January, the yields on long-term government securities in Europe and the United States were back to levels below those recorded in October.

Economic activity is slowing in the euro area while inflation remains high

According to the latest cyclical indicators, GDP in the euro area is likely to have stagnated in the last quarter of 2022. Consumer price inflation has remained high (9.2 per cent in December on an annual basis) although it has fallen since November. The core component has continued to strengthen, partly as a result of the gradual pass-through of earlier energy price rises. Wage growth has increased slightly since October. The marked recovery in the participation rate and the stagnation in labour productivity (trends which are different from those observed in the United States), together with government measures to support households, have helped to contain the demand for wage increases. In last December's Eurosystem staff projections, GDP growth estimates were revised downwards for 2023; inflation projections were revised upwards for 2023-24, reflecting the stronger and more persistent pass-through of cost pressures to consumer prices as well as higher estimates of wage growth.

The ECB raises its key interest rates again and announces measures to shrink the Eurosystem balance sheet

At its meetings of October and December 2022, the ECB Governing Council raised its key interest rates by 75 and 50 basis points respectively and announced that they will still need to rise significantly and at a steady pace in order to support a timely return of inflation to its medium-term target. The Council also decided to make the conditions applied to its targeted longer-term refinancing operations (TLTRO III) less advantageous, and in December it published the criteria it will use for normalizing the Eurosystem's monetary policy securities holdings. The portfolio of the asset purchase programme (APP) will be reduced at a measured and predictable pace, averaging €15 billion per month from the beginning of March until the end of the second quarter of 2023. The reinvestment of maturing securities under the pandemic emergency purchase programme (PEPP) will instead continue until at least the end of 2024 and will be conducted flexibly.

Economic activity in Italy weakens in Q4

Our estimates suggest that economic activity in Italy

weakened in the last quarter of 2022, due to both the waning recovery in services value added, which had already regained pre-pandemic levels in the summer, and the decline in industrial production. Household spending appears to have slowed despite the measures to support disposable income in a high-inflation environment. Firms taking part in the Bank of Italy's surveys consider that investment conditions are still unfavourable.

The current account deficit increases, mainly due to the larger energy deficit

In October and November, exports of goods appear to have remained stable while imports seem to have decreased. The current account deficit continued to widen, mainly due to a further worsening of the energy deficit. The positive net international investment position remains solid nonetheless.

Employment increases slightly, while wage growth remains limited

Headcount employment began to increase again slightly in October and November, still buoyed by the permanent employment component thanks to the conversion of temporary positions activated in 2021. Wage growth remains moderate, not least owing to the protracted negotiation process in the service sector, where there is a still high share of employees waiting for the renewal of their wage agreements. Wage growth is expected to increase moderately in 2023.

Inflation is still high, mainly driven by energy

Harmonized consumer price inflation recorded new highs in the autumn (standing at 12.3 per cent in December on an annual basis), still buoyed by the energy component, which continues to pass through to the prices of the other goods and services. According to our estimates, which include both the direct and indirect effects, energy accounted for just over 70 per cent of consumer price inflation on average in the fourth quarter. The government's energy-related measures appear to have mitigated consumer price growth by more than 1 percentage point in the same period.

The cost of bank lending continues to rise

Between August and November, bank lending to the non-financial private sector slowed, reflecting weaker demand from firms for investment purposes and from households for house purchase. Credit supply conditions tightened moderately. The increase in key interest rates was passed on to the cost of bank lending, broadly in line with the average increase in the euro area. In Italy too, financial market conditions have improved overall since mid-October. In mid-January, the yield spread between Italian and German government bonds stood at around 185 basis points, well below the highs reached during 2022.

The public finances improve in 2022

Preliminary data for 2022 point to a significant reduction in the deficit and in the debt-to-GDP ratio. According to the official assessments, under the current legislation scenario, the budget law adopted by Parliament in December will increase the deficit by 1.1 percentage points of GDP in 2023; the debt-to-GDP ratio will continue to decline, albeit at a slower pace. Last November, Italy received the second tranche of the Recovery and Resilience Facility funds, worth €21 billion.

GDP is projected to slow in 2023-25; inflation is expected to remain high in 2023 and to fall sharply in the following two years

Our projections for the Italian economy continue to be purely indicative, given the current environment of high uncertainty, stemming above all from the ongoing conflict in Ukraine. In the baseline scenario, the tensions associated with the conflict are assumed to remain high in the early months of this year, before easing gradually over the projection horizon. After an increase of almost 4 per cent in 2022, GDP growth is projected to weaken to 0.6 per cent in 2023; growth is expected to strengthen in the following two years, thanks to an acceleration in both exports and domestic demand. Inflation, which rose to almost 9 per cent last year, is projected to decline to 6.5 per cent in 2023 and at a faster pace thereafter, reaching 2.0 per cent in 2025.

If energy supply from Russia were to shut down, GDP would likely fall and inflation would rise further

Under a scenario that assumes a permanent suspension of the supply of energy commodities from Russia to Europe, GDP would fall in 2023 and 2024, and would grow moderately the following year. Consumer price inflation would rise further this year, before declining

markedly in the next two years. The scenario does not take into account any new measures to mitigate the effects of these more unfavourable developments nor the possibility of a sharp deterioration in economic activity being reflected on inflation by more than what historical precedents might suggest, thereby leading to a lower level of inflation at the end of the forecasting horizon.

1 THE WORLD ECONOMY

1.1 THE GLOBAL CYCLE

The global economy continues to be affected by high inflation, the deep uncertainty connected with the war in Ukraine and the restrictive stance of monetary policies. The cyclical indicators and the first available national statistics pointed to a worsening of the situation in the fourth quarter, more markedly so in the advanced countries and in China. International trade is also thought to have slackened at the end of last year. The slowdown in global demand has helped to lower the price of oil. Natural gas prices have fallen sharply in Europe thanks to the mild temperatures, the fall in industrial demand and the substantial stockpiles accumulated, although they remain at historically high levels. Considerable risks persist in connection with geopolitical developments. Despite some signs of a decrease, inflation has remained high and central banks in the main advanced economies have continued with monetary restrictions. The international institutions expect global growth to weaken in 2023.

GDP returns to growth in the United States in the third quarter and accelerates in China ...

Economic performance differed across the main advanced economies in the summer quarter. In the United States, GDP returned to growth (Table 1), but it contracted in the United Kingdom and Japan. Among the emerging economies, GDP accelerated in China, benefiting from the temporary improvement in the COVID situation. However, the weakness of the housing market continued to curb activity. In Russia, GDP grew slightly compared with the previous quarter, but remains around 5 per cent below the level prior to the invasion of Ukraine.

Table 1

GDP and world trade growth and macroeconomic projections
(percentage changes)

	Growth			Forecasts		Revisions (1)	
	2021	2022 Q2 (2)	2022 Q3 (2)	2022 (3)	2023	2022	2023
GDP							
World	**5.9**	**–**	**–**	**3.1**	**2.2**	**0.1**	**0.0**
of which:							
Advanced countries							
Euro area	5.3	3.2	1.3	3.3	0.5	0.2	0.2
Japan	2.1	4.5	-0.8	1.6	1.8	0.0	0.4
United Kingdom	7.6	0.2	-1.2	4.4	-0.4	1.0	-0.4
United States	5.9	-0.6	3.2	1.8	0.5	0.3	0.0
Emerging countries							
Brazil	5.0	3.7	3.6	2.8	1.2	0.3	0.4
China	8.1	0.4	3.9	3.0	4.6	0.1	-0.1
India (4)	8.3	13.5	6.3	6.6	5.7	-0.3	0.0
Russia	4.8	-4.1	….	-5.5	-4.5	–	–
World trade	11.2	1.0	1.8	5.6	1.7	0.3	0.3

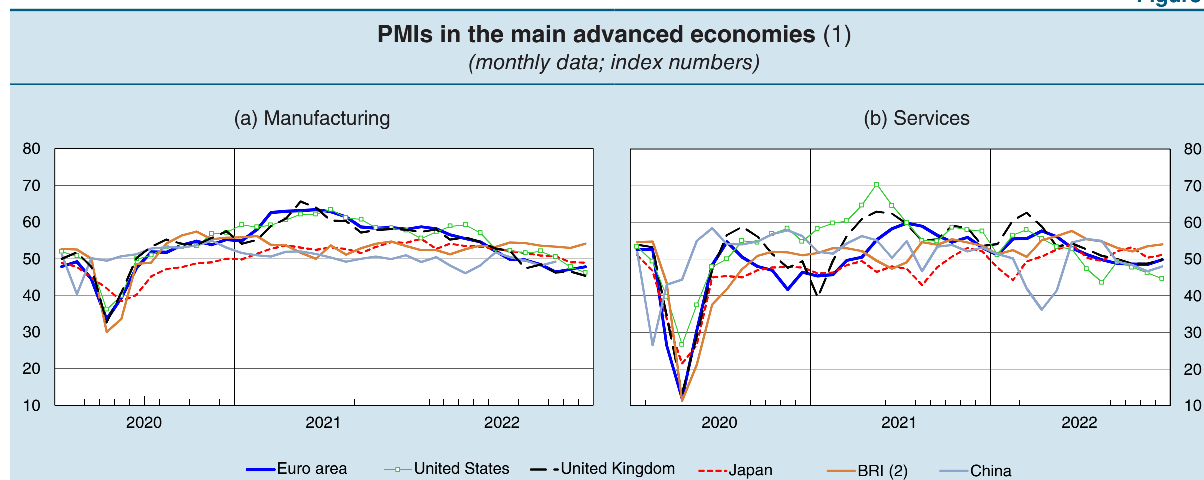
Sources: National statistics for data on GDP growth; OECD for data on world GDP and forecasts (*OECD Economic Outlook*, November 2022); Bank of Italy calculations based on national accounts and customs data for world trade.
(1) Percentage points; revisions compared with *OECD World Economic Outlook Update,* September 2022 and, for world trade, compared with the Bank of Italy's *Economic Bulletin*, 4, 2022. – (2) Quarterly data; for the advanced countries, annualized and seasonally adjusted percentage changes on the previous quarter; for the emerging countries, year-on-year percentage changes. – (3) For China, actual data for 2022. – (4) The actual data for 2021 and the forecasts refer to the fiscal year starting in April.

... but the global situation worsens in the fourth quarter

In autumn, the purchasing managers' indices (PMIs) for manufacturing firms declined in the advanced economies, compared with varying trends in the services sector (Figure 1). In the United States, firms' expectations of weaker activity are in contrast to the resilience of retail sales; the rise in employment (see the box 'Recent developments in the labour market: the euro area and the United States') appears to have supported growth at the end of 2022 as well. In the United Kingdom, the decline in PMIs is accompanied by signs of a further reduction in private consumption.

Figure 1

PMIs in the main advanced economies (1)
(monthly data; index numbers)



Sources: Markit and Refinitiv.
(1) PMIs of economic activity in the manufacturing and service sectors. Each index is obtained by adding the percentage of responses of 'increasing' economic activity to half of the percentage of responses of 'stable'. The value of 50 is the threshold compatible with expansion in the sector. – (2) Average of the forecasts for Brazil, Russia and India (BRI), weighted on the basis of each country's GDP in 2021.

Among the emerging economies, manufacturing PMIs have remained broadly stable. In China, GDP was essentially stationary compared with the previous quarter. Strict measures to contain the pandemic were adopted between October and November, leading to disruptions in production and growing social tensions, resulting in a marked deterioration in the economic situation. The government then decided on a sudden relaxation of these policies early in December: the potentially positive effect on domestic demand was undermined by the negative impact of a new and strong wave of cases of COVID-19 in a context of low population immunization and with the national health service in a state of unpreparedness.

Global trade is thought to have slackened at the end of 2022

International trade grew at a strong pace in the summer quarter (Table 1). However, partial customs data for trade in goods alone and the PMIs for export orders point to a marked slowdown in the autumn months. According to our estimates, the weakness in global trade in goods and services is likely to persist this year, recording a far lower growth rate than the average one in the pre-pandemic period.

Inflation goes down in the United States and in the United Kingdom

In the United States, inflation declined on average in the fourth quarter to 7.1 per cent, from 8.3 per cent in the third (Figure 2), driven by energy; the core component also decreased, albeit slightly. In the United Kingdom, the growth in consumer prices reached its highest level in October (11.1 per cent), and then fell in the following two months, to 10.5 per cent in December. In October and November, consumer prices in Japan rose on average to 3.8 per cent, the highest level since 1990.

The outlook for the global economy is worsening

According to the OECD's forecasts for 2023, published in November, global GDP is expected to slow to 2.2 per cent, from 3.1 per cent last year, as a result of the restrictive stance of monetary policies, energy prices remaining high and weak

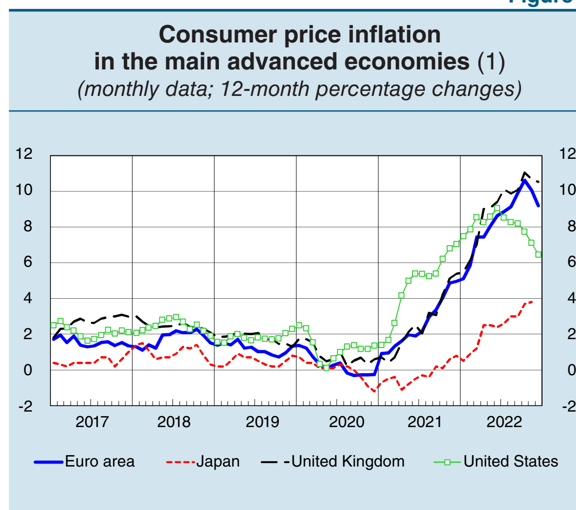
household disposable income. The risks to these projections are predominantly on the downside, including those stemming from the continuation of the war in Ukraine, the persistently high inflation rates and the potentially protracted weakness of activity in China.

Oil prices fall ...

From mid-October, the price of a barrel of Brent oil fell to just below $85 on average in the first half of January, the lowest since the beginning of the war in Ukraine (Figure 3.a), as a result of the slowdown in global demand. On 5 December 2022, the European Union embargo on Russian crude oil imports entered into force, as did the corresponding ceiling set by G7 members on the price of Russian oil exported to third countries of $60 per barrel, to be reviewed every two months based on market conditions.[1]

Figure 2

Consumer price inflation in the main advanced economies (1)
(monthly data; 12-month percentage changes)



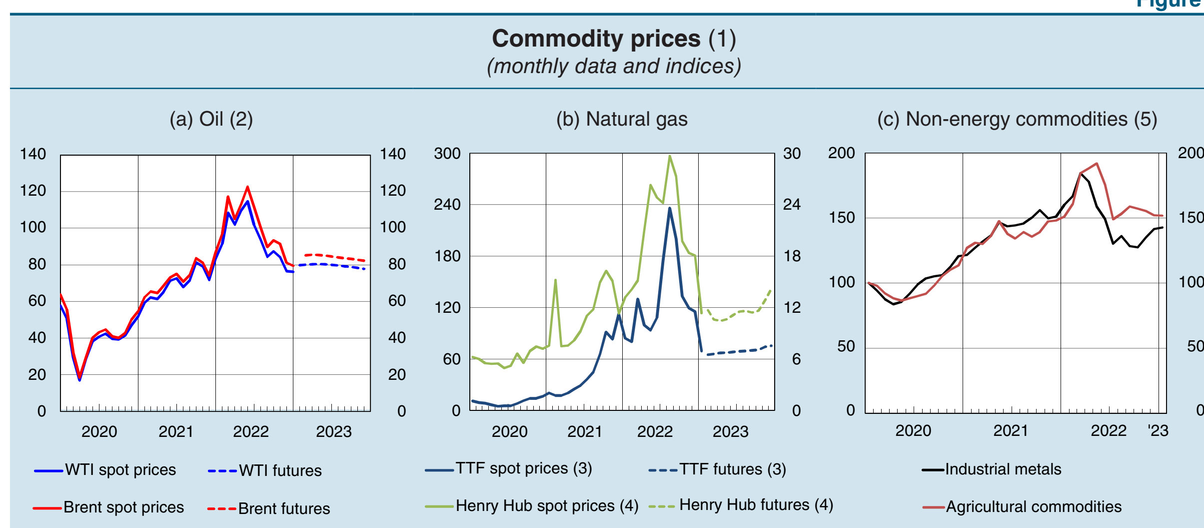
Source: Refinitiv.
(1) For the euro area and the United Kingdom, harmonized consumer price index.

... and the price of natural gas in Europe decreases sharply

Since mid-October, the price of natural gas traded on the Dutch Title Transfer Facility (TTF) market has declined sharply, reaching an average value in the first half of January of just below €70 per megawatt-hour, which is still high by historical standards (Figure 3.b). The decline is attributable to favourable weather conditions during the autumn and the drop in industrial demand in Europe which, given the broadly stable gas inflows, allowed stockpiles to be kept at maximum levels.

Figure 3

Commodity prices (1)
(monthly data and indices)



Sources: Refinitiv for oil and natural gas prices and Standard & Poor's for non-energy commodities.
(1) For the spot prices, monthly averages up to December 2022; the latest data refer to the average of the daily data from 1 to 13 January 2023. For futures, the data refer to the price on 13 January 2023. – (2) Dollars per barrel. – (3) Euros per megawatt-hour. – (4) Euros per megawatt-hour. Price of gas distributed via the Henry Hub in Louisiana (USA). Right-hand scale. – (5) Indices: January 2020=100.

[1] If buyers exceed this threshold, they will be unable to access the insurance and maritime transport services provided by companies domiciled in the G7 countries. Although when the price cap was introduced, the market price for purchasing Russian crude oil (Ural) was higher than the maximum level set by the sanctioning countries, the price is currently below the threshold, making it non-binding.

On 19 December 2022, the EU countries agreed on a correction mechanism for the price of natural gas, which will come into force in February 2023. This mechanism is applied if the price for one-month deliveries traded on the TTF exceeds €180 per megawatt-hour and at the same time deviates by more than €35 from the average liquefied natural gas (LNG) price on the European market for more than three consecutive days; these conditions have only occurred for a short period so far, between August and September 2022, at the peak of tensions on the natural gas market. Futures prices have fallen, remaining below €70 per megawatt-hour over horizons of up to twelve months. However, natural gas prices remain highly volatile, also because of the supply risks relating to both geopolitical tensions and a possible recovery in demand for LNG from Asia.

The prices of industrial metals rise slightly

Industrial metal prices increased modestly in the autumn, buoyed by the prospect of a recovery in Chinese demand, following the removal of the measures to contain the pandemic. However, they are still significantly lower than the peak recorded at the beginning of 2022 (Figure 3.c). In contrast, after a slight rise in the summer, agricultural commodity prices declined, partly thanks to compliance with the 'Black Sea Grain Initiative', an agreement on Ukrainian grain exports.

The Federal Reserve and the Bank of England slow the pace of the increase in key interest rates

At its last two meetings, the Federal Reserve raised the federal funds rate target range in November and December by 75 and 50 basis points respectively, bringing it to a level of between 4.25 and 4.5 per cent. According to the latest communications from the Federal Open Market Committee, given that the labour market is still rather tight, interest rates will reach a higher level than previously expected in order to bring inflation back to a level consistent with the objective of 2 per cent. The Bank of England also raised its reference rate again in the last two meetings, by 75 and 50 basis points respectively. Its balance sheet reduction programme, initially suspended due to severe financial market tensions at the end of September (see *Economic Bulletin* 4, 2022), began on 1 November 2022 with the sale of a first tranche of £750 million worth of government bonds and will continue at a pace to be defined from time to time according to market conditions. Despite rising inflation and the depreciation of the yen, the Bank of Japan kept both its policy rate, which is in negative territory, and its asset purchase programme unchanged. However, since the second half of December, it has widened the tolerance range for the ten-year government bond yield by 25 basis points, thereby allowing it to rise to 0.5 per cent, the highest rate since 2015 (see Section 1.3).

The stance of monetary policies has been more varied across emerging market economies, reflecting their respective cyclical conditions. In Brazil, the central bank interrupted its sequence of policy rate increases in September, while interest rates were raised in India for the fourth time in a row in December. In China, where inflation remained subdued, the central bank reduced the reserve requirement on deposits in order to support the flow of credit, especially that to the real estate sector.

1.2 THE EURO AREA

Euro-area GDP is estimated to have stagnated in the last three months of 2022. Consumer price inflation has remained high. The European Central Bank's Governing Council continued to tighten monetary policy by further raising policy rates, making the terms and conditions applied to the third series of targeted longer-term refinancing operations (TLTRO III) less advantageous and announcing the general criteria based on which it will proceed with the normalization of the monetary policy asset portfolio. The European plan for reducing energy dependence on Russia and stepping up the green transition (REPowerEU) envisages new funds to support the national recovery and resilience plans.

The further growth in GDP in the third quarter ...

Euro-area GDP grew by 0.3 per cent in the summer compared with the previous quarter (Table 2), boosted by the marked growth in investment and by the more modest growth in household consumption. Net foreign demand shaved about half a percentage point off GDP growth, reflecting the fact that imports increased more strongly than exports did. The increase in value added in services persisted, continuing to benefit from the positive performance of tourism and leisure businesses and of industry excluding construction, in contrast to a decrease in construction. Economic activity grew in all the major economies, and more solidly in Italy and Germany.

Table 2

Euro-area GDP growth and inflation
(percentage changes)

	GDP growth			Inflation	
	2021	2022 Q2 (1)	2022 Q3 (1)	2022 December (2)	2022 (3)
France	6.8	0.5	0.2	6.7	5.9
Germany	2.6	0.1	0.4	9.6	8.7
Italy	6.7	1.1	0.5	12.3	8.7
Spain	5.5	2.0	0.1	5.5	8.3
Euro area	5.3	0.8	0.3	9.2	8.4

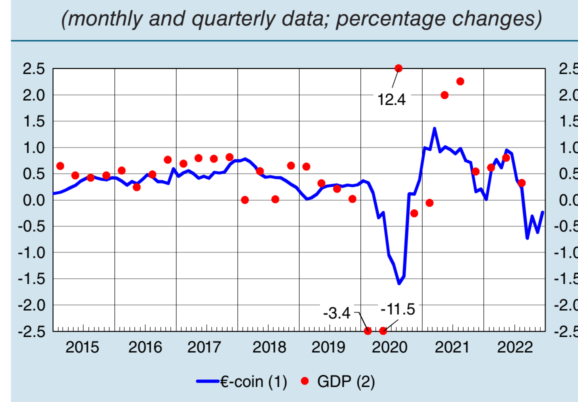
Sources: Based on national statistics and Eurostat data.
(1) Quarterly data adjusted for seasonal and calendar effects; percentage changes on the previous quarter. – (2) Monthly data; year-on-year percentage changes in the harmonized index of consumer prices (HICP) – (3) Annual averages; percentage changes on the previous quarter in the harmonized index of consumer prices (HICP).

... is likely followed by stagnation in the fourth

The latest economic indicators suggest that economic activity in the euro area was essentially stationary in the fourth quarter compared with the previous period. Based on data up until November, industrial production seems to have remained stable. The manufacturing PMIs decreased, in parallel with the renewed decline in confidence in industry. The fall in PMIs was more muted in the service sector. The consumer confidence index, which in September had been at its lowest since the start of the time series, rose in the following months, mainly boosted by more favourable expectations about the general state of the economy and their own financial situation, but it remained below its long-term average. The €-coin indicator, which measures GDP growth net of the most erratic components, turned negative on average in the fourth quarter (Figure 4).

Figure 4

€-coin coincident cyclical indicator and euro-area GDP
(monthly and quarterly data; percentage changes)



Sources: Bank of Italy and Eurostat.
(1) For €-coin, monthly estimates of changes in GDP on the previous quarter, net of the most erratic components. For the methodology used to construct the indicator and the subsequent modifications, see the box 'The €-coin indicator and the economic situation in the euro area', *Economic Bulletin*, July, 2009. The latest data for the indicator are available on the Bank of Italy's website, '€-coin: December 2022'. – (2) For GDP, quarterly data; percentage changes on previous quarter.

GDP estimates have been revised downwards again for 2023

The December Eurosystem staff projections[2] indicate a slowdown in GDP in 2023 (0.5 per cent, against 3.4 per cent last year), followed by an acceleration in the two years 2024-25 (1.9 and 1.8 per cent respectively). Compared with September 2022, the estimates for 2023 have been revised downwards by almost half a percentage point, due above all to the weakening global economic cycle and prolonged price increases.

[2] For more information, see the ECB's website: 'ECB staff macroeconomic projections for the euro area', December 2022.

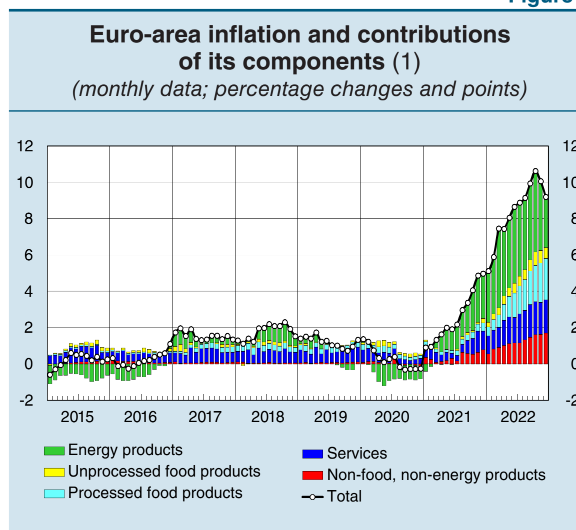
Core inflation is strengthened by the gradual pass-through of higher energy prices

Consumer price inflation declined again in December, to 9.2 per cent, from 10.1 per cent in November), marking the first decreases since summer 2021 (Figure 5). Price growth continues to be driven by the energy component, although the latter decelerated, from 41.5 per cent in October to 25.5 per cent in December. Inflation was driven by both the acceleration in the prices of food products (13.8 per cent) and the strengthening of core inflation, which reached 5.2 per cent. The latter was supported in the fourth quarter by the prices of non-energy industrial goods and of services, partly as a result of the gradual pass-through of earlier energy price rises (see the box 'The pass-through of energy price increases to consumer price inflation in Italy and the euro area', Section 2).

Figure 5

Euro-area inflation and contributions of its components (1)

(monthly data; percentage changes and points)



Sources: Based on Eurostat and ECB data.
(1) 12-month percentage change in the HICP.

Inflation is transmitted to wages to a greater but still limited extent

Contractual wages only slightly increased in the third quarter compared with the previous three months, remaining at moderate annual rates of change. Including one-off components, wages grew by 2.9 per cent on a twelve-month basis (up from 2.5 per cent in the second quarter; see the box 'Recent developments in the labour market: the euro area and the United States'). Wage growth has stepped up slightly since October, partly as a result of minimum wage increases in some countries, including Germany, and the activation in France and Belgium of indexation mechanisms based on inflation. However, in the euro area as a whole, the share of inflation-linked wages is limited, mitigating the risks of upward wage-price spirals. Among the other producer price pressures, the producer prices of industrial products sold on the domestic market continued to slow down in November, to 27.1 per cent; those of non-food consumer goods decelerated to 9.1 per cent.

RECENT DEVELOPMENTS IN THE LABOUR MARKET: THE EURO AREA AND THE UNITED STATES

In the course of 2022, headcount employment in the euro area and the United States surpassed pre-pandemic levels, helping to bring the unemployment rate down to record lows;[1] in the third quarter it stood at 6.7 per cent in the euro area, more than 3 percentage points higher than in the United States. Significant differences in labour supply and demand developments and in the reallocation of employees are leading to wide divergences in labour market conditions in the two economies.

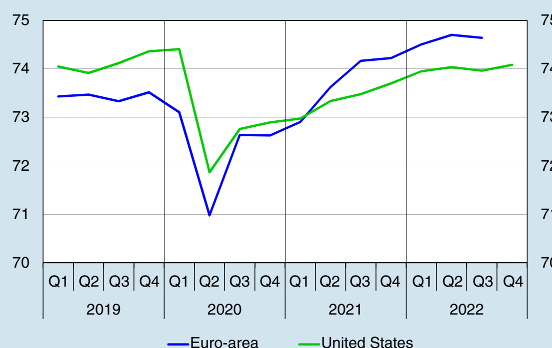
In the euro area, following a sharp decline during the early stages of the pandemic, the participation rate for the population aged 15-64 years has increased significantly (Figure A) and currently stands at its highest level since the start of the survey. The strong performance of labour supply is linked to the recovery in employment, which has exceeded pre-pandemic levels in all sectors with the exception of agriculture, and of entertainment and personal care services. The number of new hires and job separations does not indicate any significant changes in the employee turnover rate (see panels (a) and (b) of Figure B).

[1] Now at its lowest level since 1990 (when the survey was first conducted) for the euro area, and since 1968 for the United States.

Despite the faster and more pronounced recovery in economic activity,[2] which normally drives job offers, in the United States the recovery of the participation rate has instead proven much more gradual and is still incomplete: in the fourth quarter of 2022 it was still 0.3 percentage points below the pre-pandemic level in the 16-64 age group. Given the stronger demand, these developments are adding to firms' recruitment difficulties. The vacancy rate[3] reached very high levels (see panel (c) in Figure B), particularly in sectors where employment is still well below what it was in 2019, such as in leisure and hospitality. Labour shortages were also reflected in the increase in the share of quits in total job separations owing to people changing jobs.

Figure A

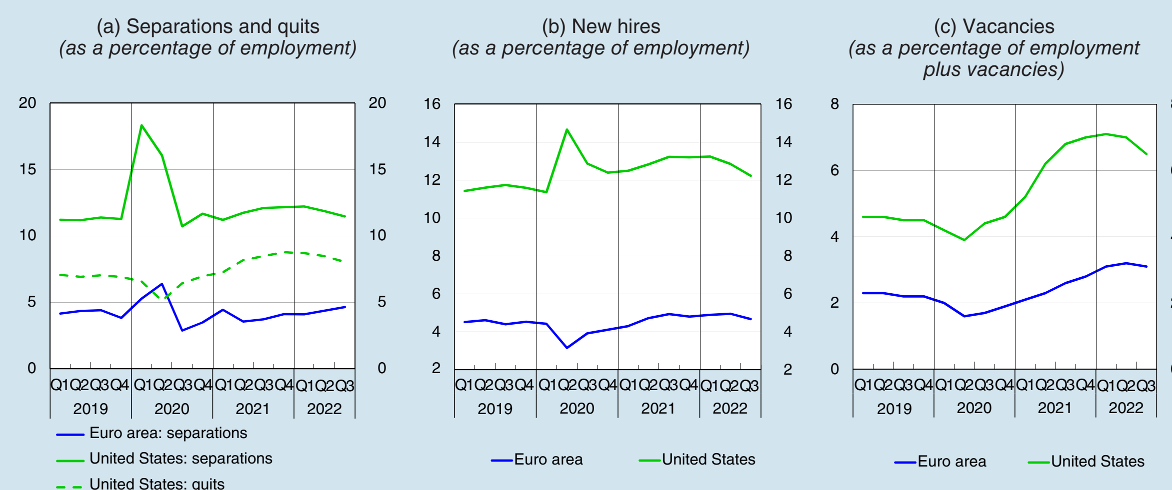
Labour market participation rate (1)
(quarterly data; per cent)



Sources: Based on Eurostat and U.S. Bureau of Labor Statistics data.
(1) In the euro area, 15-64 year-olds; in the United States, 16-64 year-olds.

Figure B

Separations, new hires and vacancies (1)
(quarterly data)



Sources: Based on Eurostat and U.S. Bureau of Labor Statistics data.
(1) For the United States, the quarterly data on employment and vacancies are based on average monthly values, while the data on separations, quits and new hires represent the totals.

Also as a result of these developments, wage growth is considerably lower in the euro area than in the United States. In the euro area, hourly wages increased by 3.1 per cent in the third quarter compared with a year earlier (0.8 percentage points higher than the average for the previous decade).

[2] In the United States, GDP exceeded pre-pandemic levels in the first quarter of 2021; in the euro area this did not happen until the end of the same year. Again, compared with the end of 2019, in the third quarter of 2022, GDP was 4.3 per cent higher in the United States and 3.6 per cent higher in the euro area.

[3] Approximated by the ratio of job vacancies to the sum of the latter and employment.

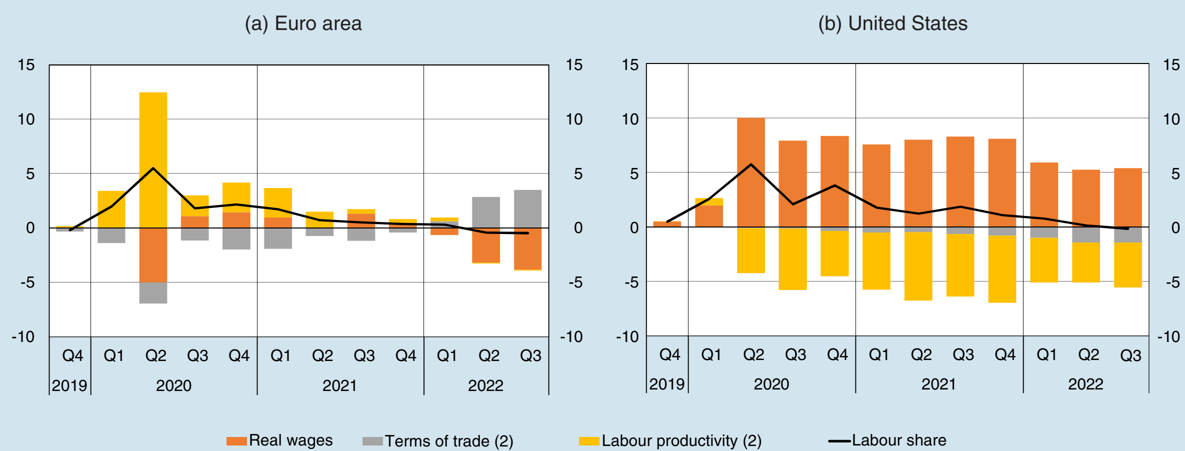
Government transfers to households in the face of rising energy prices helped to limit workers' demands for wage increases. In the United States, wage growth is very much stronger and stands at 5.2 per cent, 3.1 percentage points higher than the average for the previous decade.[4] Wage increases have been particularly marked in the case of workers who have changed jobs and in sectors where recruitment is most difficult.

Changes in the distribution of value added between labour and capital can provide further indications of inflationary pressures. Other things being equal (market structure and technology), an increase in the share of labour may drive firms to recover their profit margins by raising their own selling prices. This was the case, for example, in western European countries during the oil crisis of the early 1970s, when the initial decline in purchasing power due to deteriorating terms of trade[5] was followed by a significant increase in the wage bill and consequently in the labour share.[6] Following the upturn observed at the start of the pandemic, in 2021 the share of value added devoted to the wage bill (labour share) in both the euro area and the United States stabilized at end-2019 levels and, unlike in the 1970s, did not change significantly as a result of the subsequent exceptional surge in energy prices (Figure C).

Figure C

Breakdown of the labour share (1)

(quarterly data; cumulative percentage changes since Q4-2019)



Sources: Based on data from Eurostat, U.S. Bureau of Economic Analysis and U.S. Bureau of Labor Statistics.
(1) For details on the construction of the variables, see Footnote 7. – (2) The terms of trade and labour productivity are inverted, given their negative contribution to the labour share.

The recent substantial stability of the labour share nonetheless reflects divergent underlying trends in the two areas. Other things being equal, the labour share decreases as real labour

[4] For the United States, annual growth in hourly wages is calculated using data produced by the U.S. Bureau of Labor Statistics.

[5] The terms of trade measure the aggregate prices of the goods and services that an economy exports in relation to the prices of imported goods and services. The terms of trade are approximated here by the ratio of the GDP deflator to the consumption deflator; see N. Battistini, H. Grapow, E. Hahn and M. Soudan, 'The dynamics of the wage share and second-round effects on inflation following the rise in energy prices in the 1970s and today', ECB Economic Bulletin, 5, 2022, pp. 48-55.

[6] However, this was not the case in the United States.

income per employee falls, as labour productivity grows, or as the terms of trade improve.[7] In the United States, wage growth is robust, but the labour share has remained stable alongside an equally robust increase in productivity; in the US economy, which is a net exporter of energy, the terms of trade have improved slightly. In the euro area, in an environment of sluggish productivity, the decline in real wages has so far led to a stable labour market share in the face of unfavourable terms-of-trade developments.

[7] According to N. Battistini et al., 2022, op. cit., the labour share is defined as the ratio of total labour income (adjusted for the presence of the self-employed) to nominal GDP; from an accounting perspective, the share can be broken down as follows: (a) real wages per employee, which is the ratio of the numerator of the labour share to the consumption deflator and the number of employees; (b) the terms of trade; (c) real productivity per employee, equal to real GDP divided by the number of persons employed.

Inflation projections are revised upwards for 2023 and 2024

According to the Eurosystem's December point estimates, euro-area inflation is expected to decline from an average of 8.4 per cent in 2022 to 6.3 per cent in 2023 and 3.4 per cent in 2024; price growth is likely to stand at 2.3 per cent in 2025. The core component will rise slightly in 2023, to 4.2 per cent, and fall to 2.4 per cent in 2025. The upward revision of inflation, of around 1 percentage point on average in 2023-24, was driven by persistently strong pipeline price pressures and by their pass-through, as well as by the increase in the estimates of wage growth.

The inflation expectations of firms and households are on the wane ...

According to the ECB's Consumer Expectations Survey for November, the median of households' three-year inflation expectations declined slightly, from the figure of 3.0 per cent observed since July, to 2.9 per cent. According to the European Commission's surveys, consumers' expectations in December regarding consumer price developments over the following twelve months confirmed the downward trend observed since last spring. The intention of firms to increase their selling prices over the following three months also softened slightly.

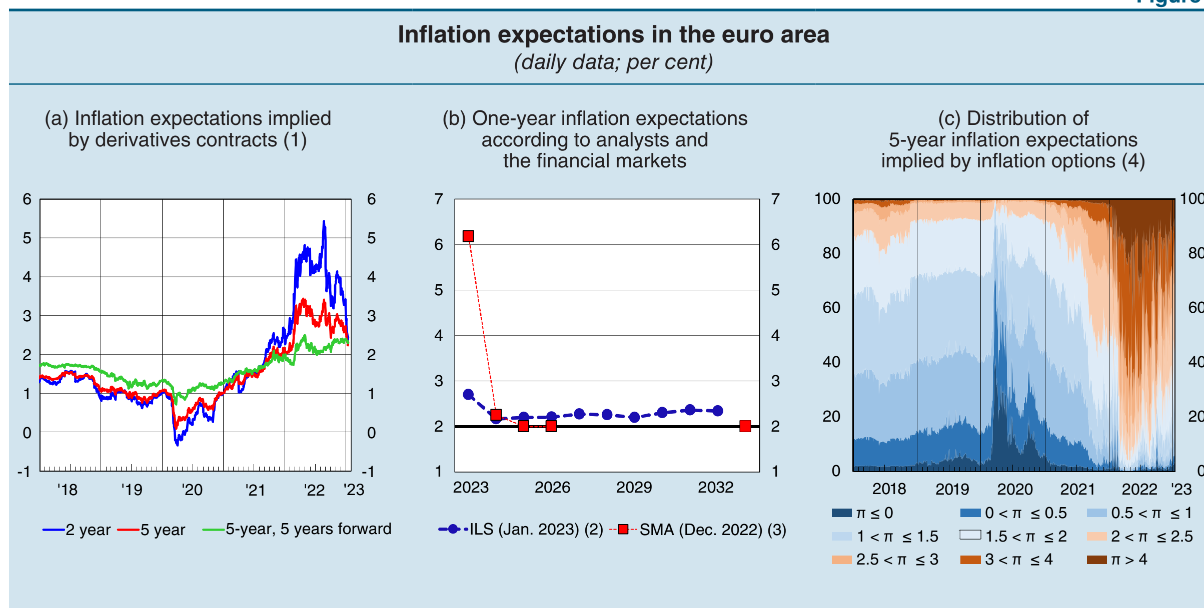
... and the long-term ones derived from the markets remain in line with the price stability objective

Between mid-October and mid-January, the yields on inflation-linked swap (ILS) contracts, a measure of euro-area inflation expectations, declined over the short- and medium-term horizons. Over the two- and five-year horizons, they stand at 2.4 and 2.3 per cent respectively (Figure 6.a), levels that, according to our estimates,[3] would not incorporate an inflation risk premium component. The five-year, five years forward expectations are also equal to 2.3 per cent; however, net of the estimated inflation risk premium, they would remain at levels just below 2 per cent, signalling that genuine inflation expectations are still anchored to the price stability objective. The experts interviewed in the Survey of Monetary Analysts, conducted by the ECB between 28 November and 1 December 2022, expect inflation to return to values close to 2 per cent in the second half of 2024 (Figure 6.b), a time frame in line with that derived from the one-year-ahead expectations implied by ILSs. Based on options prices, the probability of inflation being between 1.5 and 2.5 per cent on average in the years 2023-27 has risen slightly, to 38 per cent, while that of an increase in prices of more than 2.5 per cent has fallen, from 48 to 32 per cent (Figure 6.c).

[3] For details on the methodology, see S. Cecchetti, A. Grasso and M. Pericoli, 'An analysis of objective inflation expectations and inflation risk premia', Banca d'Italia, Temi di Discussione (Working Papers), 1380, 2022.

Figure 6

Inflation expectations in the euro area
(daily data; per cent)



Sources: Based on Bloomberg and ECB data.
(1) Expected inflation rates implied by 2-year, 5-year, and 5-year, 5 years forward ILS contracts. – (2) One-year expected inflation rates implied by ILSs at various maturities. – (3) Median of the expectations of the respondents polled as part of the December Survey of Monetary Analysts (SMA), conducted by the ECB from 28 November to 1 December 2022. – (4) The distribution of expected inflation (π) is estimated based on the prices of zero-coupon inflation options in the euro area over a 5-year horizon. The underlying inflation rate is calculated based on the harmonized index of consumer prices excluding tobacco.

The ECB has taken further steps to tighten monetary conditions with new rises in key interest rates ...

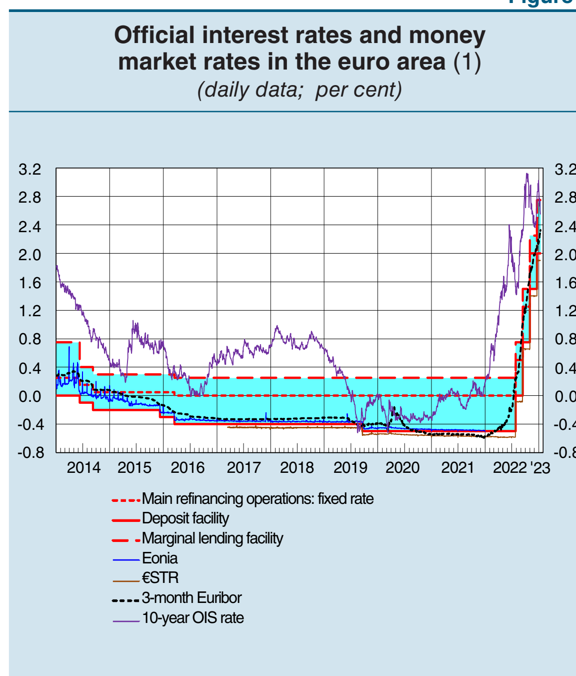
The ECB Governing Council further increased its key interest rates by 0.75 and 0.5 percentage points respectively at its meetings in October and December, bringing the overall increase since July to 2.5 percentage points and setting banks' deposit facility rate at 2.0 per cent (Figure 7). The Council believes that rates will still need to rise significantly and at a steady pace in order to support a timely return of inflation to its medium-term target of price stability. However, future decisions on rates will continue to be made based on how the inflation and growth outlook evolves.

... and with the adoption and announcement of measures to gradually reduce the Eurosystem's balance sheet

At its October meeting, the Council decided to make the terms and conditions applied to TLTRO III less advantageous. From 23 November 2022 and until the maturity or repayment of each outstanding TLTRO III operation, the respective cost will be

Figure 7

Official interest rates and money market rates in the euro area (1)
(daily data; per cent)



Sources: ECB and Refinitiv.
(1) As of 1 October 2019, the €STR is the overnight benchmark rate for the euro-area money market. For the period prior to 1 October 2019, the pre-€STR is shown. Starting on 1 October 2019 and until its discontinuation at the end of 2021, the Eonia is calculated as the €STR plus a fixed spread of 8.5 basis points.

indexed to the average of the key ECB interest rates in that period, while in the past, the overall length of operations was taken into account. The amendment aims to ensure that the contribution of this tool is consistent with the overall monetary policy stance, by bolstering the pass-through of increases in policy rates to bank credit supply conditions. Following the voluntary repayments made between November 2022 and January 2023 and the maturity of the funding obtained in the second operation of the programme, the total outstanding TLTRO III funds fell from €2,113 billion to €1,255 billion for the euro area and from €430 billion to €331 billion for Italy.

At its December meeting, the Governing Council announced the principles for normalizing the Eurosystem's monetary policy securities holdings. As of early March, the asset purchase programme (APP) portfolio will be reduced at a measured and predictable pace, as the Eurosystem will not reinvest all of the principal payments from maturing securities. The reduction will amount to €15 billion on average per month until the end of the second quarter of 2023; subsequent interventions will be decided at a later date. The full reinvestment of maturing securities under the pandemic emergency purchase programme (PEPP) will continue at least until the end of 2024 and will be carried out flexibly; this flexibility, together with the Transmission Protection Instrument approved last July (see the box 'The Transmission Protection Instrument: The ECB's new monetary policy tool', *Economic Bulletin*, 4, 2022), will help to counter any risks of financial market fragmentation.

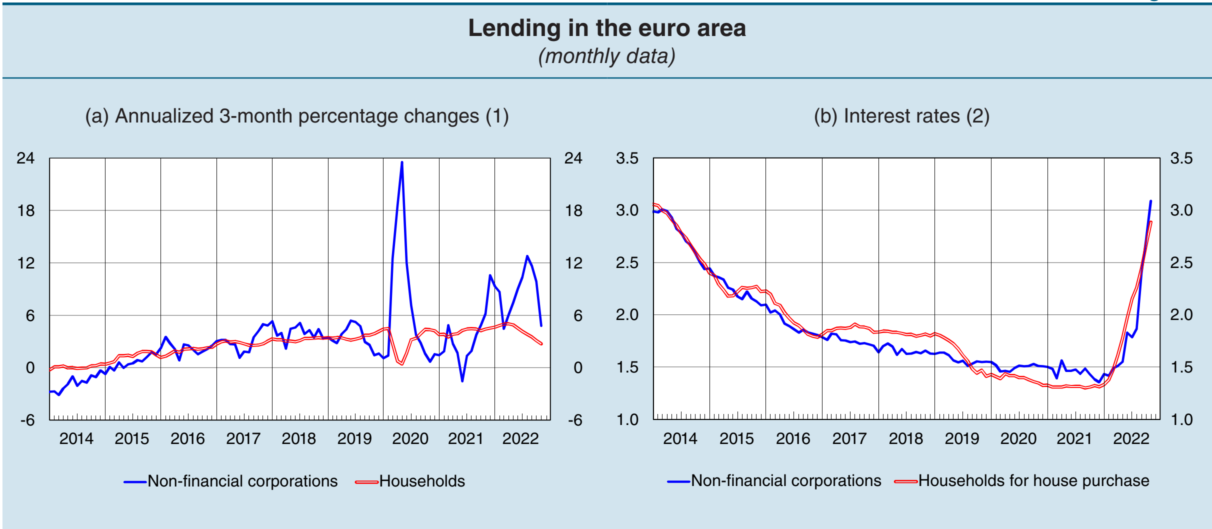
The cost of bank lending increases

Quarterly growth on an annualized basis in bank lending to non-financial corporations in the euro area fell to 4.8 per cent in November (adjusted for seasonal factors and the accounting effect of securitizations; Figure 8.a). The deceleration reflected the worsening economic outlook and tighter lending conditions. Lending slowed in Germany, France and Italy and contracted in Spain. Growth in loans to households in the euro area also declined, to 2.8 per cent.

The cost of loans to firms and households rose, following the increase in policy rates since last July. Between August and November, the interest rate on new loans to euro-area non-financial corporations went up by around 130 basis points, to 3.1 per cent; there have been similar increases in all the

Figure 8

Lending in the euro area
(monthly data)



Source: ECB.
(1) Includes bad debts, repos and loans not reported in banks' balance sheets because they have been securitized. The percentage changes are net of reclassifications, exchange rate variations, value adjustments, and other variations not due to transactions. Data are seasonally adjusted. – (2) Average of interest rates on new short and medium-long term loans weighted using the 24-month moving average of new loan disbursements; for non-financial corporations, includes overdrafts.

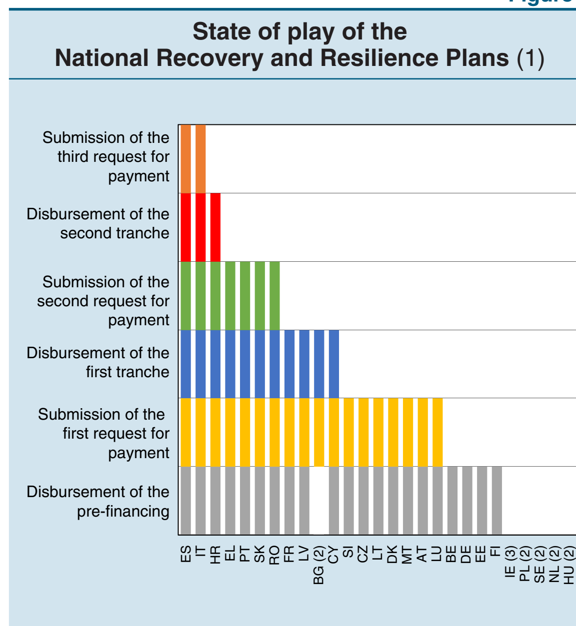
main euro-area countries (see Section 2.7 for Italy). Taking into consideration the outlook for changes in inflation, overall it can be estimated that, in real terms, the cost of lending has stayed at relatively advantageous levels, especially over shorter-term horizons. Interest rates on loans to households for house purchase increased by around 60 basis points, to 2.8 per cent (Figure 8.b).

New funds are envisaged under REPowerEU to support national recovery and resilience plans in order to tackle the energy crisis

At the end of last year, the European Commission and the Council of the EU completed the approval of the national recovery and resilience plans, with a positive assessment for that of Hungary; at the same time, the Council of the EU activated the conditionality mechanism for this country.[4] In addition, the Commission's assessments of the achievement of the targets and objectives contained in the various national plans are continuing. The total value of the funds distributed to member countries in 2022 amounts to around €74 billion. Specifically, more than €25 billion have been disbursed since last October, of which €21 billion for Italy's second instalment,[5] with its request for payment of the third instalment submitted last December (Figure 9; see Section 2.9). The Commission has so far raised over €260 billion on the capital market. The yield on ten-year European bonds is around 2.8 per cent, about 60 basis points higher than the corresponding German bonds and more than 80 points lower than Italian bonds.

Figure 9

State of play of the National Recovery and Resilience Plans (1)



Sources: Based on official documents from the Council of the EU and the European Commission.
(1) Countries on the x-axis are ordered according to the dates of the submission of the requests for payment and of the disbursement of the relative funds, on the disbursement of the pre-financing or, if funds have not yet been disbursed, based on the date of the plan's approval or submission. For the country codes, see the European Union's Interinstitutional Style Guide. – (2) The plans of Bulgaria, Hungary, the Netherlands, Poland and Sweden were approved after the deadline for the request for pre-financing of the funds allocated. – (3) Ireland did not request pre-financing.

Last December, the European Parliament and the Council of the EU reached an initial agreement on the financing of REPowerEU, whose funds could be used in national plans to respond to the energy crisis; the agreement envisages that the plan is to be financed mainly through unused loans under the Next Generation EU (NGEU) programme.[6] Once REPowerEU has obtained final approval, Member States will be able to receive additional resources by including a dedicated chapter in their national plan.

4 Under this mechanism, the disbursement of funds from the national plan and of 65 per cent of those from the Development and Cohesion Fund is conditional on the achievement of 27 targets involving the rule of law, judicial independence and the fight against corruption.

5 Italy received €10 billion in grants and €11 billion in loans. Romania received €2.6 billion (of which €1.8 billion in grants), while Cyprus, Croatia and Bulgaria received €0.1 billion, €0.7 billion and €1.4 billion respectively.

6 In addition to the €225 billion worth of unused NGEU loans, there are €20 billion of new grants. It will also be possible to transfer further resources from other European funds.

1.3 GLOBAL FINANCIAL MARKETS

Global financial market conditions improved between mid-October and mid-December, benefiting from the easing of fiscal policy uncertainty in the United Kingdom and from market participants' expectations of a slowdown in the pace of monetary policy rate increases in the main advanced economies. Following the December meetings of the leading central banks in advanced countries, analysts changed their expectations again regarding the pace and duration of the monetary restriction process. Long-term government bond yields returned to growth temporarily in Europe and the United States, and were then lower in mid-January compared with October. The appreciation of the US dollar under way since last spring came to a halt.

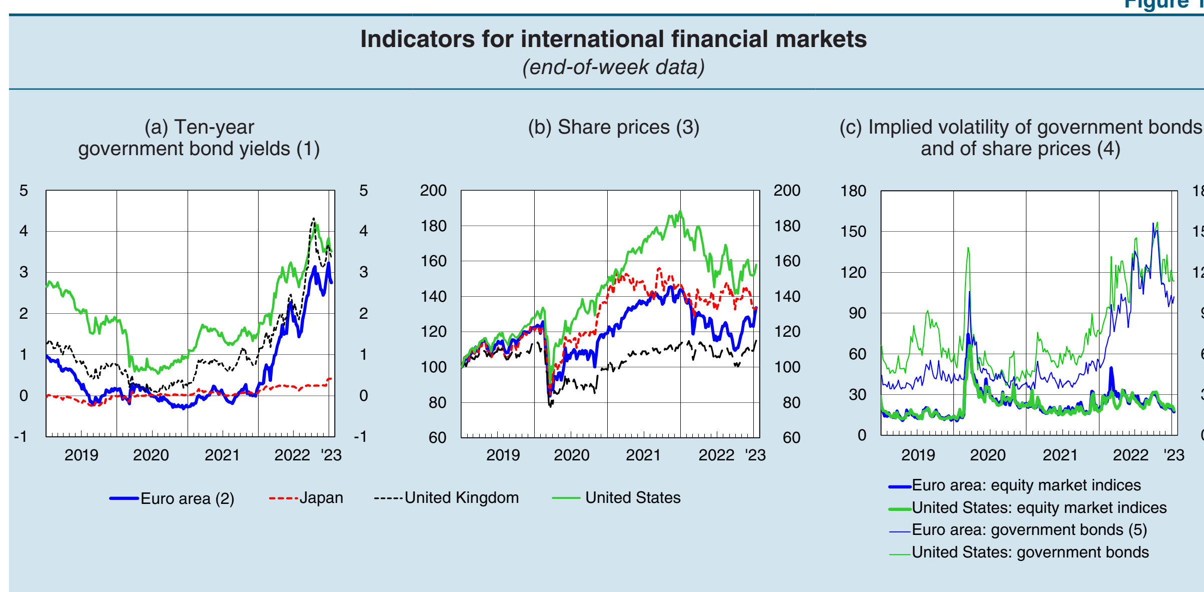
Since mid-October, government bond yields in the main economies have fallen on the whole

From mid-October to mid-December, long-term government bond yields in the main advanced economies, with the exception of Japan (see Section 1.1), declined significantly, returning to levels close to the yields in the first half of last year (Figure 10.a). The easing in the process of monetary policy restriction by the main central banks was a contributory factor. In the United States, the negative differential between long-term government bond yields and short-to medium-term yields widened, reflecting the larger decline over longer horizons in line with the increased likelihood of a slowdown in economic activity. In the United Kingdom, lower uncertainty over fiscal policy, following the approval of a budget law proposal with a more restrictive stance than that announced by the previous government, gave further impetus to lower yields across all time horizons. Share prices rose in all the leading markets, returning to mid-2022 levels (Figure 10.b).

Expectations of a more decisive policy tightening have become more widespread following the December meetings of central banks in the main advanced economies. The yields on ten-year European, British and US government bonds have risen temporarily, though remaining lower than in the second half of October.

Figure 10

Indicators for international financial markets
(end-of-week data)



Source: Refinitiv.
(1) Per cent. – (2) For the yields on 10-year government bonds: average yields, weighted by 2021 GDP at chain-linked prices, of the 10-year benchmark government securities of the euro-area countries (excluding Cyprus, Estonia, Greece, Latvia, Lithuania, Luxembourg, Malta, Slovakia and Slovenia). – (3) Indices: Dow Jones Euro Stoxx for the euro area, Nikkei 225 for Japan, FTSE All Share for the United Kingdom and Standard & Poor's 500 for the United States. Index: 1st week of January 2019=100. – (4) Percentage points. Government bonds: volatility implied by the prices of options on futures on the German Bund for the euro area and on the Treasury Note for the United States (MOVE index). Equity indices: VSTOXX for the euro area and VIX for the United States. – (5) Right-hand scale.

Volatility in public sector security yields has declined in the euro area in the period since mid-October, while it has remained broadly stable in the United States. The implied volatility in share prices has declined substantially, though remaining above pre-pandemic levels (Figure 10.c).

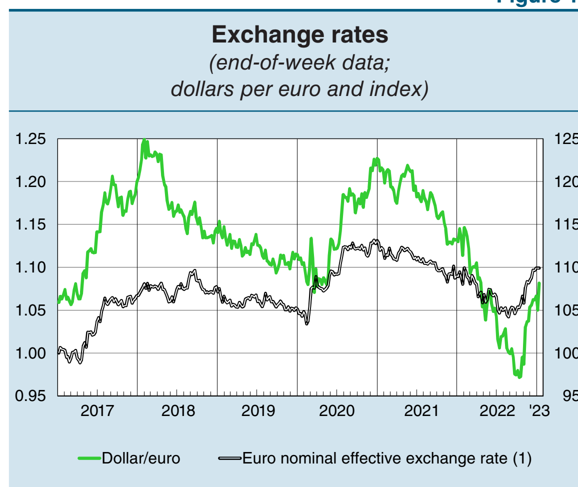
The depreciation of the dollar against major currencies comes to a halt

Expectations of a narrowing in interest rate differentials between the United States and other countries have influenced the performance of the US dollar exchange rate vis-à-vis the other major currencies. The euro/dollar exchange rate has appreciated by around 11 per cent since mid-October, exceeding parity (Figure 11). The euro nominal effective exchange rate has also strengthened again. The cost of hedging against a marked depreciation of the euro against the US dollar, as measured by the risk reversal indicator, has fallen, but remains higher than that against a marked appreciation (Figure 12). Long positions in euros have increased significantly among non-commercial traders in recent weeks.

In Japan, the central bank's interventions in the foreign exchange market continued at the end of October to counter the depreciation of the yen against the dollar. The Japanese yen, initially supported by these interventions, appears to have benefited from the fall in oil prices and from the reopening of tourism flows, which have halted the deterioration in the current account. The renminbi has appreciated vis-à-vis the US dollar, in part owing to the announcements in December of an easing of the Zero-COVID policy, following which the large capital outflows observed since early 2022 have decreased considerably.

Figure 11

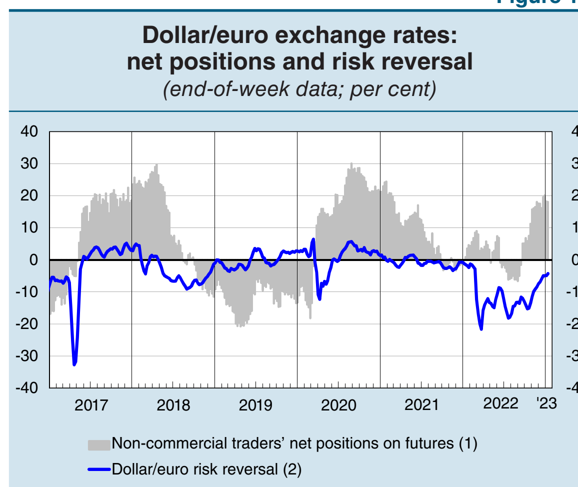
Exchange rates
(end-of-week data; dollars per euro and index)



Sources: ECB, Bloomberg and Refinitiv.
(1) Index: 1st week of January 2017=100. Right-hand scale. An increase in the index corresponds to an appreciation of the euro.

Figure 12

Dollar/euro exchange rates: net positions and risk reversal
(end-of-week data; per cent)



Sources: ECB, Bloomberg and Refinitiv.
(1) Difference between non-commercial traders' long and short positions in euros on dollar/euro FX futures as a percentage of total outstanding positions; non-commercial traders are those engaged in assets not hedged for foreign exchange risk by holding the contracts included in the index calculation. – (2) One-month risk reversal (20-day moving average), which measures the skewness of the distribution of expectations for the dollar/euro exchange rate. Negative (positive) values indicate a greater risk of a depreciation (appreciation) of the euro. Right-hand scale.

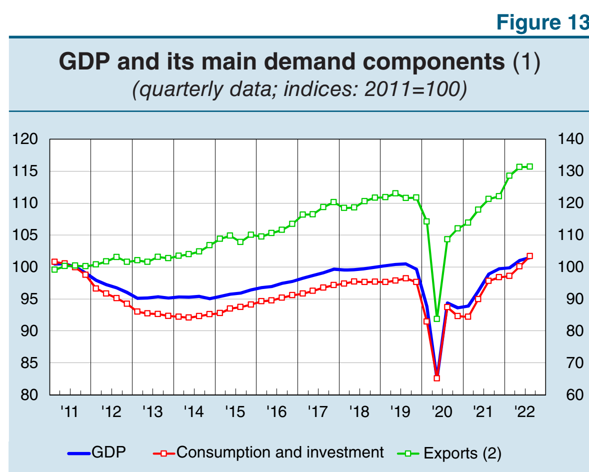
2 THE ITALIAN ECONOMY

2.1 CYCLICAL DEVELOPMENTS

In Italy, GDP continued to grow in the summer quarter; according to our models the cyclical situation weakened in the last three months of 2022, likely as a result of the drag from still high energy prices and of the easing of the strong rebound in value added in services following the most intense phase of the health crisis.

Figure 13

GDP and its main demand components (1)
(quarterly data; indices: 2011=100)



Source: Based on Istat data.
(1) Chain-linked volumes; data adjusted for seasonal and calendar effects. – (2) Right-hand scale.

GDP grows further in Q3

In the summer months, Italy's GDP expanded by a quarterly 0.5 per cent (Figure 13 and Table 3), nearly 2 percentage points higher than the value observed before the pandemic. Growth was supported by domestic demand. Household consumption continued to expand strongly; gross fixed investment increased, though less than in the previous quarter, on account of the contraction registered in the construction component for the first time since early 2020. Conversely, foreign trade shaved 1.3 percentage points off GDP growth: Italian exports stagnated in the face of a marked rise in imports (see Section 2.4). On the supply side, value

Table 3

GDP and its main components (1)
(percentage change on previous period and percentage points)

	2021	2022			2021
	Q4	Q1	Q2	Q3	
GDP	0.8	0.2	1.1	0.5	6.7
Imports of goods and services	5.0	3.8	2.1	4.2	14.7
National demand (2)	2.1	-0.3	1.1	1.8	6.8
National consumption	0.0	-0.7	1.5	1.8	4.2
Household spending (3)	-0.2	-1.2	2.5	2.5	5.2
General government spending	0.7	0.6	-1.2	-0.2	1.5
Gross fixed investment	2.7	3.8	1.5	0.8	16.5
Construction	3.6	4.6	0.8	-1.3	21.8
Capital goods (4)	1.9	3.1	2.2	2.9	12.1
Change in stocks (5)	1.4	-0.4	-0.4	0.2	0.3
Exports of goods and services	0.7	5.2	2.1	0.1	13.4
Net exports (6)	-1.1	0.5	0.1	-1.3	0.1

Source: Istat.
(1) Chain-linked volumes; the quarterly data are adjusted for seasonal and calendar effects. – (2) Includes the change in stocks and valuables. – (3) Includes non-profit institutions serving households. – (4) Include, as well as investment in plants, machinery and arms (which also include transport equipment), cultivated biological resources and intellectual property. – (5) Includes valuables; contributions to GDP growth on previous period; percentage points. – (6) Difference between exports and imports; contributions to GDP growth on previous period; percentage points.

added grew in services, especially for tourism and leisure activities, while it declined in industry.

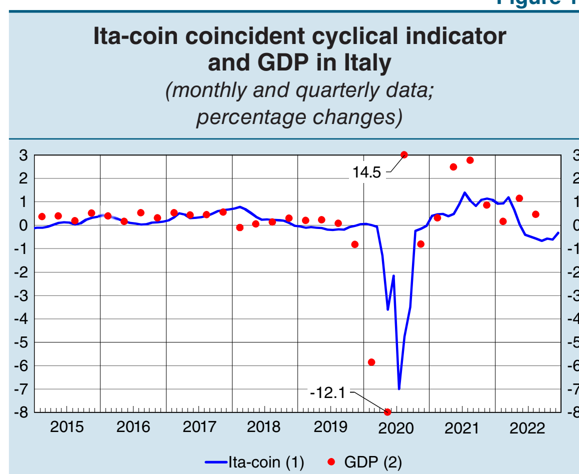
The cyclical situation appears to weaken at the end of 2022

Based on the models used by the Bank of Italy, it is estimated that economic activity weakened in the fourth quarter compared with the previous three months. This seems to have reflected the effects of persistently high energy prices and the easing of the recovery in the sectors most affected by the pandemic, such as trade, transport and hospitality services (see Section 2.2). The Ita-coin indicator, which measures GDP growth net of the most erratic components, remained negative over the same period (Figure 14). For 2022 as a whole, GDP appears to have increased by just under 4 per cent (see Section 2.10).

Figure 14

Ita-coin coincident cyclical indicator and GDP in Italy

(monthly and quarterly data; percentage changes)



Sources: Bank of Italy and Istat.
(1) Monthly estimates of changes in GDP on the previous quarter, net of the most erratic components. Further details are available on the Bank of Italy's website: 'Itacoin coincident cyclical indicator'. – (2) Quarterly data; percentage changes on previous quarter.

2.2 FIRMS

Our estimates suggest a further decline in industrial production in the fourth quarter, as a result of still high energy costs and weakening demand. After expanding in the second and third quarters, economic activity in the service sector appears to have slowed. Uncertainty about the continuation of the war in Ukraine and tighter financial conditions are affecting investment spending and the outlook for the real estate sector.

Industrial production likely declines in the fourth quarter

Based on our estimates – which incorporate the latest high-frequency data on electricity and gas consumption and on motorway traffic, as well as the assessments made by firms in December – industrial production declined in the fourth quarter (Figure 15). Since the beginning of the summer, the sharpest declines have been registered by the most energy-intensive sectors.

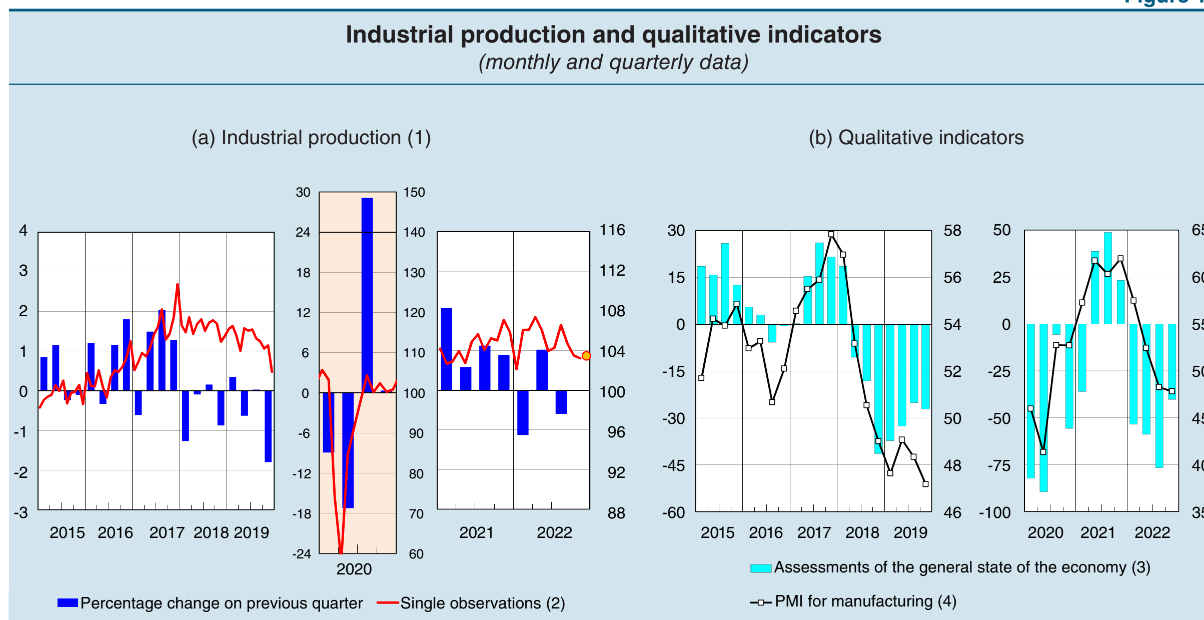
Firms' assessments remain somewhat unfavourable, especially in manufacturing

Manufacturing firms' opinions point to a decline in economic activity on average in the fourth quarter, as reported by both the PMI and the Istat surveys. The historically high levels of energy prices and the uncertainty related to the conflict in Ukraine continue to take a toll on firms (see the box 'Rising energy prices and the implications for Italian firms'). In services, confidence indicators paint a more favourable picture overall, thanks to the developments in trade. Looking ahead, the Bank of Italy's surveys conducted between November and December[1] present a less unfavourable outlook in which firms' assessments of their business situation became less pessimistic compared with the previous quarter. The surveys also point to a pick-up in demand expectations for the coming months, though almost half of manufacturing firms and around one third of service firms continue to report that they are experiencing difficulties related to energy costs to the same or a greater extent than in the summer months. Problems in sourcing commodities and intermediate inputs affected around 30 per cent of firms in industry excluding construction and in services and approximately half of those in construction, less than in the previous survey round.

[1] For more details, see 'Survey on Inflation and Growth Expectations', Banca d'Italia, Statistics Series, 16 January 2023.

Figure 15

Industrial production and qualitative indicators
(monthly and quarterly data)



Sources: Based on data from the Bank of Italy, Istat, Markit and Terna.
(1) Data seasonally and calendar adjusted. For graphic design reasons, the scale used for plotting data for 2020 is different from that used for other years. – (2) Monthly data. Index: 2015=100. The yellow dot represents the estimate for December 2022. Right-hand scale. – (3) Quarterly data. Balance, in percentage points, of the replies 'better' and 'worse' to the question on the general state of the economy (see 'Survey on Inflation and Growth Expectations', Banca d'Italia, Statistics Series, 16 January 2023). – (4) Average quarterly data. Diffusion indices of economic activity in the manufacturing sector based on purchasing managers' assessments (PMI). The index is obtained by adding half of the percentage of replies of 'stable' foreign orders to the percentage of replies of 'increasing' foreign orders. Right-hand scale.

RISING ENERGY PRICES AND THE IMPLICATIONS FOR ITALIAN FIRMS

Since the beginning of 2021, energy prices have recorded exceptional increases in Europe, accelerating further following the Russian aggression towards Ukraine last February. These developments have affected firms' operating costs, profitability and financial vulnerability, with additional repercussions for production and investment plans.

Higher energy costs affect operating costs both directly, via higher energy input costs, and indirectly, through increases in the prices of other intermediate goods, which, in turn, reflect the higher energy costs for suppliers. Using an energy input-output methodology,[1] which allows energy consumption in each sector to be considered together with all cross-sectoral relationships, it is possible to obtain an estimate of the extent to which the increase in the price of each energy product has contributed to the increase in the costs for Italian companies in the non-energy sectors, distinguishing between direct and indirect effects.

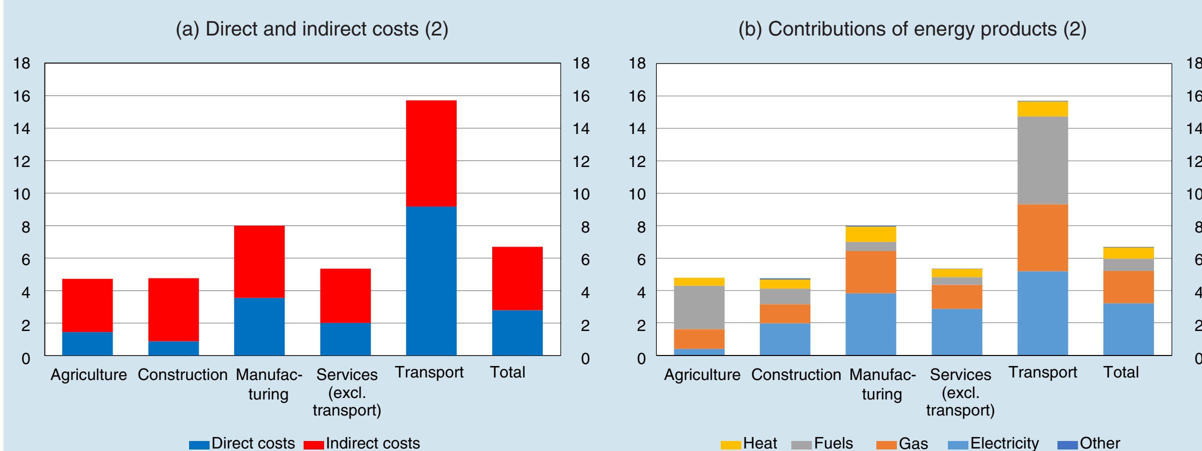
[1] This methodology combines data on energy consumption from the physical energy flow accounts (PEFA) and cross-sectoral relationships from the input-output matrices of the national accounts. It makes it possible to highlight the channels through which higher energy costs may be passed on to each sector and to quantify the contribution of higher energy prices to the overall increase in sectoral costs. The methodology (similar to other input-output models) assumes a full pass-through of the higher energy costs to the prices charged to buyers, as well as constant technical production and energy consumption coefficients. These assumptions likely overestimate the overall effect of the price increases on firms' operating costs, both because the pass-through may be incomplete (thus reducing the indirect effect compared with the reported effect) and because firms may change their production processes to adapt them to the new business environment.

According to these estimates, the increase in energy prices over the past two years has led to an increase in unit costs of 6.7 percentage points compared with the first quarter of 2021 (see panel (a) of Figure A), more than half of it due to the indirect effects of higher energy prices. The estimated rise in costs has been especially pronounced in the transport sector and, to a lesser extent, in manufacturing (15.7 and 8.0 per cent respectively): just under half of the overall increase in costs can be traced back to the rise in the prices of electricity (see panel (b) of Figure A), owing to the significant role it plays in production processes, whereas the direct use of gas accounts for around one fourth of the increase. Higher fuel prices appear to have had a more limited impact, but represent a significant share of the cost increase in the transport, agriculture and construction sectors.

Figure A

Impact of the rising energy prices on the unit costs of non-energy firms (1)

(percentage changes between Q1 2021 and Q4 2022)



Source: Based on PEFA data; for the input-output matrices, Istat; for the market prices of energy products, Refinitiv.
(1) Excludes net producers of energy products: A2 (forestry and use of forested areas), B (mining and quarrying), C19 (manufacture of coke and petroleum products), D (supply of electricity, gas, steam and air conditioning), E37-E38-E39 (sewage management – waste collection, treatment and disposal activities – remediation activities and other waste management services). Sector G46 (wholesale trade, except that of motor vehicles and motorcycles) is also excluded because it comprises an important oil refining plant. – (2) The energy input-output methodology combines the information at sectoral level (2-digit NACE classification) from the input-output tables with data from the PEFA programme on energy use and supply, and it provides sectoral estimates of the energy requirements for 20 energy products. The latter are grouped into 5 categories: electricity, gas (biogas, ethane, gas derivatives and natural gas), fuels (gasoline, biofuels, kerosene, diesel fuel, naphtha, petroleum and other hydrocarbons), heat, and a residual category (comprising coal, coke, wood and other petroleum products). To estimate unit costs, a conversion coefficient is applied to the quantities of each energy product (in terajoules) obtained using the input-output energy methodology, thereby allowing these quantities to be expressed in the same unit of measure as the market prices of the commodities. To compare the two periods considered, quarterly averages of daily spot prices are used.

According to the findings of the Bank of Italy's latest Business Outlook Survey of Industrial and Service Firms (conducted between September and October 2022), the share of companies planning to close the 2022 financial year with a loss and to reduce the number of hours worked in the six months following the interview is higher among energy-intensive companies[2] than among non-energy-intensive ones; a reduction in investment spending in 2023 is also more likely for the energy-intensive firms (see panel (a) of Figure B).

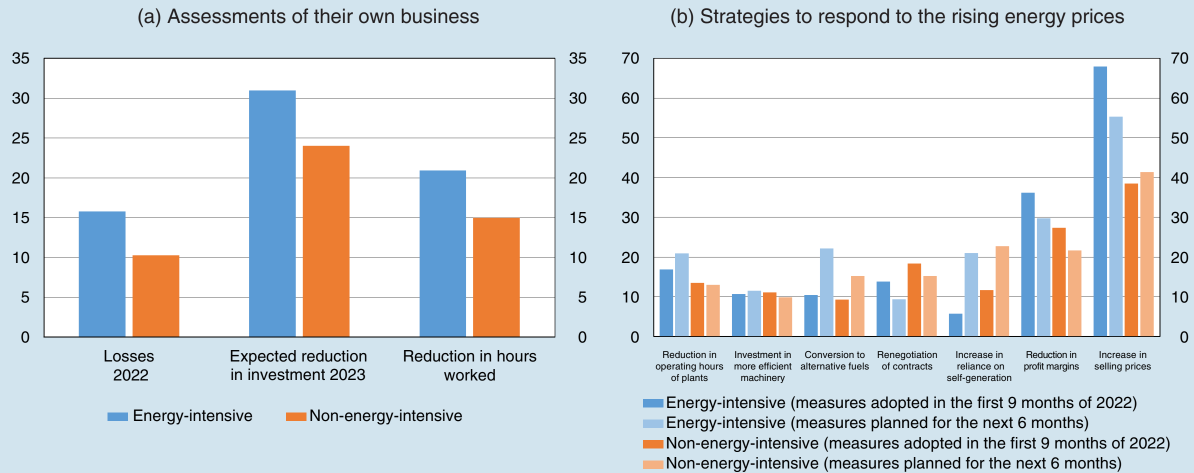
The most common strategies used by firms in the first nine months of 2022 to deal with rising energy costs were higher selling prices and lower profit margins (see panel (b) of Figure B); the adoption of these strategies, together with the reduction of the operating hours of plants,

[2] Given the significance of the impact of higher electricity prices on firms' costs, the analysis focuses on the assessments of energy-intensive firms. In particular, companies are defined as 'energy-intensive' if, in compliance with the requirements of the relevant ministerial decrees, they registered onto the 'List of electricity-intensive businesses' managed by Cassa per i servizi energetici e ambientali (CSEA) in order to access the benefits for the calendar year 2022 (see Section 2.9). In practice, these benefits are only available to firms in industry excluding construction and are tied exclusively to electricity consumption.

Figure B

Firms' assessments of their own business and strategies to respond to the rising energy prices (1)

(percentage shares)



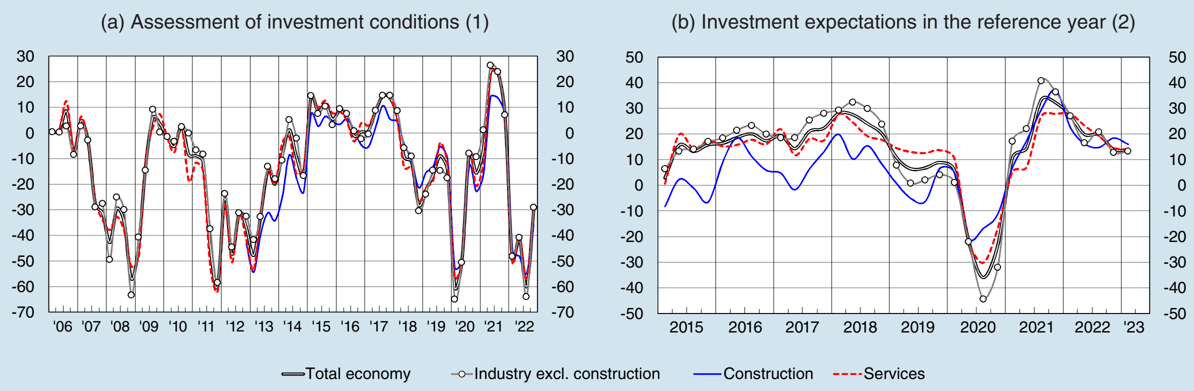
Source: Based on data from the 'Business Outlook Survey of Industrial and Service Firms', Banca d'Italia, Statistics Series, 7 November 2022.
(1) The analysis is limited to firms in industry excluding construction, consistent with the CSEA classification used to define energy-intensive firms. Firms belonging to sectors that are net producers of energy products were also removed from the sample (see Figure A, note 1). The data are weighted by the number of firms. The results are robust compared with a regression model that includes among its control variables the main characteristics of a firm (turnover, investment spending, number of employees, share of exports in turnover, and geographical location).

was particularly widespread among energy-intensive firms, whereas energy self-generation was more common among other firms. Conversely, the share of firms that, at the time of the survey, had invested in more efficient machinery or had adapted their plants to alternative energy sources was limited for both energy-intensive and non-energy-intensive firms; however, based on the interviews that were conducted, the former report being more likely to convert plants to alternative sources and to turn to energy self-generation in the coming months.

Figure 16

Firms' assessments of investment conditions and expectations of investment expenditure

(quarterly data; percentage points)



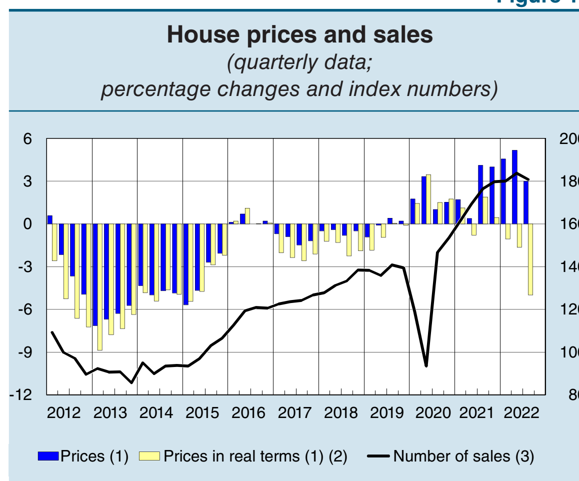
Source: 'Survey on Inflation and Growth Expectations', Banca d'Italia, Statistics Series, 16 January 2023.
(1) Balance of opinion between positive and negative assessments compared with the previous quarter. Construction firms are included in 'Total economy' starting from Q1 2013. – (2) Balance between expectations of an increase and of a decrease compared with the previous year. The first expectations for the reference year are surveyed in the last quarter of the preceding year.

Investment continues to slow

Investment slowed in the third quarter (to a quarterly 0.8 per cent), reflecting a reduction in construction spending, while spending on plant and machinery accelerated. According to our estimates – which are confirmed by data on the value of lease financing contracts for industrial vehicles and capital goods from Assilea, the Italian leasing association – investment appears to have stagnated in the fourth quarter. Also based on the Bank of Italy's surveys, firms continue to report negative investment conditions (Figure 16), though the share of firms planning to expand investment in the current year as a whole exceeds that of firms expecting to reduce it.

Figure 17

House prices and sales
(quarterly data; percentage changes and index numbers)



Sources: Based on data from the Italian Revenue Agency's Osservatorio del Mercato Immobiliare (OMI), the Bank of Italy, Istat and Consulente Immobiliare.
(1) Year-on-year percentage changes. – (2) House prices deflated by the consumer price index. – (3) Adjusted for seasonal and calendar effects. Indices: 2015=100. Right-hand scale.

The expansion of the real estate market is affected by rising mortgage rates and high inflation

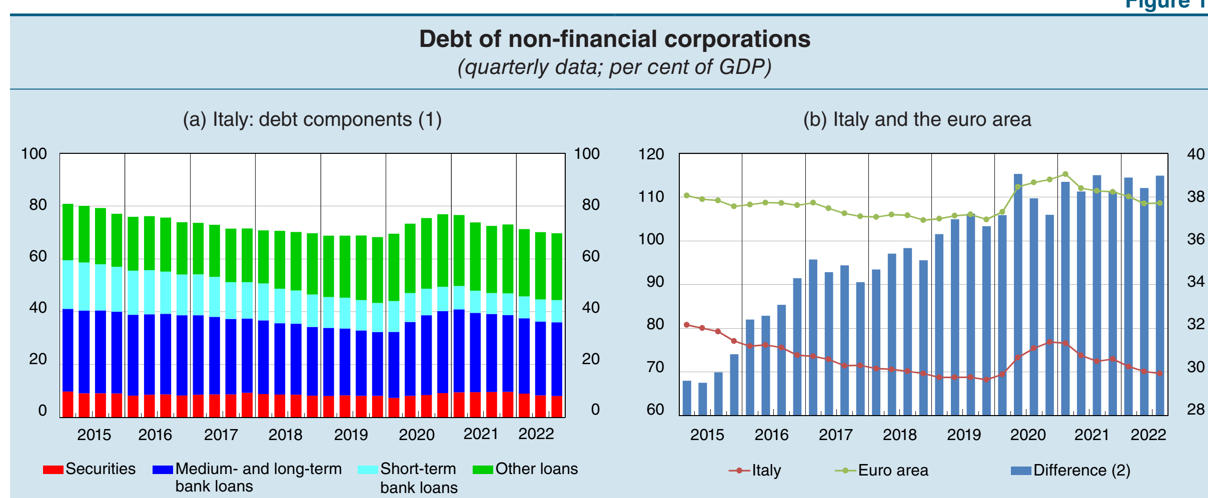
House sales dropped in the third quarter (-1.6 per cent quarterly; Figure 17), thus bringing to a halt the recovery under way since mid-2020. House prices, which fell in nominal terms quarter on quarter for the first time since 2020, remain 3 per cent higher than in the same period of 2021 but are 5 per cent lower net of consumer price inflation. The real estate agents interviewed for the Italian Housing Market Survey between September and October were anticipating a further decline in house prices, both with respect to the agents' own market and to the overall national market, in both the fourth quarter and the two-year period following the survey. These assessments continue to reflect expectations of weak demand and rising mortgage rates (see Section 2.7). The data inferred from the listings posted on the Immobiliare.it online platform in October and November remain consistent with a slowdown in the real estate market.

Firms' debt as a share of GDP declines further

In the third quarter, the total debt of Italian firms as a share of GDP came down by about half a percentage point quarter on quarter, to 69.6 per cent (Figure 18.a),

Figure 18

Debt of non-financial corporations
(quarterly data; per cent of GDP)



Sources: Based on Bank of Italy and Istat data.
(1) End-of-quarter stocks for debt (including securitized loans); 4-quarter cumulative flows for GDP. The data for the last quarter are provisional. – (2) Right-hand scale.

mainly as a result of nominal GDP growth. This is significantly below the euro-area average (108.6 per cent; Figure 18.b). The amount of liquidity held by Italian firms in their deposit and current accounts is stable with respect to the previous quarter and remains at high levels in historical terms.

2.3 HOUSEHOLDS

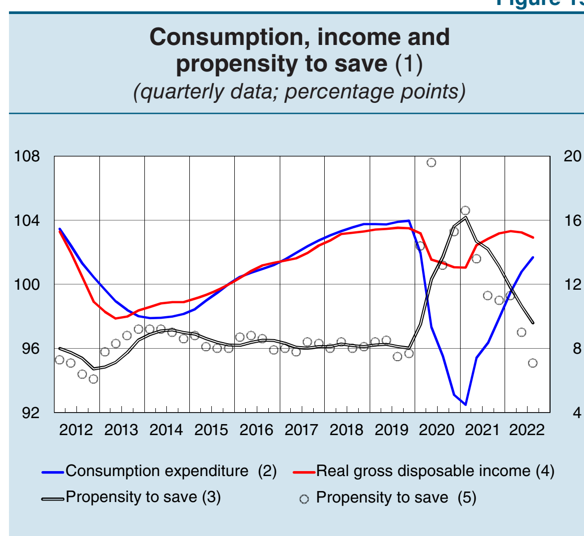
Household spending registered a further significant increase in the third quarter. It appears to have weakened at the end of the year, despite the Government's action to control energy prices and support disposable income, especially for poorer households. The propensity to save continued to decline, returning to pre-pandemic levels.

Consumption continues to expand in Q3...

Household expenditure grew at a fast pace during the summer months, driven by all sectors excluding non-durable goods. Over the same period, households' disposable income in real terms increased slightly compared with the previous quarter, also supported by government measures.[2] The propensity to save diminished, returning to pre-pandemic levels (7.1 per cent; Figure 19). All the measures put in place by the Government to mitigate energy prices (see Section 2.6) and to support disposable income dampened the effect of inflationary shock on households' purchasing power in 2022 and considerably mitigated the increase in income inequality.[3]

Figure 19

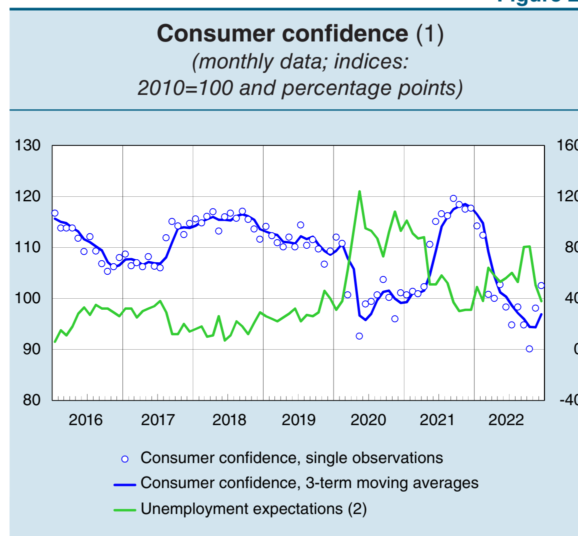
Consumption, income and propensity to save (1)
(quarterly data; percentage points)



Source: Based on Istat data.
(1) Seasonally adjusted data. – (2) Chain-linked volumes; index: 2015=100; 4-term moving average. – (3) Consumer households' savings as a percentage of gross disposable income; per cent; 4-term moving average; right-hand scale. – (4) Net of the variation in the final consumption expenditure deflator for resident households; index: 2015=100; 4-term moving average. – (5) Consumer households' savings as a percentage of gross disposable income; per cent; right-hand scale.

Figure 20

Consumer confidence (1)
(monthly data; indices: 2010=100 and percentage points)



Source: Based on Istat data.
(1) Seasonally adjusted data. In the absence of the figure for April 2020, which was not recorded owing to the pandemic emergency, the moving average for April, May and June 2020 is constructed on the basis of the only two observations available. – (2) Balance between the percentages of replies indicating 'an increase' and those indicating 'a decrease'. A rise in the balance signals a deterioration in the expectations regarding the unemployment rate. Right-hand scale.

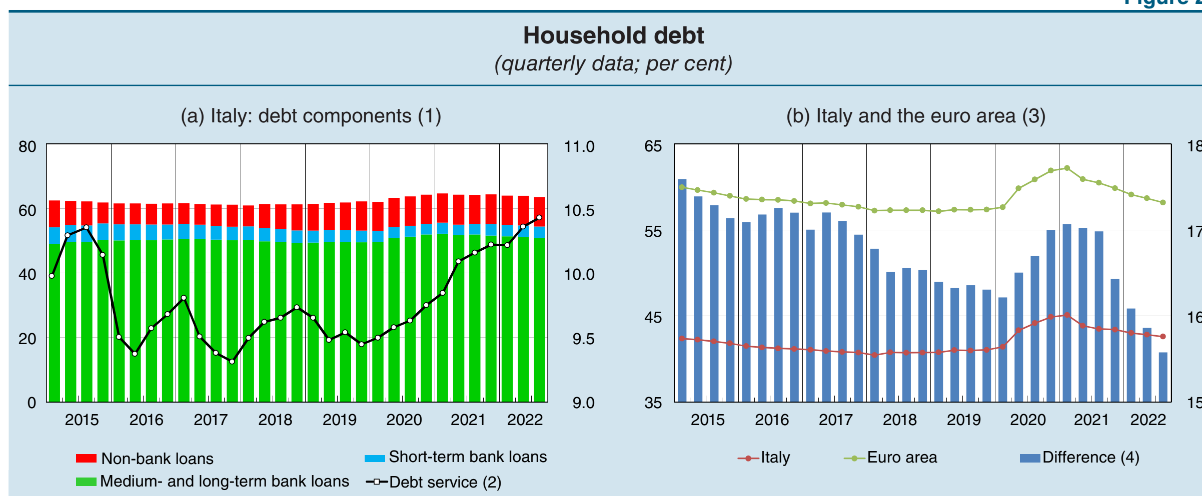
[2] Among these, Decree Law 50/22 ('Aid Decree') provided for a one-off bonus payment of €200 in July for individuals below a certain income threshold; Decree Law 115/22 ('Aid Decree-*bis*') raised workers' share of social contributions exempted from payment from 0.8 to 2.0 percentage points, again on a selective basis (the initial exemption had already been introduced by Budget Law 2022); see *Economic Bulletin*, 4, 2022.

[3] N. Curci, M. Savegnago, G. Zevi and R. Zizza, 'The redistributive effects of inflation: a microsimulation analysis for Italy', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 738, 2022.

Figure 21

Household debt

(quarterly data; per cent)



Sources: Based on Bank of Italy and Istat data.
(1) Debt (including securitized loans) as a percentage of gross disposable income. End-of-quarter stocks for debt; 4-quarter cumulative flows for income. – (2) Estimated cost of debt service (interest plus repayment of principal) for consumer households only. Right-hand scale. – (3) Debt is expressed as a percentage of GDP for ease of comparison with non-financial corporations' debt, which is expressed as a percentage of GDP in Section 2.2. The data for the last quarter are provisional. – (4) Right-hand scale.

... but seems to weaken in Q4

Despite the extension of government measures,[4] spending appears to have slowed at the end of the year, in line with the moderate decline in Confcommercio's consumption indicator in October and November on average compared with the third quarter. Consumer confidence rebounded in late 2022, driven by more optimistic assessments and expectations relating to the general state of the economy, including unemployment (see Section 2.5 and Figure 20); however, the overall indicator remains below its pre-pandemic values.

Debt servicing costs rise slightly

In the third quarter, Italy's household debt as a percentage of disposable income decreased compared with the previous period, to 63.5 per cent (Figure 21.a). Debt servicing costs (interest plus repayment of principal) rose slightly. Household debt as a share of GDP also fell, albeit slightly, to 42.6 per cent compared with 58.2 per cent in the euro area (Figure 21.b).

2.4 FOREIGN TRADE AND THE BALANCE OF PAYMENTS

In the third quarter of 2022, the growth in Italian exports came to a halt, while that in imports continued at a strong pace. In the autumn months, foreign sales of goods appear to have remained stable, while imports likely decreased. Owing to the steep increase in the energy deficit, the current account deficit continued to deteriorate. Disinvestments of Italian government bonds by foreign investors continued, amidst subdued net issuance by the Treasury. The positive net international investment position remains solid.

Exports of goods and services stagnate in the third quarter...

Following the strong expansion in the first half of 2022, exports remained broadly unchanged in volume in the summer months, as they were dampened by a marked slowdown in the sales of goods and a decline in the sales of services

[4] More specifically, the 'Aid Decree-*bis*' brought forward from January 2023 to October 2022 the cost-of-living revaluation of pensions, albeit on a partial and selective basis. By contrast, a further one-off payment (provided for by Decree Law 144/22, the 'Aid Decree-*ter*') was granted in November to a smaller group of beneficiaries and for a lower amount (€150), and in December the cut on fuel excises was reduced (Decree Law 179/22; see Section 2.9).

Table 4

Italy's imports and exports (1)
(percentage change on previous period)

	2021	2021 Q4	2022 Q1	2022 Q2	2022 Q3
Exports	**13.4**	**0.7**	**5.2**	**2.1**	**0.1**
Goods	13.0	-0.1	4.1	1.6	0.3
to euro area markets	14.9	1.2	1.9	3.0	-1.5
to non-euro area markets (2)	11.7	-1.1	5.9	0.6	1.6
Services	15.6	5.1	11.2	4.7	-0.8
Imports	**14.7**	5.0	**3.8**	**2.1**	**4.2**
Goods	13.8	4.1	3.8	1.4	2.8
from euro-area markets	14.9	1.9	2.2	1.1	-2.4
from non-euro area markets (2)	12.9	5.9	5.2	1.7	7.1
Services	18.5	8.6	4.5	4.9	9.5

Source: Based on Istat's national accounts and foreign trade data.
(1) Chain-linked volumes; raw annual data; quarterly data adjusted for seasonal and calendar effects. – (2) Includes unallocated countries and territories and, for exports, goods procured in Italian ports by foreign carriers.

(Table 4). Sales of goods were supported by the growth in markets outside the euro area – in particular in the United States, also on account of the appreciation of the dollar, and in China – while they declined in the markets of Italy's major euro-area trading partners. The largest contribution to exports came from pharmaceuticals and other transport equipment (in particular, from the sale of ships), whereas the majority of the remaining sectors registered a contraction. After one and a half years of strong recovery, exports of services decreased moderately, largely as a result of the waning of the rebound in international tourism receipts, which went back to pre-pandemic levels.

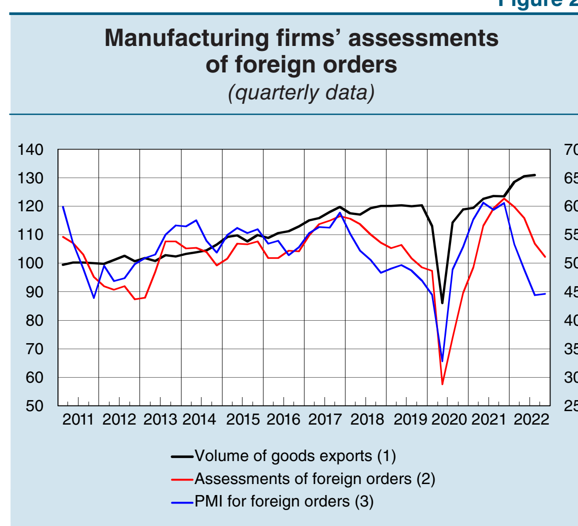
The strong growth continued both for imports of goods, also in relation to the positive performance of investment in capital goods (see Section 2.2), and, to an even greater extent, for imports of services. The first component was driven mainly by motor vehicles, electronics, machinery and energy products. As for services, the strong acceleration in purchases from foreign countries is largely due to the pick-up in residents' travels abroad.

...as do goods exports in the autumn months

According to our estimates, it appears that in the two-month period October and November the volume of exports of goods remained stable compared with the third quarter, while imports likely decreased. In the autumn, the purchasing managers' index (PMI) for foreign orders and the corresponding index relating to Istat's manufacturing survey still pointed to a deterioration in foreign demand (Figure 22).

Figure 22

Manufacturing firms' assessments of foreign orders
(quarterly data)



Sources: Istat, Markit and Refinitiv.
(1) National accounts data. Chain-linked volumes; the data are adjusted for seasonal and calendar effects. Indices: 2011=100. – (2) Quarterly average based on Istat's monthly survey of firms; percentage balance of replies of 'increasing' or 'decreasing' foreign orders, minus the average since the start of the time series (January 2000) plus 100. Q2 2020 is the average of two months; no data was gathered in April due to the pandemic emergency. Seasonally adjusted data. – (3) The diffusion index is obtained by adding half of the percentage of replies of 'stable' to the percentage of replies of 'increasing'. Quarterly averages. Seasonally adjusted data. Right-hand scale.

Our seasonally adjusted estimates suggest that tourism exports increased in October and November on average compared with the summer quarter.

The current account deficit widens, mainly as a result of the sharp increase in the energy deficit…

In the first eleven months of 2022 the current account balance was negative by €16.3 billion, against a surplus of €53.7 billion in the year-earlier period (Table 5). The deterioration, which started in the second half of 2021 (Figure 23), is mainly due to the exceptional increases in energy commodity prices; the deficit for this component grew by around €56 billion compared with the previous year. The merchandise trade surplus net of energy goods narrowed, while remaining large. The deficit in the service component narrowed moderately, benefiting from the doubling of the tourism balance surplus compared with the same period in 2021, while that for other services, in particular transport services, widened.

Table 5

Balance of payments (1)
(balances; billions of euros)

	2020	2021	Jan.-Nov. 2021	Jan.-Nov. 2022
Current account	**64.0**	**54.4**	**53.7**	**-16.3**
Memorandum item: % of GDP	3.9	3.1		
Goods	68.3	53.6	54.6	-16.4
Non-energy products (2)	88.8	97.6	91.8	76.7
Energy products (2)	-20.5	-43.9	-37.3	-93.1
Services	-8.4	-11.7	-10.5	-7.2
Primary income	20.7	31.9	28.0	23.8
Secondary income	-16.6	-19.4	-18.4	-16.5
Capital account	**0.9**	**-1.9**	**-1.8**	**0.6**
Financial account	**63.5**	**55.4**	**64.4**	**-23.3**
Direct investment	19.1	31.5	36.3	-10.0
Portfolio investment	109.3	124.3	108.5	153.0
Derivatives	-2.9	..	-0.8	7.7
Other investment (3)	-65.9	-121.1	-100.0	-175.4
Changes in official reserves (4)	4.0	20.7	20.4	1.4
Errors and omissions	**-1.5**	**2.8**	**12.5**	**-7.6**

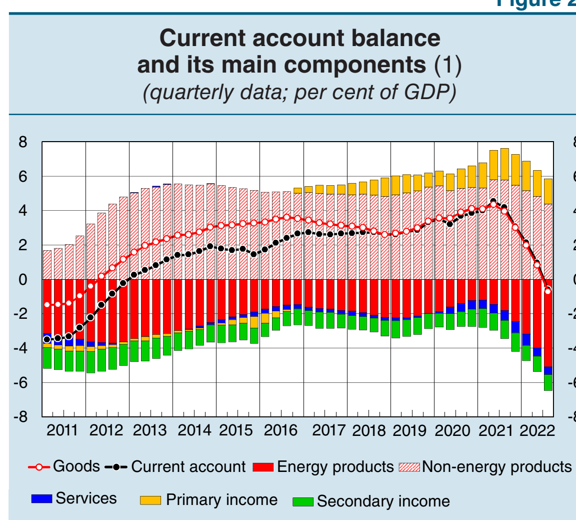
(1) Based on the international standards set out in the IMF's *Balance of Payments and International Investment Position Manual*, Sixth Edition (BPM6), 2009. For October and November 2022, provisional data. – (2) Based on Istat's foreign trade data. – (3) Includes change in TARGET2 balance. – (4) Includes the allocation of new Special Drawing Rights (SDRs) approved by the IMF in August 2021; the increase in official reserves did not affect the financial account, as it was offset by an equal increase in liabilities due to 'other investment' by the Bank of Italy.

… now nearing the oil shock levels of the early 1980s

In the four quarters to September 2022, the energy deficit reached 5.1 per cent of GDP, approaching its all-time low recorded in 1981 (-5.8 per cent). Over the course of 2022, natural gas became the main imported energy product in value, surpassing oil, which has traditionally been the main component; imports of electricity also increased markedly, reaching a thirty-year high.

Figure 23

Current account balance and its main components (1)
(quarterly data; per cent of GDP)



Source: For GDP, Istat. For the breakdown between energy and non-energy products, based on Istat foreign trade data.
(1) 4-quarter moving averages.

Foreign investors continue to dispose of Italian securities

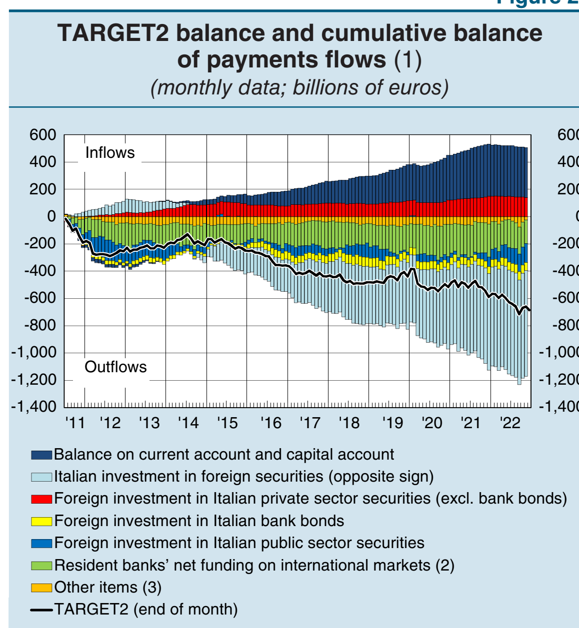
Between January and November 2022, net sales of Italian portfolio securities by foreign investors continued; the disinvestments mainly concerned government securities (€67.3 billion), in an environment of very low net issuance by the Treasury. According to data from Emerging Portfolio Fund Research (EPFR) for a sample of international investment funds, between December and early January the moderate net inflows of savings into Italian financial assets, driven by bond funds, appear to have been entirely offset by small outflows in the equity funds segment.

Overall, in the first eleven months of 2022 the more than ten year long upward trend of foreign fund purchases, in particular by Italian households, came to a halt. Over the same period, investment in other portfolio assets, almost exclusively long-term debt securities, mainly by resident banks and insurers, was €72.9 billion. These outflows were only partially offset by an increase in Italian banks' net funding on international markets via loans and deposits. The Bank of Italy's negative balance on the TARGET2 European payment system stood at €684 billion at the end of December, a slight improvement from late September (Figure 24), also as a result of the payment of the second tranche of funding under the Recovery and Resilience Facility by the European Commission in November (see Section 2.9).

Figure 24

TARGET2 balance and cumulative balance of payments flows (1)

(monthly data; billions of euros)



(1) Using the balance of payments accounting identity, an improvement in the Bank of Italy's negative balance vis-à-vis the ECB in the TARGET2 payment system may reflect investment in Italy by non-residents (greater liabilities), residents' disposals of foreign assets (fewer assets) or a current account and capital account surplus. Cumulative capital flows since July 2011. – (2) Net bank funding in the form of loans, deposits and other investments by the banking sector, including those intermediated by resident central counterparties. – (3) Direct investment, financial derivatives, residual items in other investment, official reserves, errors and omissions.

The net international investment position remains solid

At the end of September, Italy's net international investment position was positive by €105.8 billion, equal to 5.7 per cent of GDP. This is a marginal improvement from late June: the appreciation of the US dollar in the third quarter led to positive valuation adjustments on assets, which more than offset the negative current account balance.

2.5 THE LABOUR MARKET

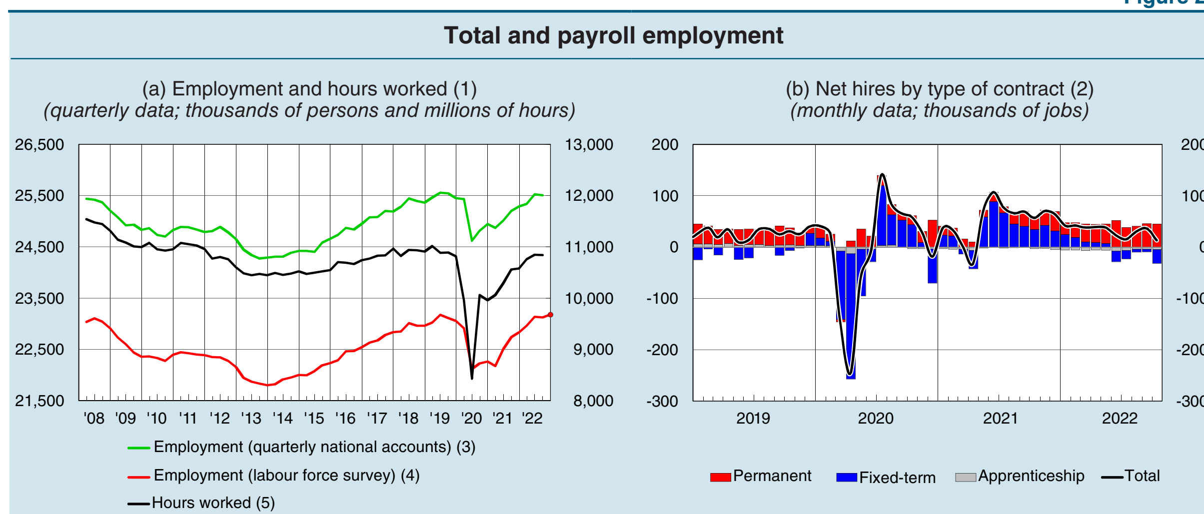
In the third quarter, employment and the number of hours worked stabilized at the high levels of the previous quarter. The number of permanent jobs continued to grow, driven by the many conversions of fixed-term contracts started in 2021. Labour demand picked up moderately in October and November. Wage growth remained subdued, partly owing to the prolonged negotiations in some service sectors, where the share of employees whose collective bargaining agreements are pending renewal is still substantial.

Employment remains stable in the third quarter

Employment growth came to a halt in the summer months (Figure 25.a): the increase in manufacturing (0.6 per cent quarter on quarter) was offset by a decline in construction (-0.8 per cent), the first since the end of 2020. Conversely, employment in private services remained unchanged. The number of hours worked, in total and per employee, which had already returned to pre-pandemic levels in the spring, also recorded no change. The use of wage supplementation broadly stabilized,

Figure 25

Total and payroll employment



Sources: Istat's quarterly national accounts for employment and hours worked; Istat's labour force survey for employment; based on data from the Ministry of Labour and Social Policies (mandatory reporting) for net hires.
(1) Seasonally adjusted data. The point corresponding to Q4 2022 indicates the average value for the two-month period October-November. – (2) Seasonally adjusted data. Net hires are calculated as the difference between total hires and total terminations in a given month. The contracts analysed are those in the non-farm private sector. – (3) Includes all persons engaged in production activity in Italy's economic territory. – (4) Includes all resident persons that are employed, excluding workers living permanently in an institution and military personnel. – (5) Right-hand scale.

following the rapid decline in the first half of the year (Figure 26.a), and showed signs of picking up in energy-intensive sectors.[5] Similar indications come from the number of workers who, although formally employed, are temporarily absent from work: this indicator, which also includes employees in wage supplementation schemes, fell to levels lower than before the health emergency. Growth in labour demand also came to a halt as a result of the reduction in fixed-term contracts, which were affected by the decline in the service sector. Permanent employment instead continued to expand, driven by the conversions of fixed-term contracts that began in 2021. The number of self-employed workers increased for the fourth quarter in a row, but remains almost 5 per cent lower than at end-2019.

Employment increases slightly in October and November

Preliminary data from Istat's labour force survey point to slightly favourable employment developments for the last few months of 2022, despite the weak economic outlook. In October and November, headcount employment rose by 0.2 per cent on average compared with the previous quarter, although it decreased slightly in November. This growth is attributable to a 0.5 per cent expansion in payroll employment which in turn, according to data from firms' mandatory reporting, was driven by permanent contracts. In the first ten months of 2022, the latter contributed more than 90 per cent to net job creation (Figure 25.b).[6] In the fourth quarter, the expectations of firms and households showed signs of resilience. The European Commission's indicator for Italian firms' employment expectations over the following three months remained broadly stable and compatible with an increase in labour demand. Households' unemployment expectations improved (see Section 2.3).

The unemployment rate continues to decline

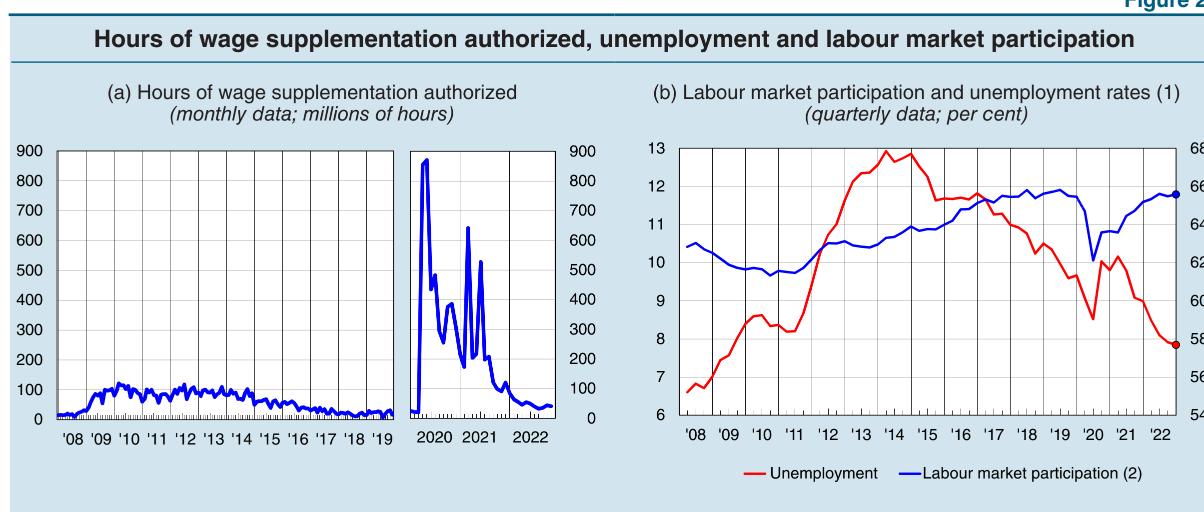
In the third quarter, the unemployment rate stood at historically low levels (7.9 per cent), 0.2 percentage points lower than in the second quarter (Figure 26.b). This decrease largely reflects the decline in the working age

[5] Energy-intensive sectors are defined based on an energy-intensity indicator, which is equal to the ratio of energy consumption to value added: both parameters are surveyed by Istat in the physical energy flow accounts and the national accounts, respectively.
[6] Ministry of Labour and Social Policies, Banca d'Italia and ANPAL, 'The labour market: data and analysis', November 2022.

population, which was not offset by developments in the participation rate. The latter increased slightly only in the over 50 age group. Other labour market stress indicators compiled by Eurostat suggest that the degree of labour market slack, after the peak reached during the pandemic, has returned to pre-2019 levels.[7] The unemployment rate declined further, by 0.1 percentage points in the two-month period October-November, while the participation rate remained stable.

Figure 26

Hours of wage supplementation authorized, unemployment and labour market participation



Sources: Based on INPS data for wage supplementation schemes; Istat's labour force survey for the labour market participation and unemployment rates.
(1) Seasonally adjusted data. The points corresponding to Q4 2022 indicate the average value for the two-month period October-November. – (2) Right-hand scale.

Wage growth remains moderate

Over the summer, actual hourly wage growth in the economy as a whole was 1.8 per cent year-on-year, 1.5 points lower than in the second quarter (Figure 27), owing to a sharp deceleration in the wage drift.[8] The rise in hourly labour costs (1.6 per cent) was slightly more moderate, as a result of a protracted decrease in employers' social security contributions. Contractual wages[9] instead grew by 1.2 per cent year-on-year, 0.3 percentage points more than in the previous period. The acceleration was driven by the public sector. In the non-farm private sector, the growth rate remained unchanged at 1.0 per cent. The agreements signed in the second half of 2022 in the electricity, gas and water, and insurance sectors led to increases of between 2 per cent and 3 per cent per year on average, broadly in line with the trend of the harmonized index of consumer prices excluding imported energy, forecast by Istat for the contractual period and published last June.[10] In trade, a bridge agreement was signed in December, including a one-off payment and a slight increase in wages from next April, pending final renewal. Wage growth is expected to accelerate moderately in 2023 (see Section 2.10), partly mitigated by protracted negotiations in some private service

[7] The indicator includes involuntary part-time employment, jobseekers who are not immediately available for work and those who would be available to start a job though not actively seeking it.

[8] Wage drift is defined as the differences between actual and contractual wages. They reflect the remuneration components other than the minimums set by collective bargaining and may arise from direct negotiations with firms or as unilateral payments made by the latter; they include, for example, productivity or attendance bonuses, one-off payments and non-monetary benefits included in corporate welfare plans.

[9] These contractual wages do not include one-off payments.

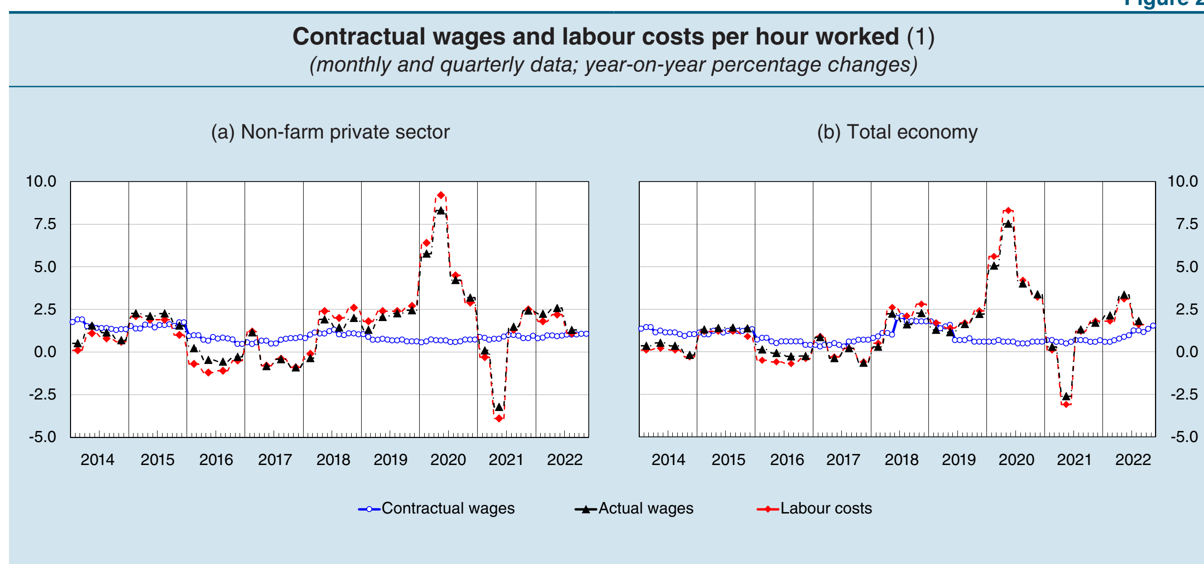
[10] ISTAT, 'IPCA al netto degli energetici importati' ('HICP excluding imported energy'), press release, 7 June 2022 (only in Italian).

sectors, where the share of employees waiting for a contract renewal is still large (around 67 per cent in November).

Figure 27

Contractual wages and labour costs per hour worked (1)

(monthly and quarterly data; year-on-year percentage changes)



Sources: Istat's quarterly national accounts and Survey of Contractual Wages and Salaries.
(1) Raw monthly data for contractual wages; seasonally adjusted quarterly data for actual wages and labour costs.

2.6 PRICE DEVELOPMENTS

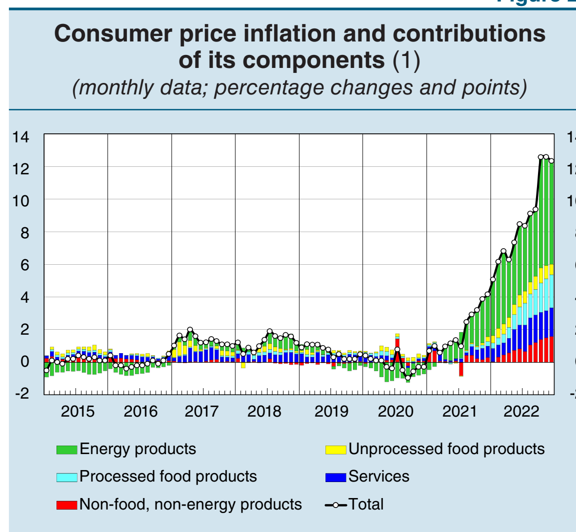
Inflation reached new heights in the autumn months, driven by the energy component, which is still passing through to the prices of other goods and services and is leading to a moderate strengthening of core inflation. Consumer price growth continued to be mitigated by the energy-related measures. Households' and firms' expectations point to the first signs of easing inflationary pressures.

Inflation remains high Harmonized consumer price inflation remained high in December (12.3 per cent; Figure 28 and Table 6), although it declined slightly compared with the two previous months. Energy and food prices, despite decreasing moderately, remain at historically high levels (65.1 per cent and 11.6 per cent, respectively). Energy prices are still highly volatile, particularly so in the unregulated components. The exceptional increase in energy prices is contributing to consumer price inflation both directly and indirectly via higher production costs. Taking direct and indirect effects into account, it is estimated that in the last quarter of 2022, in Italy, just over 70 per cent of inflation was attributable to the energy shock (see the box 'The pass-through of energy price increases to consumer price inflation in Italy and the euro area'). Core inflation rose again (4.8 per cent), driven by both the service and the non-energy industrial component.

Figure 28

Consumer price inflation and contributions of its components (1)

(monthly data; percentage changes and points)



Source: Based on Eurostat data.
(1) Twelve-month change in the HICP.

Table 6

Indicators of inflation
(year-on-year percentage changes, unless otherwise specified)

	HICP (1)		CPI (2)			PPI (3)	GDP deflator
	Overall index	Excl. food and energy	Overall index		Excl. food and energy	Overall index	
				at 1 month (4)			
2020	-0.1	0.5	-0.2	–	0.4	-4.4	1.6
2021	1.9	0.8	1.9	–	0.8	13.0	0.5
2022	8.7	3.3	8.1	–	3.0	….	….
2022 – Jan.	5.1	1.3	4.8	1.5	1.5	41.8	–
Feb.	6.2	1.7	5.7	0.9	1.5	41.3	–
Mar.	6.8	1.8	6.5	1.0	1.7	46.6	–
Apr.	6.3	2.2	6.0	-0.3	2.0	44.1	–
May	7.3	3.0	6.8	0.8	2.7	42.7	–
June	8.5	3.4	8.0	1.2	3.1	41.9	–
July	8.4	3.4	7.9	0.5	3.4	45.9	–
Aug.	9.1	4.1	8.4	0.6	3.6	50.5	–
Sept.	9.4	4.4	8.9	0.6	3.9	52.9	–
Oct.	12.6	4.6	11.8	3.5	4.2	33.2	–
Nov.	12.6	4.7	11.8	0.7	4.2	35.7	–
Dec.	12.3	4.8	11.6	0.3	4.4	….	–

Sources: Based on Istat and Eurostat data.
(1) Harmonized index of consumer prices. – (2) Consumer price index for the entire resident population; this differs from the HICP principally on account of the different method for recording the prices of pharmaceutical products and promotional sales. – (3) Producer price index for industrial products sold on the domestic market. – (4) One-month percentage change, seasonally adjusted.

THE PASS-THROUGH OF ENERGY PRICE INCREASES TO CONSUMER PRICE INFLATION IN ITALY AND THE EURO AREA

Energy prices have risen sharply since early 2021, reflecting at first the recovery in economic activity after the pandemic and, subsequently, the Russian invasion of Ukraine and the ensuing tensions in the supply of energy commodities. Unlike in the past, the increases have been observed for all energy goods: those in oil prices have been comparable to those of past episodes, while those in electricity and gas prices have been unprecedented in magnitude and volatility.

The increases have had a marked impact on the overall consumer price index: in the last quarter of 2022 on average, the harmonized index of consumer price inflation in Italy reached 12.5 per cent on an annual basis, driven to a large extent by developments in the energy component (which grew to around 68 per cent), which directly contributed about 6.5 percentage points to overall inflation. Euro-area inflation came to 10 per cent: the energy component, which rose to about 34 per cent, directly contributed 3.7 percentage points, reflecting the considerable heterogeneity across countries. Moreover, the exceptional intensity of the price increases has impacted inflation indirectly, through the non-energy components: the pressures originating in wholesale energy markets have gradually passed through to the price formation chains, influencing selling prices for other goods, such as food and non-food products derived from industrial processing. They have also affected the prices of many services, such as in transport, tourism and the restaurant industry.

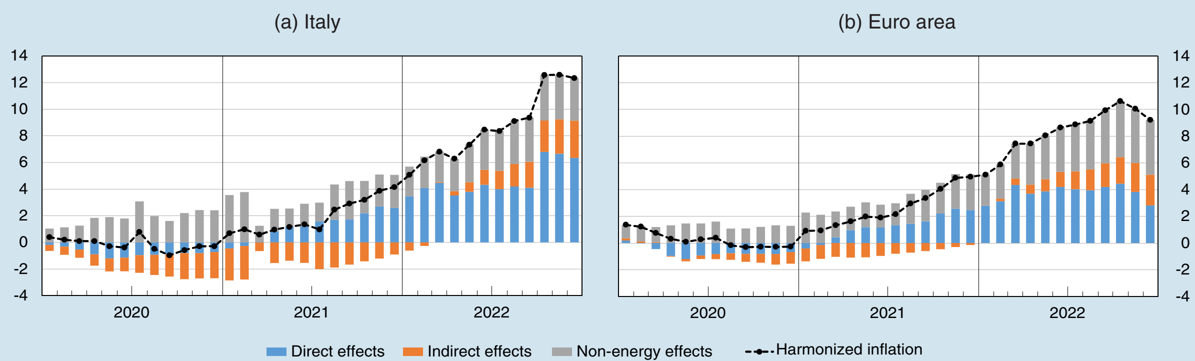
A study by the Bank of Italy[1] estimates that the responsiveness of the prices of non-energy industrial goods and services to energy price developments is statistically significant, though quantitatively modest; by contrast, food prices display a higher sensitivity, as well as being typically more volatile.

[1] F. Corsello and A. Tagliabracci, 'Assessing the pass-through of energy prices to core and food inflation in the euro area', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), forthcoming.

Given the exceptional magnitude of the increase in energy prices, however, their total contribution to overall inflation was substantial: looking at the average figure for 2022, without the energy shock, underlying and food inflation would have been 0.9 and 2.4 percentage points lower in Italy and 0.8 and 3.2 percentage points lower in the euro area compared with the data actually observed (see the figure). In the last quarter of 2022, taking into account all direct and indirect effects, energy accounted for slightly more than 70 per cent of overall inflation in Italy and around 60 per cent in the euro area. The effects for Germany and Spain are similar in magnitude to those for the euro area, while they are more limited for France, where energy price increases have been less pronounced.

Figure

The effects of energy prices on consumer price inflation (1)
(monthly data; percentage changes and percentage points)



Sources: Based on Eurostat and Istat data.
(1) The quantification of the indirect effects of the energy shock is based on a historical decomposition obtained through a structural vector autoregression model, estimated with Bayesian techniques using monthly data covering the period 2002-2022. The model, which is estimated separately for Italy and the euro area, comprises the main components of inflation (energy, food and underlying) as well as some variables relating to the economic cycle and the labour market.

Inflation is mitigated by energy-related measures

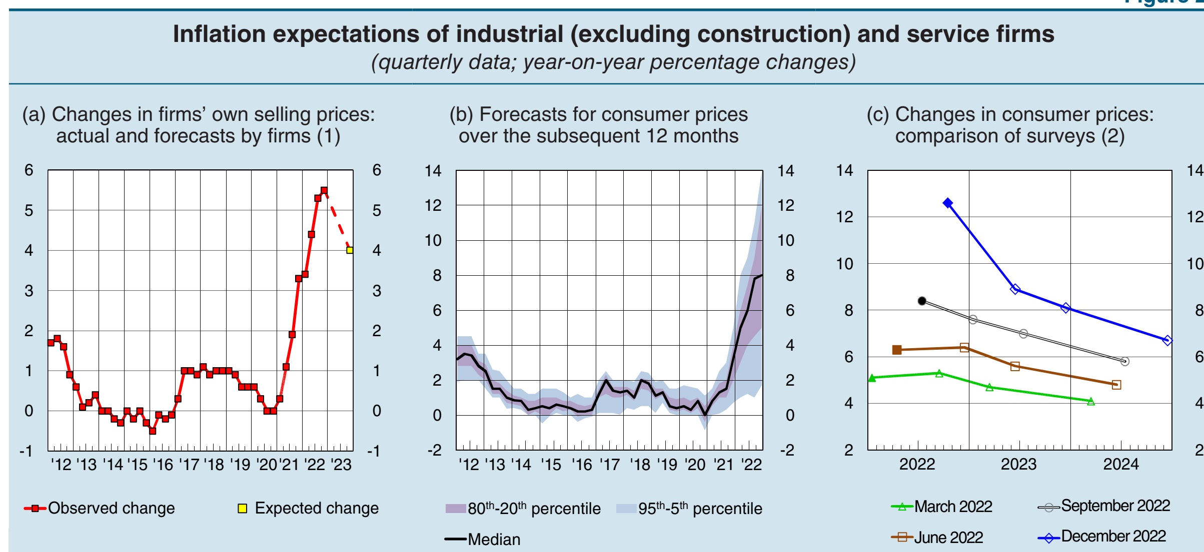
Considering only government measures that have a direct effect on the consumer price index,[11] the overall drag on inflation would have been over one percentage point on average in the fourth quarter, about half of which would be attributable to the cuts in gas and electricity bills. For the first three months of 2023, the Italian Regulatory Authority for Energy, Networks and the Environment (ARERA) announced a quarter-on-quarter cut of around 20 per cent in electricity prices on the regulated market, driven by both lower wholesale energy market prices and measures approved by the Budget Law for 2023 (see Section 2.9).

Wage pressures remain low and there are signs of a slowdown in other cost pressures

Producer price inflation for industrial products sold on the domestic market declined in October and November compared with the summer months, but remained high. This was mainly the result of the slowdown in energy prices and, to a lesser extent, of the reduced inflation of intermediate goods since the third quarter. The PMIs also show signs of an easing in producer price pressures: the manufacturing input price development index fell in December to its lowest level in two years, although it remains at a level consistent with a recovery. Moreover, the high inflationary pressures have not yet passed through to salaries (see Section 2.5) and unit labour cost growth in the non-farm private sector, measured on a four-term moving average, stabilized in the third quarter.

[11] These include the elimination of system charges on electricity and gas, a reduction in excise duties on petrol and diesel (in force until 31 December 2022) and an increase in the electricity and gas 'social bonus' for financially disadvantaged households, the effects of which on bills are taken into account in Istat's calculation of consumer price indices starting from April 2022.

Figure 29



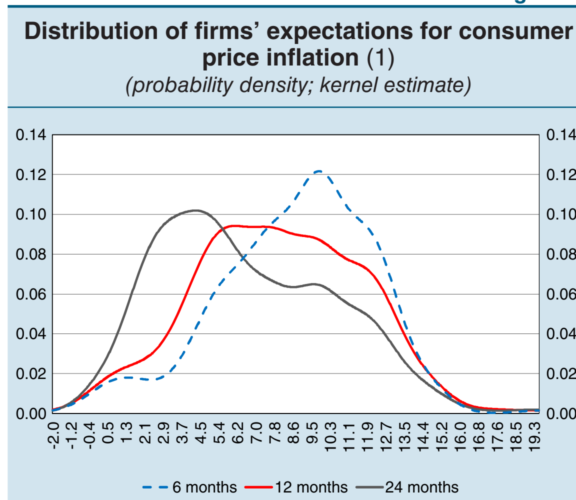
Inflation expectations of industrial (excluding construction) and service firms
(quarterly data; year-on-year percentage changes)

Source: Based on the findings of the Bank of Italy's quarterly 'Survey on Inflation and Growth Expectations'. Up to October 2018, the survey was conducted jointly with Il Sole 24 Ore.
(1) Robust average of responses to questions on the observed percentage change in firms' own prices over the past 12 months and the change expected over the next 12 months. – (2) The key below indicates the month in which the survey was carried out. The first point on each curve is the definitive figure for inflation available at the time of the survey, which is provided to respondents in the questionnaire to use as the basis for formulating their expectations; the second point is the average of the forecasts (for the 12-month change in prices) for the 6 months following the survey date; the third point is the average of the forecasts for the 12 months following; and the fourth point is the average of the forecasts for the 24 months following.

Households' and firms' expectations of higher prices start to ease

According to Istat's household surveys, expectations of an easing in inflationary pressures prevailed in December, for the first time since July 2021. Based on the European Central Bank's Consumer Expectations Survey, Italian households' inflation expectations over a three-year horizon fell sharply and reached a median of 3.0 per cent. According to the Bank of Italy's quarterly Survey on Inflation and Growth Expectations, conducted between November and December, the increase in firms' selling prices expected over the next twelve months has also waned, especially in industry (Figure 29). Conversely, firms reported an increase in consumer price inflation expectations across all forecasting horizons, more markedly so for the short ones which were likely affected by the high level of current inflation, information that the survey respondents were given in advance.[12] The dispersion of these expectations continued to increase to historically high levels across all horizons (Figure 30).

Figure 30



Distribution of firms' expectations for consumer price inflation (1)
(probability density; kernel estimate)

Source: Based on the findings of the Bank of Italy's quarterly 'Survey on Inflation and Growth Expectations', Banca d'Italia, Statistics Series, 16 January 2023.
(1) Distribution on the consumer price inflation rate (12-month change in prices) for different time horizons (at 6, 12 and 24 months) following the survey conducted between November and December 2022.

[12] Firms which were not given information on the current inflation rate had expectations between 2 and 3 percentage points lower, depending on the time horizon.

2.7 BANKS

Between August and November, bank lending to the non-financial private sector slowed down, reflecting weaker demand from firms for investment purposes and from households for house purchase. Credit supply conditions tightened moderately. The increase in policy rates that started in July is being passed through to the cost of bank lending. The non-performing loan rates remained low and the profitability of significant banking groups increased.

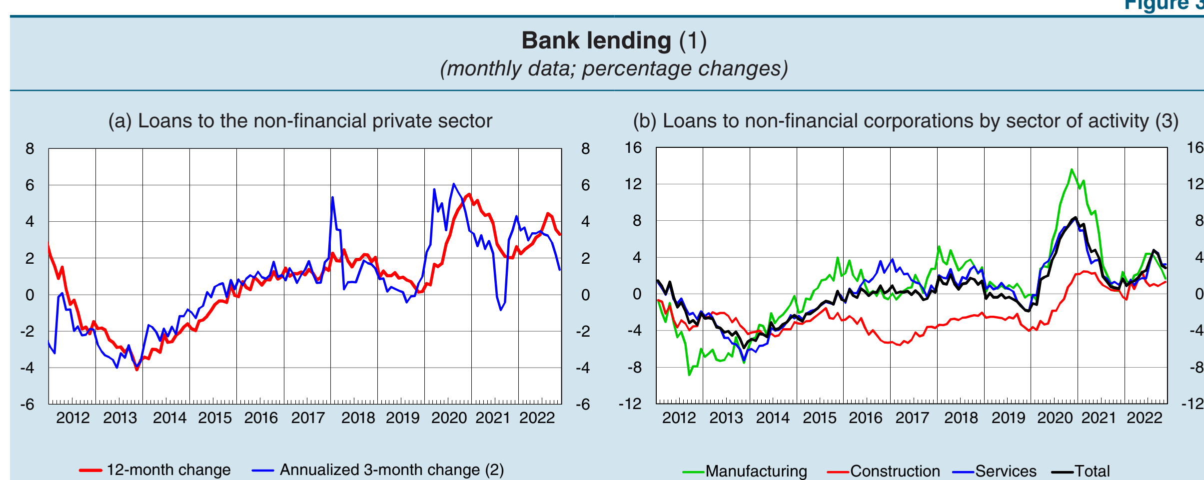
Lending to the private sector slows down ...

In November, growth in lending to the non-financial private sector declined to 1.4 per cent quarter-on-quarter (from 3.1 per cent in August, on an annualized basis; Figure 31.a). This slowdown mainly reflected that of loans to non-financial corporations, whose growth largely came to a halt. The twelve-month credit growth weakened in manufacturing and services, while it increased slightly in construction (Figure 31.b). The growth in loans to households also declined (to 3.1 per cent), mainly as a result of developments in loans for house purchase.

Figure 31

Bank lending (1)

(monthly data; percentage changes)



Source: Supervisory reports.
(1) Includes bad debts, repos and loans not reported in banks' balance sheets because they have been securitized. Percentage changes are net of reclassifications, exchange rate variations, value adjustments, and other variations not due to transactions. – (2) The data are seasonally adjusted using a methodology that conforms with the guidelines of the European Statistical System. – (3) Twelve-month changes; until December 2013, the data for each sector are not corrected for value adjustments.

... as a result of weaker demand and tighter credit standards

According to the Italian banks surveyed last October in the euro-area bank lending survey (BLS),[13] firms' credit demand for investment purposes declined in the third quarter, while that for financing inventories and working capital increased. Households' demand for loans for house purchase and consumption purposes also weakened, reflecting the higher interest rates and declining consumer confidence in the quarter. Again according to banks, the decline in demand for loans was accompanied by a further general tightening of credit standards. The more selective lending policies were driven by a higher risk perception and lower risk tolerance on the part of intermediaries, as well as by higher funding costs.

Intermediaries anticipated a further and stronger tightening of credit policies for loans to firms and households in the fourth quarter, while they expected demand from firms to remain stable and demand from households to decline, especially for mortgage loans.

[13] Thirteen of the main Italian banking groups took part in the survey. The results for Italy are available on the Bank of Italy's website: 'Bank Lending Survey (BLS)'; for those on the euro area, see the ECB, 'October 2022 euro area bank lending survey', press release, 25 October 2022.

Bank funding stops growing and becomes more expensive

Banks' funding remained stable in the twelve months ending in November, following a 1.3 per cent increase recorded in August. This trend reflected the slowdown in deposits (Table 7), following the deceleration in those of households and the decline in those of firms.

Table 7

Main assets and liabilities of Italian banks (1)
(billions of euros and percentage changes)

	End-of-month stocks		12-month percentage changes (2)	
	August 2022	November 2022	August 2022	November 2022
Assets				
Loans to Italian residents (3)	1,756	1,743	2.6	2.2
of which: firms (4)	678	666	4.8	2.8
households (5)	677	682	4.1	3.8
Claims on central counterparties (6)	33	36	6.1	-2.4
Debt securities excluding bonds of resident MFIs (7)	543	532	1.5	1.5
of which: securities of Italian general government entities	403	393	2.3	2.3
Claims on the Eurosystem (8)	336	342	-19.6	-20.1
External assets (9)	514	508	8.9	4.8
Other assets (10)	856	883	15.5	16.4
Total assets	**4,038**	**4,045**	**3.3**	**2.8**
Liabilities				
Deposits of Italian residents (3) (11) (12)	1,883	1,845	2.7	0.4
Deposits of non-residents (9)	325	322	6.2	4.4
Liabilities towards central counterparties (6)	107	113	25.3	14.9
Bonds (12)	201	207	-8.6	-3.2
Liabilities towards the Eurosystem (8)	432	415	-6.7	-7.5
Liabilities connected with transfers of claims	116	112	-3.8	-5.1
Capital and reserves	338	344	-2.9	-0.3
Other liabilities (13)	637	686	18.0	20.4
Total Liabilities	**4,038**	**4,045**	**3.3**	**2.8**

Source: Supervisory reports.
(1) The data for November 2018 are provisional. – (2) Adjusted for reclassifications, value adjustments and exchange rate movements. Changes in loans to firms and households are adjusted for securitizations. – (3) Excludes transactions with central counterparties. – (4) Harmonized definition, excludes producer households. – (5) Harmonized definition, includes producer households, non-profit institutions serving households and households not classified elsewhere. – (6) Only repos. – (7) Excludes bonds of resident MFIs, i.e. banks and money market funds. – (8) Includes the accounts with the Eurosystem for monetary policy operations; see Tables 3.3a and 3.3b, in 'Banks and Money: National Data', Banca d'Italia, Statistics Series.– (9) In the period considered, these refer mainly to interbank transactions. – (10) Includes bonds issued by resident MFIs; loans to resident MFIs; shares and other equity of resident companies; cash; money market fund units; derivatives; movable and immovable goods; other minor items. – (11) Excludes liabilities connected with transfers of claims. – (12) Excludes liabilities towards resident MFIs. – (13) Includes bonds held by resident MFIs; deposits of resident MFIs; derivatives; other minor items.

Liabilities vis-à-vis the Eurosystem decreased in conjunction with the voluntary repayments of TLTRO-III funds disbursed last November (see Section 1.2). The cost of funding increased, mainly as a result of the rise in money market interest rates.

The increases in policy rates are passing through to the cost of bank lending

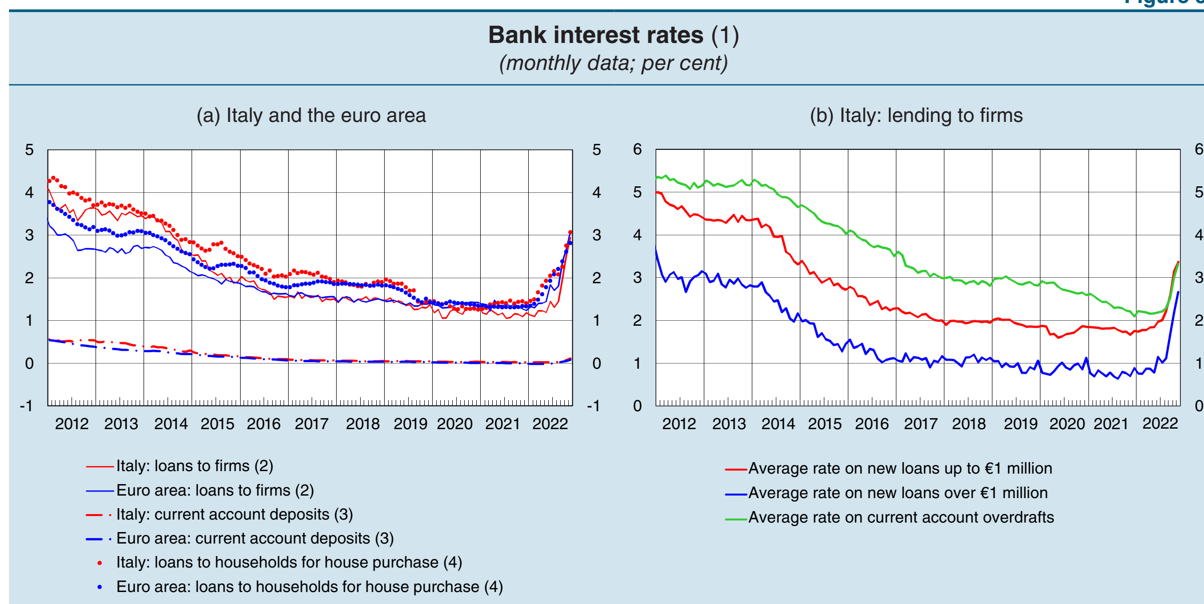
The average interest rate on new bank loans to firms rose by around 150 basis points since August (to 2.9 per cent in November), in line with the average euro-area increase (Figure 32). The cost of new loans to households for house purchase increased by approximately 100 basis points (to 3.1 per cent); the increase was recorded for both fixed-rate and variable-rate mortgages (3.6 per cent and 2.8 per cent, respectively).

The non-performing loan rate remains low ...

In the third quarter, the flow of new non-performing loans in proportion to total loans rose slightly to 1.1 per cent (on an annualized basis; Figure 33). Compared with the previous three months, the indicator increased slightly for firms (to 1.7

Figure 32

Bank interest rates (1)
(monthly data; per cent)



Sources: Bank of Italy and ECB.
(1) Averages. The data on lending and deposit rates refer to transactions in euros and are gathered and processed using the Eurosystem's harmonized method. – (2) Rate on new loans to firms. – (3) Rate on current account deposits of households and firms. – (4) Rate on new loans to households for house purchase.

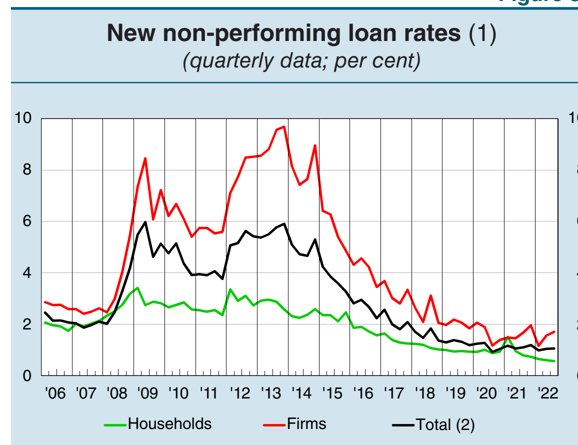
per cent), driven by manufacturing companies, while it remained stable for households (0.6 per cent). The ratio of non-performing loans to total loans of the significant banking groups remained virtually unchanged, both gross and net of writedowns. The coverage ratio of these loans grew, mainly as a result of higher provisions (Table 8).

... and the profitability of significant banking groups increases

In the first nine months of last year, the annualized return on equity (ROE) of significant banking groups, net of extraordinary components, increased compared with the same period of 2021. This improvement mainly reflected the increase in net interest income, which more than offset the decrease in other income. Operating expenses rose as a result of the charges incurred by a large intermediary to facilitate the early termination of employment contracts; net of these charges, they would have decreased slightly. Loan loss provisions held broadly stable.

Figure 33

New non-performing loan rates (1)
(quarterly data; per cent)



Source: Central Credit Register.
(1) Annualized quarterly flows of adjusted NPLs in relation to the stock of loans at the end of the previous quarter, net of adjusted NPLs. Data seasonally adjusted where necessary. – (2) The total includes households, firms, financial corporations, foreign trade, general government and non-profit institutions.

The capitalization of significant groups declined slightly in the third quarter, mainly as a result of a reduction in higher-quality capital. Despite the positive contribution of profitability, the value of capital was affected by the reduction in reserves of other comprehensive income, linked to the decrease in the market value of portfolio securities measured at fair value, and the buyback by a primary group of their own shares.

Table 8

Main indicators for significant Italian banks (1)
(per cent)

	June 2022	September 2022
Non-performing loans (NPLs) (2)		
Gross NPL ratio	2.6	2.6
Net NPL ratio	1.2	1.2
Coverage ratio (3)	52.7	53.9
Regulatory capital		
Common equity tier 1 (CET1) ratio	14.9	14.7
	January-September 2021	January-September 2022
Profitability		
Return on equity (ROE) (4)	7.8	8.9
Net interest income (5)	-3.3	11.6
Gross income (5)	5.4	2.3
Operating expenses (5)	-2.5	2.1
Operating profit (5)	23.5	2.8
Loan loss provisions (5)	-47.2	-1.1

Source: Consolidated supervisory reports.
(1) Provisional data. Significant banks are those directly supervised by the ECB. In 2022, significant groups expanded by 2 units following the entry of Mediolanum and Fineco. The data prior to that date were pro forma recalculated as if the two banks were significant in the previous periods too. – (2) End-of-month data. Includes loans to customers, credit institutions and central banks. The NPL ratio is reported gross and net of loan loss provisions. – (3) The coverage ratio is measured as the ratio of loan loss provisions to the corresponding gross exposure. – (4) Net of extraordinary components. – (5) Percentage changes with respect to the year-earlier period.

2.8 THE FINANCIAL MARKET

Financial market conditions in Italy have also improved overall since mid-October. Until mid-December, expectations of a slowdown in the increase in interest rates combined with an increase in investors' risk tolerance favoured the drop in long-term government bond yields and in the sovereign risk premium, and drove up equity prices. Following the meetings of the main central banks, these developments recorded a reversal, which then turned out to be temporary. In mid-January, the yield spread between Italian ten-year government bonds and the corresponding German bonds stood at 185 basis points, well below the peaks reached in 2022.

The yield on long-term government bonds decreases overall

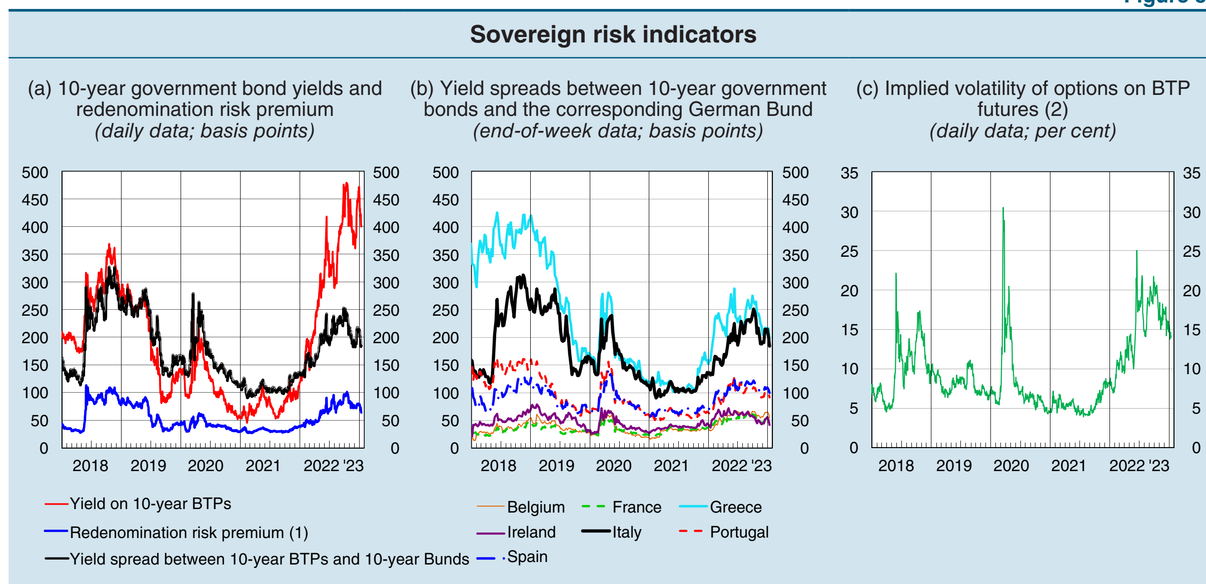
Between mid-October and the first half of December, Italy's ten-year government bond yield dropped by around 100 basis points, falling below 4.0 per cent (Figure 34.a). The yield spread compared with German sovereign bonds narrowed, dropping below 190 basis points (fig. 34.b). Following the meetings of the main central banks in December, above all after the ECB's meeting – which ushered in a more restrictive stance than the markets had anticipated (see Section 1.2) – the ten-year Italian bond yield temporarily bounced back to mid-October levels. Since the beginning of this year, the yield has narrowed again. It was approximately 4.0 per cent in mid-January, while the spread stood at around 185 basis points, well below the peaks reached over the course of 2022. The premium demanded by investors as remuneration for the risk of government bonds being redenominated in currencies other than the euro has decreased (to 64 basis points) since mid-October and the implied volatility in ten-year government bond derivatives has declined (Figure 34.c).

Equity prices increase, especially in the banking sector

Despite the weakening economic outlook, the Italian stock market index rose strongly between mid-October and the first half of December, reflecting monetary policy expectations and an environment of increased risk tolerance, as well as the release of better than expected profits for the third quarter of 2022 (Figure 35).

Figure 34

Sovereign risk indicators



Sources: Based on Bloomberg, ICE CMA and Refinitv data.
(1) Spread between the premiums on Italian sovereign CDS ISDA-2014 and ISDA-2003 contracts with 5-year maturities. Compared with ISDA-2003, ISDA-2014 contracts offer greater protection against a redenomination of the underlying debt. – (2) Implied volatility of at-the-money options with a 1-month maturity on 10-year BTP futures traded on the Eurex.

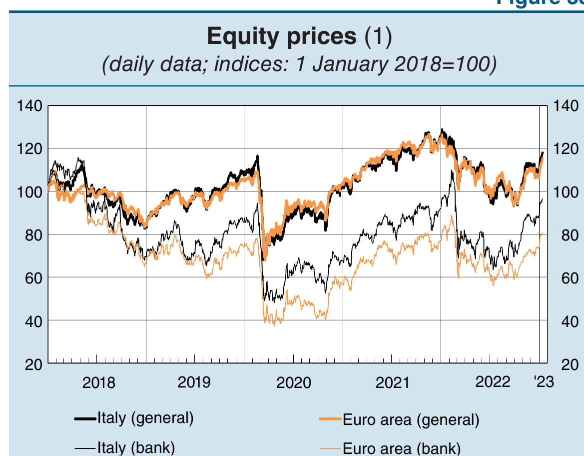
Earnings and profitability growth favoured the upswing in bank share prices in particular. The tighter monetary policy stance resulted in a temporary contraction in equity prices. Over the whole period, however, the overall index grew by over 20 per cent, and the banking index rose by over 30 per cent.

Bond funding becomes less expensive overall

As for the euro area as a whole, the reduction in medium- and long-term rates translated into lower yields on the bonds of non-financial corporations and banks between mid-October and the first half of December (Figure 36). In the second half

Figure 35

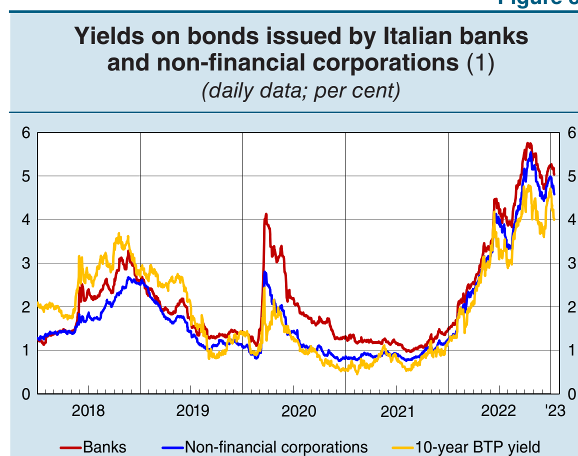
Equity prices (1)
(daily data; indices: 1 January 2018=100)



Source: Based on Refinitiv data.
(1) General and bank indices: FTSE MIB for Italy; Dow Jones Euro STOXX for the euro area.

Figure 36

Yields on bonds issued by Italian banks and non-financial corporations (1)
(daily data; per cent)



Sources: Based on Bloomberg and ICE BofAML data.
(1) The data refer to the average yields (to maturity) of a basket of euro-denominated bonds issued by Italian banks and non-financial corporations and traded on the secondary market. Even if the basket contains bonds with different maturities, selected on the basis of an adequate level of liquidity, for comparison purposes, the figure shows the 10-year BTP yields, which are especially representative of the yields offered on Italian government bonds.

of December, the yields rebounded temporarily before declining again. In the third quarter, non-financial corporations and banks issued net debt securities for €0.6 billion and €2.1 billion, respectively. According to preliminary Bloomberg data, net issuance of securities by non-financial corporations remained slightly positive in the autumn months, while it is thought to have been negative for banks.

The net inflow of savings into open-end investment funds is negative

Based on Assogestioni data, the net inflow of savings into open-end investment funds was negative in the third quarter by €1.3 billion, as positive inflows into equity and monetary funds were offset by outflows from flexible, balanced and bond funds. The information available for October and November is consistent with a further reduction in net flows of savings in the fourth quarter owing to a decline of €1.8 billion in the total net inflows to investment funds, despite further net inflows into equity funds.

The spread of crypto-assets among Italian households remains limited

In recent years, households' interest in crypto-assets has increased worldwide, but the uptake of these assets is still limited in Italy (see the box 'Crypto-asset holdings of Italian households'). The potential risks associated with the spread of these assets call for close monitoring of market developments and regulatory changes at supranational level to protect users and preserve the stability of the financial system.

CRYPTO-ASSET HOLDINGS OF ITALIAN HOUSEHOLDS

Crypto-assets are digital assets that can be stored and transferred electronically using distributed ledgers. Households' interest in these assets has grown worldwide in recent years,[1] though unevenly across countries. In the United States, where the use of crypto-assets has been more widespread, 12 per cent of adults reported having used or held crypto-assets in 2021.[2] In the euro area as a whole, the share of holders in 2022 is estimated at 4 per cent (see ECB, 'Study on the payment attitudes of consumers in the euro area (SPACE)', December 2022).

To assess the extent of the phenomenon in Italy, some specific questions were included in a pilot survey of 1,700 households conducted by the Bank of Italy between June and July 2022.[3] The questions asked the reference person of the household, i.e. the person mainly responsible for and/or most informed about the family finances, whether any member of the household held crypto-assets[4] at the end of 2021 and, if so, for what amount, defined within certain intervals.

According to the data collected, 2.2 per cent of Italian households held crypto-assets. The figure is in line with that calculated by the ECB on a sample of around 3,000 Italian citizens interviewed between March and May 2022.[5] Similarly to what happens for traditional financial assets, the share of holders is higher among wealthy households: it goes from 4.3 per cent for those in the highest

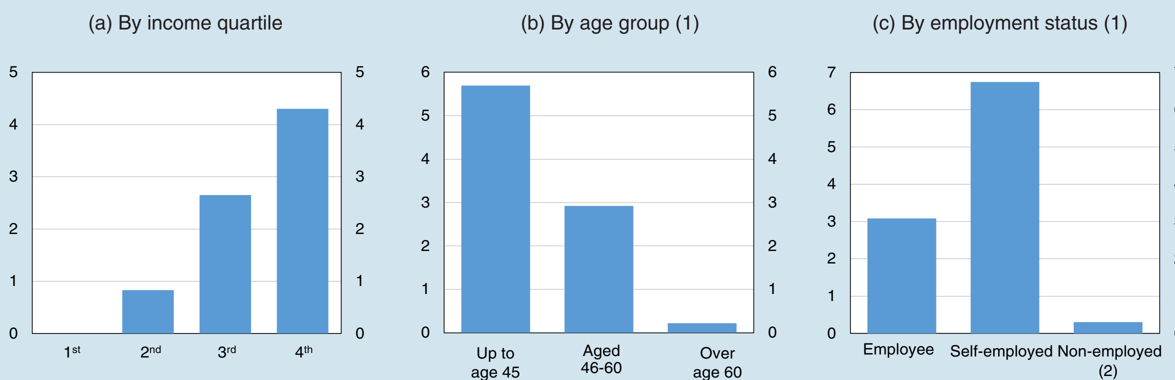
[1] BIS, 'Crypto trading and Bitcoin prices: evidence from a new database of retail adoption', November 2022.
[2] Board of Governors of the Federal Reserve System, *Economic Well-Being of U.S. Households in 2021*, May 2022.
[3] The survey was targeted to the sample of households taking part in the Survey on Household Income and Wealth for 2020. The weighting system used for the analyses corrects for the non-participation of some of the households that were contacted and for distortions related to the type of data collection channel (online).
[4] This question does not distinguish between stablecoins, the value of which is pegged to that of one or more currencies or other underlying assets, and other crypto-assets (such as bitcoins), which are not issued against any real or financial assets and therefore have no intrinsic value.
[5] See ECB, December 2022, op. cit. The share is also similar to that estimated by Consob (see Consob, *Report on financial investments of Italian households. Behavioural attitudes and approaches*, 2021). According to this analysis – conducted using information collected from over 2,500 individuals (representative of the population of financial decision-makers, defined as the primary income earner in the household, aged 18 to 74) – the share of households holding crypto-assets stood between 1 and 2 per cent in 2021.

quartile of the income distribution to less than 1 per cent for those in the second quartile (see panel (a) of Figure A). The use of crypto-assets is also more widespread among younger adults (5.7 per cent

Figure A

The use of crypto-assets among Italian households

(per cent)



Source: Based on Bank of Italy data.
(1) The data refer to the reference person of the household, i.e. the person who is mainly responsible for and/or most informed about the family finances. – (2) Includes retired workers.

of households where the respondent is under 45 years of age, compared with 0.2 per cent for the older households; see panel (b) of Figure A), plausibly in connection with the greater use of IT tools. The percentage is higher among self-employed professionals and other self-employed workers (6.7 per cent; see panel (c) of Figure A). It rises to 19 per cent among the less risk-averse.[6]

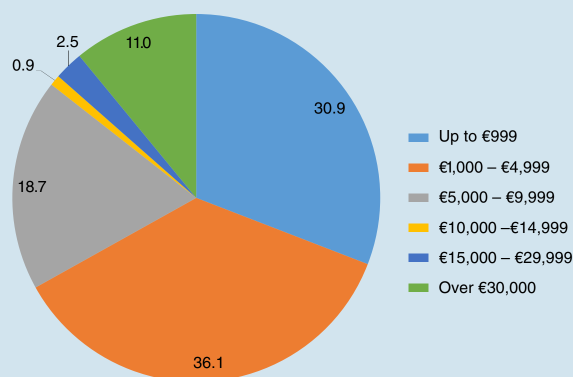
The amount of crypto-assets held by households is limited: two thirds of them reported holding up to €5,000, while only 11 per cent reported holding amounts over €30,000 (Figure B).

Also in light of the recent crisis episodes in the crypto-asset market[7] and the legislative and regulatory changes that will take place in the

Figure B

Amounts held in crypto-assets (1)

(per cent)



Source: Based on Bank of Italy data.
(1) Share of households holding crypto-assets, by amount class (in euros).

6 Risk aversion is considered low if the person reports being inclined towards making investments that offer the possibility of very high returns even if there is a high risk of losing part of the capital.

7 F. Panetta, 'Crypto dominos: the bursting crypto bubbles and the destiny of digital finance', London Business School, London, 7 December 2022.

coming months,[8] the Bank of Italy plans to conduct further surveys to continue monitoring the phenomenon and provide more up-to-date estimates.

[8] As regards the new tax rules, see 'Preliminary hearing on the budgetary provisions for the three years 2023-2025', testimony by the Head of the Structural Economic Analysis Directorate of the Bank of Italy, F. Balassone, before the Chamber of Deputies, Rome, 5 December 2022 (only in Italian). For a broader reference to the forthcoming regulatory framework for crypto-assets, see 'Crypto-assets e questioni legate alla digitalizzazione della finanza', speech by the Deputy Governor of the Bank of Italy, P. Cipollone, at the conference 'Le cripto attività: un terreno di nuove opportunità e sfide' (Crypto-assets: new opportunities and challenges), Milan, 21 October 2022 (only in Italian).

2.9 THE PUBLIC FINANCES

Preliminary data for 2022 point to a significant reduction in the deficit and the debt-to-GDP ratio. According to the official assessments, the Budget Law approved by Parliament in December increases the 2023 deficit by 1.1 percentage points of GDP compared with the current legislative framework. Last November, Italy received the second tranche of the Recovery and Resilience Facility funds and requested the release of the third instalment at the end of December.

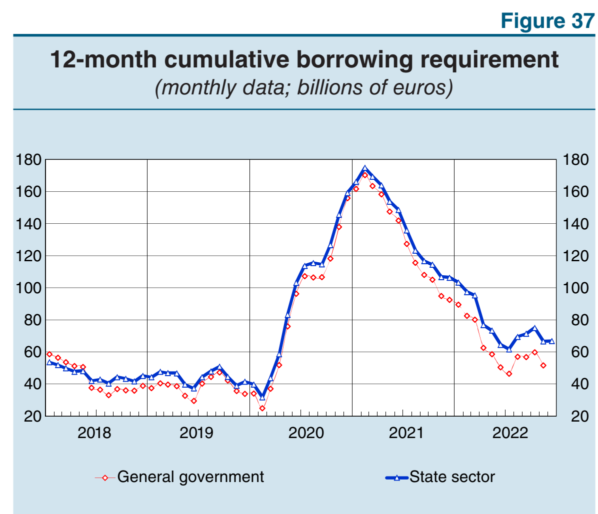
Net borrowing is likely to have declined in 2022

In the first eleven months of 2022, the general government borrowing requirement amounted to €50.9 billion, €40.8 billion less than in the corresponding period of 2021 (Figure 37). Considering the preliminary data for December and assessments of the main factors linking the borrowing requirement to net borrowing (financial transactions and cash/accruals differences, considering the statistical processing currently in use), the deficit as a share of GDP is estimated to have settled at a significantly lower level in 2022 than in the previous year, broadly in line with the most recent official forecasts (5.6 per cent of GDP; Table 9).

Figure 37

12-month cumulative borrowing requirement

(monthly data; billions of euros)



Source: For the state sector, Ministry of Economy and Finance (MEF).

The quarterly account estimates released by Istat also suggest an improvement in the public finances compared with 2021. In the first nine months of 2022, the ratio of net borrowing to GDP declined by 3.2 percentage points year on year; the narrower deficit equally reflects lower expenditure and higher revenue relative to GDP.

The debt-to-GDP ratio is likely to have fallen in 2022

At the end of November, general government debt came to €2,764.9 billion, almost €87 billion more than at the end of 2021. Based on preliminary data for December, the debt-to-GDP ratio for 2022 is estimated in the order of 145 per cent (from around 150 per cent in 2021), which is broadly in line with the plans outlined in the revised Update to the 2022 Economic and Financial Document (NADEF) published early in November.

Table 9

Outturns and official targets for the main public finance indicators (1)
(per cent of GDP)

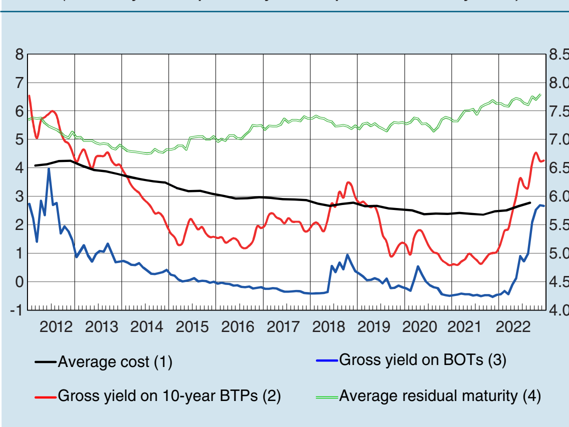
	2021	2022	2023	2024	2025
Net borrowing	7.2	5.6	4.5	3.7	3.0
Primary balance	-3.7	-1.5	-0.4	0.2	1.1
Interest payments	3.6	4.1	4.1	3.9	4.1
Structural net borrowing	6.3	6.1	4.8	4.2	3.6
Debt (2)	150.3	145.7	144.6	142.3	141.2

Source: Update to the 2022 Economic and Financial Document published on 4 November 2022.
(1) Outturns for 2021 and official targets for 2022-25. Rounding of decimal points may cause discrepancies in totals. – (2) Gross of financial support to EMU countries.

The average cost of debt was assessed at 2.8 per cent at the end of September last year (2.5 per cent at the end of 2021); given the high average residual debt maturity (7.8 years in November), the increase in rates at issuance is very gradually reflected in the average cost of debt (Figure 38).

Figure 38

Gross yields on BOTs and 10-year BTPs, average cost and average residual maturity of debt
(monthly and quarterly data; per cent and years)



Source: Istat, for interest payments.
(1) Ratio of interest payments in the four quarters ending in the reference quarter to the stock of the debt at the end of the year-earlier quarter. – (2) Average monthly yield at maturity of the benchmark instrument traded on the online government securities market. – (3) The yield at issue is the average, weighted by the issue amounts allotted, of the compound allotment rates at the auctions settled during the month. – (4) Right-hand scale.

Support measures in the face of rising energy prices are extended until the end of 2022

In November, the Government intervened again on energy costs – mainly by extending until the end of last year most of the temporary measures adopted to contain the effects of higher energy prices on household and corporate balance sheets – and on property renovation incentives, with Decree Laws 176/2022 and 179/2022 (Table 10).

More specifically, tax credits partially offsetting the increase in energy costs incurred by firms and reductions in excise duties on fuel were extended until 31 December 2022.[14] The deadline for the sale of natural gas stocks purchased by Gestore dei Servizi Energetici (GSE) was extended to 31 March 2023. The total amount of resources allocated to energy measures in 2022 was almost €68 billion[15] (of which €5.5 billion were earmarked in November, versus €5.5 billion disbursed in 2021 as a whole). Decree Law 176/2022 has also reduced the deduction for apartment building renovation costs that will be incurred in 2023 from 110 to 90 per cent, while the revised legislation on single-family homes is more favourable to taxpayers.

According to the official assessments, the deficit-increasing measures laid down in November totalled €11 billion in 2022, with financial coverage of around €2 billion mainly resulting from lower

[14] Decree Law 176/2022 extended the reduction in excise duties on fuel until the end of the year, with an estimated total charge of €1.4 billion. The subsequent Decree Law 179/2022 set slightly higher excise duties for the period from 1 to 31 December.

[15] In the Government's official assessments, this amount is approximately €57 billion and does not include: (a) the measures introduced by Decree Laws 176/2022 and 179/2022 (€5.6 billion); (b) previous residual measures (€2.5 billion); (c) the contribution exemption provided for in the Budget Law for 2022 (approximately €2 billion); and (d) the effect of the reduction in excise duties on VAT (around €500 million).

Table 10

Energy-related government measures
(millions of euros)

	Previous measures (1)	Decree Law 176/2022 and Decree Law 179/2022 (2)	Total
General system charges	12,097	0	12,097
Electricity	9,015	0	9,015
Gas	3,082	0	3,082
Reduction of VAT on gas	2,524	0	2,524
Social bonus	2,812	410	3,222
Financial support to firms	17,737	3,044	20,781
Energy-intensive firms (3)	4,907	751	5,658
Gas-intensive firms (3)	5,153	866	6,019
Other firms	7,676	1,427	9,103
Excise duties (including effect on VAT)	8,232	976	9,208
Households	15,577	0	15,577
One-off bonus	9,878	0	9,878
Cost-of-living revaluation of pensions	1,965	0	1,965
Contribution exemption	3,734	0	3,734
Transport	773	0	773
Other (4)	2,502	1,163	3,665
Total	**62,254**	**5,593**	**67,847**

(1) All the measures implemented with the 2022 Budget Law, with Decree Law 4/2022 (converted into Law by Law 25/2022), Decree Law 17/2022 (converted into Law by Law 34/2022), Decree Laws 21/2022 and 38/2022 (converted into Law by Law 51/2022), Decree Laws 50/2022 and 80/2022 (converted into Law by Law 91/2022), Decree Law 115/2022 (converted into Law by Law 142/2022), Decree Laws 144/2022 and 153/2022 (converted into Law by Law 175/2022) and with the Decrees of the Ministry of Economy and Finance of 18 March, 6 April, 24 June, 19 July, 30 August, 13 September and 19 October 2022. – (2) Converted by Law 6/2023; it excludes the effects of the extension of the deadline to 31 March 2023 by which GSE is required to sell the stocks of natural gas purchased. – (3) Energy-intensive: firms that use a lot of electricity; Gas-intensive: firms that use a lot of natural gas. – (4) Includes (a) the fund to help local governments ensure continuity of services; (b) the increase in the value of corporate welfare goods and services that do not constitute payroll employment income; (c) the increase in national health system standard funding to cover higher costs; and (d) other residual measures involving limited amounts.

allocations to some ministerial funds; the net impact on last year's deficit is in line with the budget variance approved by Parliament in November.

Parliament approves the Budget Law for 2023-25

The Budget Law for the three years 2023-25, approved by Parliament last December, increases the deficit by 1.1 percentage points of GDP in 2023 and by 0.1 points the following year, compared with the current legislative framework (Table 11). However, a correction of 0.2 points is forecast for 2025.[16] Taking into account the effects of the Budget Law, net borrowing is expected to fall from 5.6 per cent in 2022 to 4.5 per cent in the current year; it should continue to decline in subsequent years, reaching 3 per cent of GDP in 2025.

The main objective of deficit widening in 2023 is to extend and in some cases reinforce, almost exclusively for the first quarter of the year, the measures to mitigate the impact of higher energy prices on households and firms. These measures amount to €20.5 billion in 2023 and an average of around €1 billion per year in the following two years. In addition to the energy emergency provisions, the Budget Law includes deficit-widening measures worth €21.2 billion in 2023 (€12.5 billion on average in 2024-25), resulting from higher expenditure and lower revenue equally. In terms of higher spending, the bulk is allocated to healthcare, the extension of some investment incentives, public sector employment, changes to the pension system and the universal single children's allowance scheme. In terms of revenue cuts, the main measures include a one-year extension of the 2-percentage point cut in social security contributions for workers with an income of up to €35,000 and an increase in the relief for workers with an income of up to €25,000 to 3 percentage points.

[16] 'Preliminary hearing on the budgetary provisions for the three years 2023-25', testimony by the Head of the Structural Economic Analysis Directorate of the Bank of Italy, F. Balassone, before the Chamber of Deputies, Rome, 5 December 2022 (only in Italian).

Table 11

Overall impact of the 2023 Budget Law measures on the general government profit and loss account (1)

(millions of euros)

	2023	2024	2025
USE OF FUNDS (C=A-B)	**41,748**	**14,263**	**12,692**
Higher expenditure (A)	**24,279**	**9,804**	**9,535**
Current expenditure	**15,650**	**7,719**	**6,950**
Energy-related measures	**7,412**	**1**	**1**
Tax credits for firms on electricity and fuel purchases	5,589	0	0
Transfers to Cassa Servizi Energetici e Ambientali (CSEA)	1,022	0	0
Other	801	1	1
Other measures	**8,238**	**7,718**	**6,949**
Increase in the national health system standard funding	2,160	2,313	2,613
Public sector employment	1,569	474	532
Changes to retirement eligibility requirements (‘Quota 103’, ‘APE sociale’, ‘Opzione donna’)	696	1,447	715
COVID-19 vaccine and drug fund	650	0	0
Staple food fund	500	0	0
Contribution reliefs for hiring young and female workers and minimum income recipients	492	1,083	949
Changes to the single and universal children’s allowance scheme	409	526	543
Other	1,762	1,875	1,597
Capital account expenditure	**8,629**	**2,084**	**2,585**
Energy-related measures	**5,031**	**880**	**1,010**
Tax credits for firms on natural gas purchases	4,431	0	0
Funds for public works (repricing of materials and continuation of works; net effect)	600	880	1,010
Other measures	**3,598**	**1,204**	**1,575**
Investment incentives and ‘nuova Sabatini’ financial subsidies	1,617	95	95
Guarantee fund for SMEs and ISMEA	800	0	0
Other	1,180	1,109	1,480
Lower revenue (B)	**-17,469**	**-4,460**	**-3,157**
Energy-related measures	**-8,058**	**0**	**0**
Reduction in general system charges (including VAT on methane gas)	-5,409	0	0
Increase in social bonus	-2,515	0	0
Reduction of VAT on pellet fuel	-133	0	0
Other measures	**-9,411**	**-4,460**	**-3,157**
Contribution relief for employees (net effect)	-4,633	-135	0
Change to the pension indexation mechanism (tax effects)	-1,414	-2,733	-2,636
Tax assessment, litigation and collection measures (net effect)	-1,110	882	768
Postponement of plastic packaging tax and sugar tax (net effect)	-599	126	-60
Suspension of general system charges (nuclear decommissioning)	-535	-535	-535
Revision of flat rate scheme and introduction of incremental flat tax (net effect)	-300	-1,182	-397
Reduction of VAT on baby products and feminine hygiene products	-215	-215	-215
Other (net effect)	-606	-667	-81
SOURCE OF FUNDS (D=E-F)	**20,645**	**12,157**	**17,567**
Higher revenue (E)	**7,353**	**1,046**	**1,009**
Temporary levies on energy companies (net effect)	3,945	0	0
Land and shareholding revaluation (net effect)	1,194	196	196
Indirect effects of spending measures	767	394	558
Substitute tax on profit and profit reserves from foreign subsidiaries	336	0	0
Tax relief on transfers of movable or immovable property to trade company members	278	-37	-40
Higher excise duties on tobacco products	152	220	300
Other	681	273	-5
Lower expenditure (F)	**-13,292**	**-11,110**	**-16,558**
Current expenditure	**-9,411**	**-10,792**	**-12,263**
Change to the pension indexation mechanism (net effect)	-3,055	-6,452	-6,589
2023-25 Budget Law implementation fund (under Decree Law 176/2022)	-2,628	-453	-325
Tax measures fund	-1,393	-1,393	-1,393
Minimum income scheme and overhaul of poverty and labour inclusion programmes	-947	-1,000	-1,000
Spending review (2)	-702	-1,031	-1,302
Other (3)	-686	-462	-1,655
Capital account expenditure	**-3,881**	**-318**	**-4,295**
Definancing, refinancing and rescheduling (net effect) (3)	-1,984	5	-3,952
Development and cohesion fund	-1,647	-56	-55
Spending review (2)	-120	-182	-202
Other	-130	-85	-85
Net change in revenue (G=B+E)	**-10,116**	**-3,413**	**-2,148**
Net change in expenditure (H=A+F)	**10,987**	**-1,307**	**-7,023**
Current	6,240	-3,073	-5,314
Capital account	4,748	1,766	-1,710
Change in net borrowing (I=H-G)	**21,104**	**2,107**	**-4,875**
Per cent of GDP (4)	1.1	0.1	-0.2

(1) Based on the official assessments contained in the parliamentary proceedings for the 2023 Budget Law. – (2) Includes the spending review measures laid down in Section II of the 2023 Budget Law. – (3) Includes the net effect of definancing, refinancing and rescheduling for Section II (net of spending review). – (4) Based on the nominal GDP in the policy scenario reported in the Update to the 2022 Economic and Financial Document published on 4 November 2022.

In addition, the Government introduced new rules on tax assessment, litigation and collection, and extended the full or incremental flat tax regime to a larger number of individuals. These measures are largely covered by revenue increases or spending cuts. Higher revenue mainly results from the introduction of temporary levies on energy companies (€4 billion in the current year).[17] Spending cuts include a change in the criteria for pension indexation (€3.3 billion in 2023 and around €6.5 billion in each of the following two years, gross of the effect on revenue), the use of the fund established by Decree Law 176/2022 (€2.6 billion in 2023 and €400 million in the following two years on average) and changes to the minimum income scheme (€1 billion per year).

The European Commission comments on the public finance plans

In mid-December, in its opinion on Italy's 2023 Draft Budgetary Plan, the European Commission stated that it was in line with the fiscal stance outlined in the Council recommendations of 12 July 2022. Recalling the latter, the Commission stressed the need for Italy to limit the increase in current public expenditure in order to pursue a prudent fiscal stance in the current year and in the following two years. It called on the Government to monitor the support measures and be ready to adjust them in response to any changes in the economy. It also recommended increasing public investment for the green and digital transition and for energy security, including through the use of resources from the Recovery and Resilience Facility and other European funds. On the other hand, it pointed out that Italy had not yet made progress in simplifying the tax system.

Italy receives the second tranche of the Recovery and Resilience Facility funds and requests payment of the third instalment

Last November, after achieving the 45 milestones and targets set by the National Recovery and Resilience Plan (NRRP) for the first half of 2022, Italy received €21 billion (€10 billion in grants and €11 billion in loans) under the second tranche of NRRP funds, bringing the total funding received so far to almost €67 billion. Following the achievement of the 55 milestones and targets set for the second semester, on 30 December 2022, the Ministry of Economy and Finance sent the European Commission a request for payment of the third instalment of NRRP funds; the corresponding amount of €19 billion will be disbursed at the end of the assessment process in the coming months. The payment of the fourth instalment is subject to the implementation of 27 measures in the first half of 2023.

2.10 PROJECTIONS

The projections for the Italian economy presented here update – in light of the latest cyclical indicators – those prepared as part of the Eurosystem staff macroeconomic projections published on 16 December 2022.[18] In the baseline scenario, following growth of almost 4 per cent in 2022, GDP is projected to slow down over the next three years, with a 0.6-per cent uptick this year and a 1.2-per cent expansion in both 2024 and 2025. Inflation, which rose to almost 9 per cent on average in 2022, is projected to decline to 6.5 per cent this year and more strongly thereafter, to 2 per cent in 2025. The projections, though presented as point estimates, continue to be purely indicative, given the current exceptional uncertainty.

[17] First, a solidarity levy is imposed on energy producers and retailers based on their income for IRES tax purposes (as opposed to a similar measure introduced by Decree Law 21/2022 last year, which took into account the balance between VAT payables and receivables). The expected revenue from this measure is €2.6 billion in 2023. Second, for the period from 1 December 2022 to 30 June 2023, the Budget Law provides for a cap on the price of energy produced by plants firing coal, fuel oil and renewable sources other than those already subject to the two-way compensation mechanism laid down in Decree Law 4/2022. According to official estimates, this measure would lead to an increase in revenue of €1.4 billion.

[18] For more information, see the Bank of Italy's website: 'Macroeconomic projections for the Italian economy (Eurosystem staff macroeconomic projections)', 16 December 2022.

The macroeconomic outlook depends on how the conflict in Ukraine unfolds

The war in Ukraine continues to be a major cause of instability for the macroeconomic outlook. In this baseline scenario, the tensions associated with the conflict are assumed to remain high in the first few months of this year, before easing gradually over the projection horizon. In an alternative scenario, we assess the economic repercussions of more adverse developments, associated with a permanent shutdown of Russian energy supplies.

In the assumptions underlying the baseline scenario, energy prices remain relatively high in 2023 and gradually abate in the following two years (see the box 'The assumptions underlying the macroeconomic scenario'). World trade slows down significantly this year, due to the impact of high inflation and of the uncertainty associated with the conflict in Ukraine on global economic activity, and picks up again in 2024-25. We assume nominal interest rates will move in line with market expectations, increasing further this year and stabilizing over the next two years.

THE ASSUMPTIONS UNDERLYING THE MACROECONOMIC SCENARIO

The projections for the Italian economy presented here update those prepared as part of the Eurosystem staff macroeconomic projection exercise, published on 16 December 2022, and are based on the information available as at 13 January 2023.

The main assumptions underlying the baseline scenario are as follows (see the table):

Table

Assumptions for the main exogenous variables in the baseline scenario

	2022	2023	2024	2025
Potential foreign demand (1)	6.5	2.0	3.1	3.2
Dollar/euro (2)	1.05	1.06	1.06	1.06
Nominal effective exchange rate (1) (3)	1.7	-0.6	0.0	0.0
Crude oil prices (2) (4)	101.7	80.7	76.8	73.5
Natural gas prices (2) (5)	130.4	77.5	74.1	59.3
3-month Euribor (2)	0.4	3.4	3.0	2.6
1-year BOT yields (2)	0.9	3.4	2.9	2.7
10-year BTP yields (2)	3.1	4.4	4.6	4.7

Sources: Based on Bank of Italy and Istat data.
(1) Percentage changes. – (2) Annual averages. – (3) Positive changes indicate a depreciation. – (4) Dollars per barrel of Brent crude oil. – (5) Euros per megawatt hour.

a) following a 6.5 per cent increase in 2022, foreign demand, weighted by the outlet markets for Italian exports, slows down to 2 per cent in 2023; it expands by just over 3 per cent on average in the two years 2024-25;

b) the euro/dollar exchange rate, equal to 1.05 on average in 2022, stands at 1.06 this year and in 2024-25;

c) the price of a barrel of Brent crude oil, based on the prices of futures contracts, inches down over the forecast horizon to $73 in 2025 (from $102 in 2022); the gas price is around €77.5 per megawatt hour on average this year, down sharply from 2022, and gradually declines to €59 in 2025;

d) the three-month interest rate on the interbank market (Euribor), equal to 0.4 per cent in 2022, rises to 3.4 per cent in 2023 and edges down to 2.8 per cent on average over the next two years;

e) the yield on ten-year BTPs rises to 4.7 per cent in 2025 (3.1 per cent in 2022), in line with the values of forward rates implied by the term structure of interest rates on government securities;

f) this scenario incorporates the provisions laid down in the Budget Law for the three years 2023-25 (see Section 2.9) and the information available on the implementation of the National Recovery and Resilience Plan (NRRP).

GDP is projected to slow down this year, with growth to gain momentum over the next two years

Economic activity, which was supported by robust consumption and investment growth for most of 2022, appears to have weakened in the last few months of the year (see Section 2.1). GDP growth should remain weak in the current quarter, before gradually picking up from the spring onwards; growth is projected to gain momentum from 2024, as inflationary pressures and uncertainty abate. GDP is expected to increase by an annual average of 0.6 per cent in 2023 and by 1.2 per cent in both 2024 and 2025 (Table 12; Figure 39).

Table 12

Macroeconomic scenario
(percentage change on previous year unless otherwise indicated)

	2022	2023	2024	2025
GDP (1)	3.9	0.6	1.2	1.2
Household consumption	4.6	1.6	0.7	0.9
Government consumption	0.0	-1.0	0.4	1.3
Gross fixed investment	9.6	2.9	1.6	1.0
of which: in capital goods	8.4	3.1	3.1	2.3
Total exports	10.4	1.8	3.3	2.8
Total imports	15.2	4.1	2.4	2.4
Change in stocks (2)	0.5	0.0	0.0	0.0
Memorandum item: GDP, raw data (3)	3.8	0.5	1.4	1.1
Prices (HICP)	8.7	6.5	2.6	2.0
HICP net of food and energy	3.3	3.8	2.6	2.2
GDP deflator	2.2	4.1	3.4	4.2
Employment (hours worked)	4.2	0.5	0.6	0.8
Employment (headcount)	2.2	0.4	0.5	0.7
Unemployment rate (4)	8.2	8.2	7.9	7.6
Export competitiveness (5)	2.7	-2.2	-1.6	-0.2
Current account balance of payments (6)	-0.9	-1.2	0.5	1.6

Sources: Based on Bank of Italy and Istat data.
(1) For GDP and its components: chain-linked volumes; changes estimated on the basis of quarterly data adjusted for seasonal and calendar effects. – (2) Includes valuables. Contributions to GDP growth; per cent. – (3) Not calendar adjusted. – (4) Annual averages; per cent. – (5) Calculated by comparing the price of foreign manufactures with the deflator of Italian merchandise exports (excluding energy and agricultural products); a positive (negative) value indicates a gain (loss) in competitiveness. – (6) Per cent of GDP.

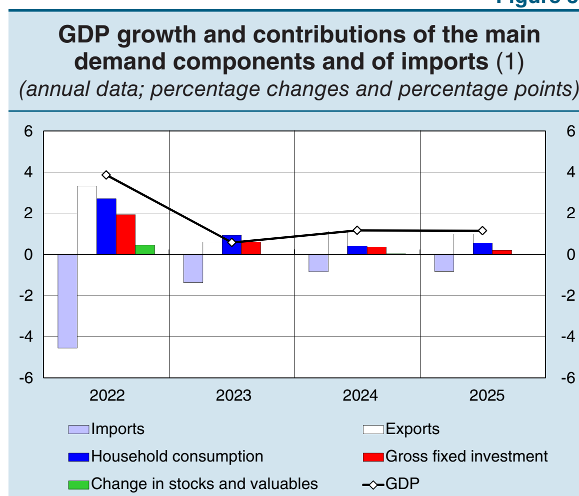
Inflation is projected to remain high in 2023 and to fall sharply in the following two years

HICP inflation, which stood at 8.7 per cent in 2022, is projected to average 6.5 per cent this year, before declining more markedly, to 2.6 per cent in 2024 and 2.0 per cent in 2025 (Figure 40). This decline is highly dependent on the assumption of a gradual decrease in commodity prices, whose effects should only partially be offset by higher wage growth. Core inflation is projected to rise further to 3.8 per cent in 2023 and to fall close to 2 per cent in 2025. This trend reflects relatively strong growth in actual wages in the private sector over the three-year forecast period, which in our assumptions should be supported by shorter delays than in the past in collective bargaining agreement renewals and by a narrowing gap between actual inflation and the benchmark inflation rate used for previous agreements. The GDP deflator is projected to grow at rates slightly below 4 per cent, on average, driven by rising labour costs and a partial recovery in profit margins.

Figure 39

GDP growth and contributions of the main demand components and of imports (1)

(annual data; percentage changes and percentage points)

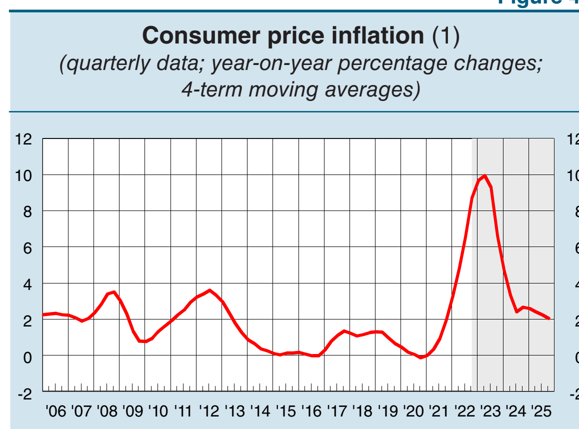


Sources: Based on Bank of Italy and Istat data.
(1) Data seasonally and calendar adjusted.

Figure 40

Consumer price inflation (1)

(quarterly data; year-on-year percentage changes; 4-term moving averages)



Sources: Based on Bank of Italy and Istat data.
(1) HICP. The shaded area shows forecast data.

Employment is expected to continue to gradually increase

Hours worked are expected to continue to expand over the three-year period, at a slower pace than GDP. Headcount employment is projected to grow at even lower rates over the horizon, reflecting the gradual recovery in the intensive margin of labour supply. The unemployment rate is forecast to decline slightly over the three-year period.

Consumption growth is likely hindered by inflation

Household consumption – which reflected a return to pre-pandemic spending habits in 2022 – is expected to be more strongly affected by high inflation and flagging confidence this year. On average, consumption is projected to grow by approximately 1.5 per cent in 2023, mainly in the wake of strong growth in the previous year, and to slow down to just below 1 per cent on average in 2024-25. The saving rate, which fell to 7.1 per cent in the third quarter of 2022, is expected to decline further this year and recover only partially in the following two years (Figure 41).

Investment is poised for moderate growth

Investment is projected to grow by almost 2 per cent on average over the three years 2023-25. The capital goods component is likely to be dampened by the worsening demand outlook and heightened uncertainty, especially in the early part of the forecast horizon. Thereafter, it will probably be affected by the higher funding costs associated with the rebound in interest rates, but these effects should be partially offset by fading uncertainty. Construction spending should continue to be supported by stimulus measures for most of this year,

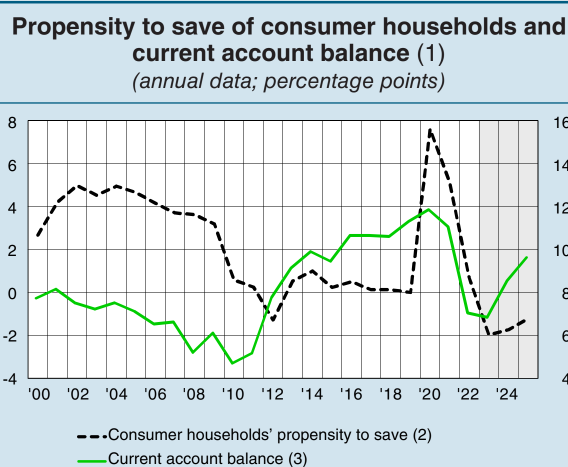
only to slow down later, partly on account of the increased cost of borrowing. NRRP funds should strongly support capital accumulation, mainly through a sharp increase in public investment. Overall, the total investment-to-GDP ratio is projected to stand above 20 per cent, just below its twenty-year highs (Figure 42).

The deterioration in the energy balance is expected to weigh on the current account balance this year too

Exports, which grew strongly in 2022 also thanks to the normalization of international tourism flows, are projected to slow down markedly this year, to below 2 per cent. Export growth should pick up again more strongly over the next two years, in line with foreign demand for Italian goods and services. Imports will likely expand at a similar pace, driven by the demand components with a high import content (exports and investment in capital goods). The sizeable energy deficit is expected to weigh on the current account balance of payments, which should remain negative this year.

Figure 41

Propensity to save of consumer households and current account balance (1)
(annual data; percentage points)



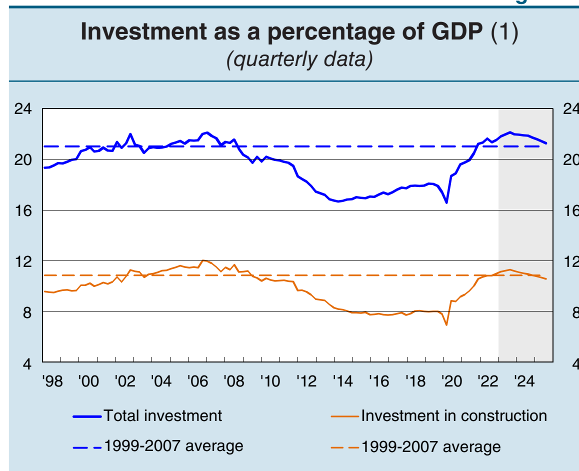
Sources: Based on Bank of Italy and Istat data.
(1) The shaded area shows forecast data. – (2) Right-hand scale. – (3) Per cent of GDP.

Growth projections are revised slightly down for 2024, inflation forecasts are revised upwards

Compared with the scenario outlined in the October 2022 *Economic Bulletin*, growth projections for 2023 have been revised slightly upwards, due to the carryover effects of the trends observed in 2022. By contrast, the 2024 GDP growth estimate has been revised slightly downwards on account of lower consumption growth. Inflation estimates have been revised upwards by three tenths of a percentage point for 2024, incorporating the assumption of stronger wage increases.

Figure 42

Investment as a percentage of GDP (1)
(quarterly data)



Sources: Based on Bank of Italy and Istat data.
(1) Data seasonally and calendar adjusted. The shaded area shows forecast data.

Compared with those of the other leading forecasters, our projections for economic activity are slightly more favourable for 2023 and in line for 2024 (Table 13). Inflation estimates for the current year are comparable to those of other private and institutional forecasters. For 2024, they are higher than those of the European Commission and lower than those of the OECD.

The risks to growth are on the downside while inflation risks are more balanced

The projections presented under the baseline scenario are still surrounded by exceptionally high uncertainty, associated with developments in prices and in the availability of commodities, which are largely affected by the course of the conflict in Ukraine, trends in international trade and the repercussions of global monetary tightening. Overall, the risks to growth are skewed to the downside. The risks to inflation, on the other hand, are more balanced, as short-term upside risks essentially stemming from potential new energy price increases are offset by downside risks associated with a stronger and sustained deterioration in aggregate demand, particularly over the medium term.

Table 13

Comparison with other organizations' forecasts for Italy
(percentage change on previous period)

	GDP (1)		Inflation (2)	
	2023	2024	2023	2024
IMF (October)	-0.2	1.3	5.2	1.7
OECD (November)	0.2	1.0	6.5	3.0
European Commission (November)	0.3	1.1	6.6	2.3
Consensus Economics (January)	0.0	1.1	6.6	2.2
Memorandum item:				
Bank of Italy (October)	0.3	1.4	6.5	2.3
Bank of Italy (January)	0.6	1.2	6.5	2.6

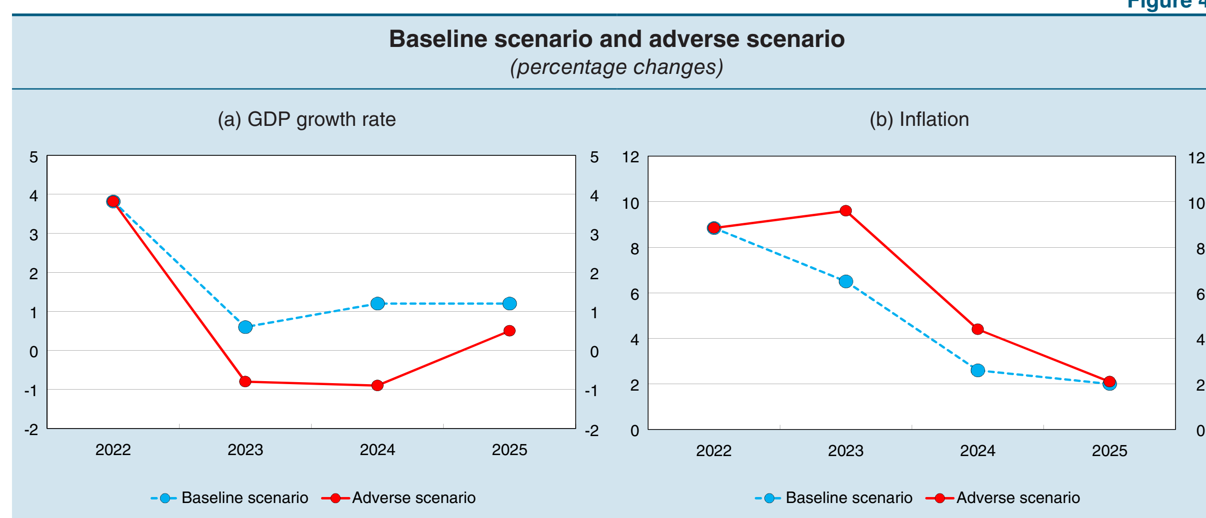
Sources: IMF, *World Economic Outlook*, October 2022; OECD, *OECD Economic Outlook*, November 2022; European Commission, European Economic Forecast. *Autumn 2022*, November 2022; Consensus Economics, *Consensus Forecasts*, January 2023; Banca d'Italia, *Economic Bulletin*, 4, 2022.
(1) The growth rate forecasts of the OECD are adjusted for calendar effects; those of the European Commission and IMF are not. – (2) HICP. Forecasts of Consensus Economics refer to the consumer price index for the entire resident population.

If energy supply from Russia were to shut down, GDP would likely fall and inflation would rise further

In a highly adverse scenario, we assess the consequences for our economy of a permanent disruption in European energy imports from Russia. A lower supply of natural gas on European markets would primarily result in a sharp increase in energy prices, associated with heightened uncertainty and significant weakness in global trade. In Italy, energy rationing for industrial use would be limited due to the high level of stocks, energy savings and the further gradual replacement of imports from Russia with other sources. These developments will likely result in slower economic activity and tighter financing conditions owing to the deterioration in credit quality. Under this scenario, GDP would fall by almost 1 per cent in both 2023 and 2024, and grow moderately in the following year (Figure 43.a). Consumer price inflation is forecast to rise further to close to 10 per cent this year, before declining to just above 4 per cent in 2024 and dropping towards 2 per cent in 2025 (Figure 43.b), when the direct and indirect impact

Figure 43

Baseline scenario and adverse scenario
(percentage changes)



Sources: Based on Bank of Italy and Istat data.

of higher energy prices would be offset by the contrary effect of worsening cyclical conditions, which would weigh on price developments more persistently.

This scenario does not take into account any measures that may be introduced to mitigate the effects of more adverse developments. Nor does it take into account the possibility that, as a result of significant weakness in economic activity and the labour market, wage adjustments for stronger consumer price growth will be smaller than expected based on past trends, helping to determine a lower level of inflation at the end of the forecast horizon.