

EY Italian
Macroeconomic
Bulletin

N°4 | September 2023

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Executive summary

- ▶ Global growth is expected to slow to 3.0% in 2023 after 3.5% recorded in 2022, and then decline to 2.9% in 2024 (in line with the pre-pandemic value of 2.8%). Headline inflation is expected to decline to 6.9% in 2023 and 5.8% in 2024.
- ▶ Global monetary policy continues to remain generally restrictive, with some exceptions. The Federal Reserve, at its last meeting in September 2023, kept benchmark policy interest rates stable. Similar decision by the Bank of England (BoE), unlike the European Central Bank, which raised benchmark rates by an additional 25 basis points.
- ▶ The manufacturing PMI index remains below the expansion threshold in major Eurozone countries. The services PMI index is also down, with the exception of Germany. A slowdown in the services sector will make it more difficult to balance losses from the manufacturing industry.
- ▶ High interest rates result in a high cost of debt for households and businesses, discouraging consumption and investment in the Eurozone. This phenomenon is also significantly present in Italy and is shared among different regions and economic sectors.
- ▶ "Forced" savings accumulated during the pandemic period, together with a robust labor market, have supported domestic demand in recent quarters and are expected to support it to some extent in the coming quarters. With reference to foreign demand, the recovery of world trade in the coming quarters will result in a positive contribution of net exports to GDP.
- ▶ A large part of the income tax revenue is related to the middle-income households (between 29,000-55,000 euros), which in the last 20 years, together with the lower-income households, has lost purchasing power. This phenomenon has worsened as a result of the price increases experienced in recent years.
- ▶ Taking this context into account, EY's forecasts indicate GDP growth for Italy of 0.7% in 2023 and 0.8% in 2024, while the inflation rate will rise from 5.9% in 2023 to 2.7% in 2024. The forecasts are subject to a high degree of uncertainty, considering sometimes conflicting signals coming from the data currently available, as well as the latest geopolitical events.
- ▶ Two simulations using EY's model on possible scenarios of partial use of the Recovery and Resilience Plan¹ (RRP) funds underscore the importance of RRP for growth in the short to medium term.

Figure 1

Real GDP - % change, Italy

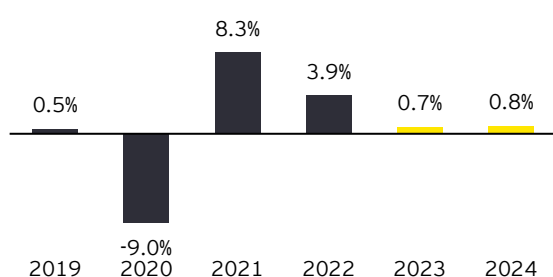
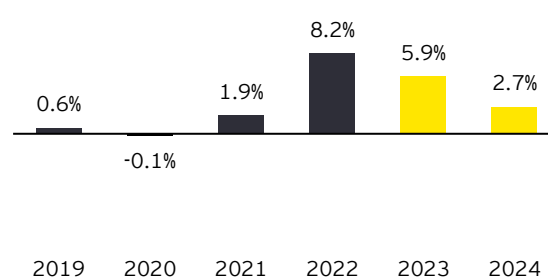


Figure 2

Consumer prices - % change, Italy



¹ For more information, https://commission.europa.eu/business-economy-euro/economic-recovery/recovery-and-resilience-facility/country-pages/italys-recovery-and-resilience-plan_en.

The global scenario

The world economy

The latest projections by the International Monetary Fund (IMF) show an expected growth of the world economy of 3.0% in 2023 and 2.9% in the following year.² Annual growth still remains below the average growth of two decades prior to the pandemic crisis (2000-2019, at 3.8%) although slightly higher than in the year before the pandemic (2.8% in 2019). The projections are also characterized by slight pessimism at the global level for 2024 (revised growth of -0.1 percentage points), despite an upward revision of US growth (increase of 0.3 and 0.5 percentage points in 2023 and 2024, respectively), balanced by a downward revision of Eurozone growth forecast, expected to grow at a mild pace in both 2023 (0.7%) and 2024 (1.2%).³

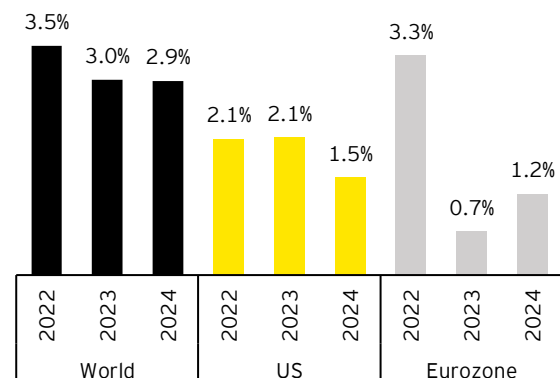
The Organization for Economic Co-operation and Development (OECD) also came to similar conclusions in its September forecasts, although these are slightly less optimistic (specifically, world growth is expected at 3.0% for 2023 and 2.7% for 2024, while growth in the US is expected at 2.2% in 2023 and 1.3% in 2024; growth for the Eurozone is also less optimistic, with growth expected at 0.6% in 2023 and 1.1% in 2024).⁴

With reference to global inflation rate, this remains closely linked to the dynamics of recent movements in energy and food prices, the state of global supply chains, and monetary policy choices by major central banks. Overall, the change in the world consumer price index is expected to decline by 1.8 percentage points in 2023 compared to 2022 (from 8.7% to 6.9%) and is expected to decline by about another percentage point in 2024 (standing at 5.8%).

Better situation for the United States and the Eurozone, with expected inflation rate for 2024 at 2.8% and 3.3%, respectively.

Figure 3

Real GDP - YoY % change

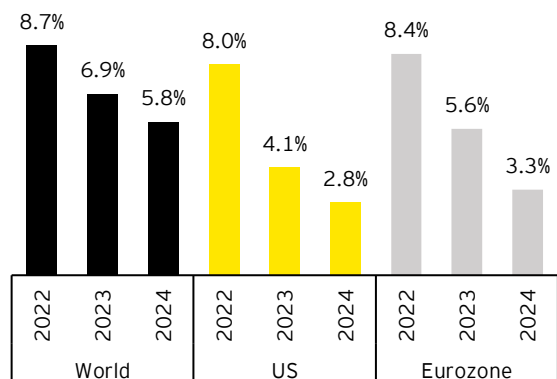


² IMF World Economic Outlook, October 2023.

³ IMF World Economic Outlook Update, July 2023.

⁴ OECD Economic Outlook, Interim Report September 2023: Confronting inflation and low growth.

Consumer price index - YoY % change



Source: EY elaborations on IMF World Economic Outlook data and forecasts.

In terms of price dynamics, therefore, a gradual slowdown of inflation is expected after the levels reached in 2022. However, values still remain far from the central banks' target values (around 2% annually), encouraging restrictive monetary policies for longer.

With reference to one of the main causes of inflationary pressures in recent years, i.e., energy price, the price of natural gas on the European market has recently seen an increase (\$11.55/mmbtu⁵ as of September 2023, up from \$9.55/mmbtu in June, an increase of about \$2/mmbtu in three months). Similar dynamic was seen for the price of gas in the US market⁶ (\$2.64/mmbtu in September 2023, up from \$2.58/mmbtu in the previous month). However, the rise in European quotations seem transitory due to contingent factors (such as the turmoil in the industry labor market in Australia, a major exporter of Liquid Natural Gas).⁷

An upward trend is also experienced in the oil price, which marked another increase in September 2023 after the one recorded in the previous month: Brent crude oil, for example,

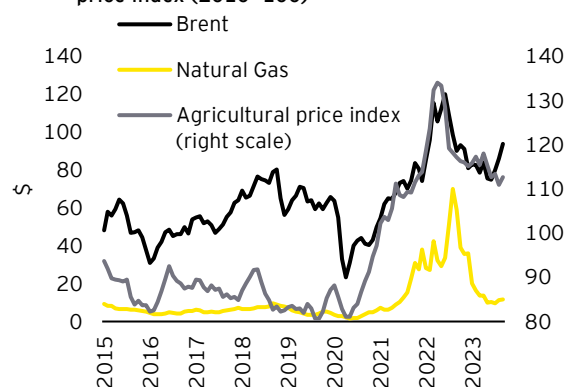
rose from \$80.1/bbl⁸ in July to \$86.2/bbl in August 2023, to \$94.1/bbl in September.

The rise in oil prices in recent months is partly attributable to OPEC+ decisions in recent months.⁹ After the decision, on the 3 of April, to reduce its production by about one million barrels per day,¹⁰ the major oil-exporting countries reiterated in August¹¹ their willingness to take action on crude oil production by keeping it around 40.5 million barrels per day through 2024.¹²

Oil price trends thus remain characterized by volatility, as they are influenced not only by economic trends (e.g., by upward pressure in the event of increased global demand and production activity), but also by the choices of major producers and the geopolitical environment. Important, in this regard, is the potential market turbulence that could be induced by the perpetuation of the situation in Israel, which is currently very complex.

Figure 4

Energy commodity prices and agricultural price index (2010=100)



Source: EY calculations on World Bank data. Brent and natural gas prices are expressed in \$/bbl and \$/mmbtu, respectively. The natural gas price refers to natural gas quoted in the Title Transfer Facility (TTF). Agricultural price index considers the price of various agriculture-related goods and derivatives globally (e.g., the price of wheat). Latest observation: September 2023.

⁵ Dollars for one million British thermal units, which is a measure of the amount of gas.

⁶ For the European figure, reference is made to natural gas quoted in the Title Transfer Facility (TTF). For the US figure, reference is made to the spot price at the Henry Hub, Louisiana.

⁷ Quarterly report on European gas markets, European Commission.

⁸ Dollars per barrel.

⁹ Organization of the Petroleum Exporting Countries (OPEC). It is the collection of oil-exporting countries whose goal is to coordinate and unify oil policies among member countries in order to ensure fair and stable prices for oil producers, an efficient, cheap and regular supply of oil to consuming countries, and a fair return on capital for those who invest in the industry. OPEC's current member countries are Algeria,

Angola, Congo, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Saudi Arabia, United Arab Emirates, and Venezuela.

For more information, https://www.opec.org/opec_web/en/about_us/24.htm. OPEC+ is the group formed by OPEC countries and other oil-exporting countries, of which Russia is a major member.

¹⁰ 48th Meeting of the Joint Ministerial Monitoring Committee, https://www.opec.org/opec_web/en/press_room/7120.htm.

¹¹ 49th Meeting of the Joint Ministerial Monitoring Committee, https://www.opec.org/opec_web/en/press_room/7199.htm.

¹² 35th OPEC and non-OPEC Ministerial Meeting, https://www.opec.org/opec_web/en/press_room/7160.htm. This refers to OPEC and non-OPEC production.

On the other hand, the downward trend in agriculture prices continues, although their level remains well above the levels recorded since 2015, affecting both global inflation and food security.^{13,14}

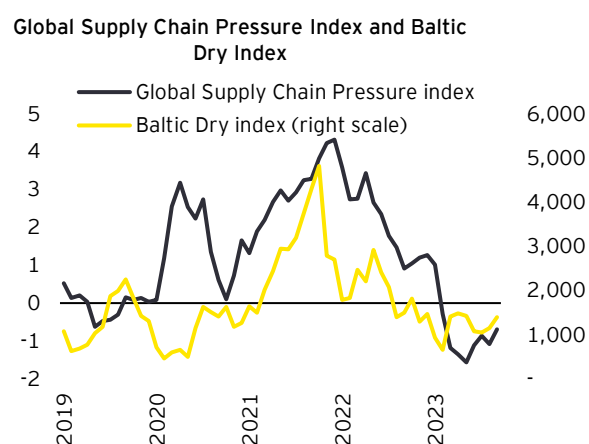
Although uncertainty has increased due to geopolitical tensions, other factors should also be considered when analyzing food price dynamics in the medium to long term. These include climatic variations, plant diseases, and increased price volatility of major agricultural inputs, as some of the main factors that may have a negative impact on the growth of global crop, livestock, and fish production (estimated at an average annual rate of 1.1% over the period from 2023 to 2032, or half the pace recorded in the decade ending 2015). Global food consumption (expressed in calories) is projected to increase by 1.3% per year over the next decade, a lower growth rate than in the current decade, thus fueling concerns about global food security.¹⁵

An additional element to consider when analyzing global price trends concerns frictions and possible slowdowns along global supply chains. Analyzing some of the leading indicators, such as the *Global Supply Chain Pressure Index* and the *Baltic Dry Index*, the reduced pressures along supply chains seem to have brought back a good degree of normalization in the global environment. This should therefore contribute to lower price pressures and improved inflation rates internationally.

However, it is important to point out that despite the improved conditions along supply chains, world trade in recent years has been going through an important transition process: the number of trade restrictions, for example, has increased significantly,¹⁶ and the evidence supporting a change in the trend of international trade is increasingly pronounced¹⁷ (refer, for example, to the diminished political will to trade openness that has been taking place since the great financial crisis, a trend we refer to as “*slowbalization*”).¹⁸

Together with recent dynamics in energy costs and the easing of pressures along supply chains, the monetary policy implemented by most central banks continues to play an important role in achieving price stability (identified with a rate of price change around 2%).

Figure 5



Source: EY calculations on Federal Reserve Bank of New York data and Baltic Dry index. The *Global Supply Chain Pressure Index* (GSCPI)-that is, the index created by the NY FED to monitor pressures along supply chains-integrates a number of commonly used metrics with the goal of providing a summary of potential supply chain disruptions (for more information see <https://www.newyorkfed.org/research/policy/gscpi#/overview>). The *Baltic Dry Index* is an index of average prices paid for transporting materials over 20 routes (for more information see <https://www.balticexchange.com/en/index.html>). Latest observation: September 2023.

Monetary policy in major economies continues to remain restrictive, although in some cases no further restrictions have been applied recently. In particular, after the additional 0.25 percentage point increase in rates on July 26, the Federal Reserve (the US central bank) decided on September 20 to keep benchmark interest rates

the period from 2012 to 2022 and restrictions in trade in goods, services, and investment.

¹⁷ Alfaro, L. and Chor, D. (2023), *Global Supply Chains: The Looming 'Great Reallocation'*. Paper presented at the Jackson Hole Economic Policy Symposium in 2023, held by the Federal Reserve Bank of Kansas City, August 2023.

¹⁸ Aiyar, S., Ilyina, A. (2023). *Charting Globalization's Turn to Slowbalization After Global Financial Crisis*, IMF Blog.

¹³ Vos, R., Glauber, J., Hernandez, M., Laborde D. (2022). *COVID-19 and Rising Global Food Prices: What's Really Happening?* IFPRI. Washington, DC.

¹⁴ WFP & FAO. 2022. *Hunger Hotspots: FAO-WFP early warnings on acute food insecurity. October 2022 to January 2023 Outlook*.

¹⁵ OECD-FAO *Agricultural Outlook 2023-2032*.

¹⁶ Georgieva, K. (2023). *Confronting Fragmentation Where It Matters Most: Trade, Debt, and Climate Action*, IMF Blog, January 16. Refers to

stable, thus remaining within the range of 5.25% to 5.5%.¹⁹

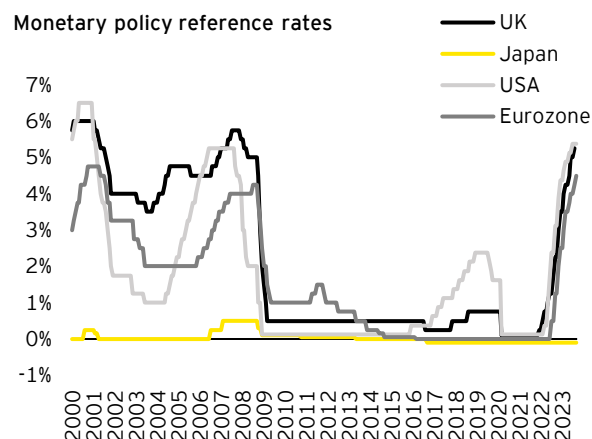
Similar decision was taken by the Bank of England (BoE), which on September 21 decided to keep the benchmark rate unchanged at 5.25%, considering the inflation rate experienced a greater decline than expected (from 7.9% in June to 6.7% in August, a reduction of 0.4 percentage points more than the BoE's previous forecast), and a labor market that shows some signs of weakness.²⁰

On September 14, the European Central Bank (ECB) voted for a further tightening, with a further increase in key interest rates by 25 basis points, considering the still significant presence of underlying elements that keep the inflation rate at levels that are still too high compared to the 2% target.²¹ Rates are thus in a range between 4.00% (*deposit facility rate*) and 4.75% (*marginal lending facility rate*).

In a high interest rate environment, it is important to emphasize how restrictive monetary policy can have negative effects on growth even in the long run, contrary to what is generally assumed.²² A rise in interest rates, for example, discourages investment in research and development (R&D), a key element in future productivity performance. An additional channel through which a rise in interest rates can negatively affect long-term growth is the phenomenon of "*labor scarring*," or the loss of skills by workers who, once unemployed, are unable to find work quickly because of the economic slowdown.^{23,24}

¹⁹ Reference is made to the Federal Fund Rate. For more information, <https://www.federalreserve.gov/newsevents/pressreleases/monetary20230920a.htm>. In this regard, it is interesting to note that the Federal Fund Rate is influenced by two specific interest rates, namely the Interest Rate on Reserve Balances (IORB) and the Overnight Reverse Repurchase Agreement rate (ON RRP): the former (IORB) represents the rate that the Federal Reserve pays on the reserves that banks hold overnight at the central bank itself, and represents the minimum interest rate for banks' overnight loans; the latter (ON RRP) refers to the rate charged for overnight Reverse Repurchase Agreement transactions, i.e., the Federal Reserve's sale of a security to an eligible counterparty with an agreement to repurchase the same security at a specific price at a future time (for more information, <https://www.federalreserve.gov/monetarypolicy/overnight-reverse-repurchase-agreements.htm>). The change in the Federal Fund Rate takes the form of adjusting these two administered rates, the *pass-through* of which varies depending on the rate being considered and

Figure 6



Source: EY calculations on Bank for International Settlements data.

Growth in the world's major economies

The US reported growth of 0.5% in the second quarter of 2023 compared with the previous quarter, after a 0.6% growth in the first quarter. Specifically, the second quarter was marked by a major slowdown in private consumption (from 0.9% cyclical growth in the previous quarter to 0.2% growth), mainly reflecting lower growth in consumption of goods, specifically durable goods (3.3% to -0.1%). Fostering growth is private

other macroeconomic variables. For more information, *The Federal Reserve's Two Key Rates: Similar but Not the Same?*, <https://libertystreeteconomics.newyorkfed.org/2023/08/the-federal-reserves-two-key-rates-similar-but-not-the-same/>.

²⁰ For more information, <https://www.bankofengland.co.uk/monetary-policy-summary-and-minutes/2023/september-2023>.

²¹ For more information, see <https://www.ecb.europa.eu/press/pr/date/2023/html/ecb.mp230914~aab39f8c21.en.html>.

²² Cerra, V., Fatás, A., and Saxena, S., C. (2023). Hysteresis and Business Cycles. *Journal of Economic Literature* 61(1), pp. 181-225.

²³ Jordà, O., Singh, S., R., Taylor, A., M. (2023). Does Monetary Policy Have Long-Run Effects? Federal Reserve Bank of San Francisco, FRBSF Economic Letter, September 2023.

²⁴ Ma, Y., & Zimmermann, K. (2023). Monetary Policy and Innovation. Paper presented at the Jackson Hole Economic Policy Symposium in 2023, held by the Federal Reserve Bank of Kansas City, August 2023.

investment, which moved from a quarter of negative growth (-2.3% in the first quarter compared to the previous one) to stronger growth in the second quarter (+1.3%).²⁵

The most recent data also show that in August 2023 consumer spending experienced essentially no growth compared to the previous month (0.1% in August versus 0.6% in July and 0.3% in June). This performance is the result of declining spending on goods (-0.2%, driven mainly by growth in consumption of durable goods) and modest growth in spending on services (0.2%).²⁶

In this regard, it is interesting to note that current consumption is still partly supported by the excess savings generated during the pandemic. Indeed, it is estimated that from the beginning of the pandemic until mid-2021, the excess savings of American households exceeded \$2 trillion. This savings then declined, first at a moderate rate (late 2021), then at an increasingly rapid rate (from 2022 onward). Given that, as of August 2023, about \$1.9 trillion of these savings are estimated to be used, the remaining savings are expected to be used in the third quarter of 2023, thereby still supporting household consumption.²⁷ Although the estimates of excess savings remain characterized by a high degree of uncertainty related to the different methodologies used and the identification of the trend in the pre-pandemic period,²⁸ studies on household savings after the pandemic recession strongly point at the rapid accumulation and subsequent utilization of excess savings in the United States.

These data come together with a robust labor market, with total nonfarm payroll employment increase of 336,000 in September compared to the previous month, and a stable unemployment rate below 4% (3.8%).²⁹

Activity in the industrial and manufacturing sectors also picked up slightly, with changes over the previous month of 0.4% and 0.1%,

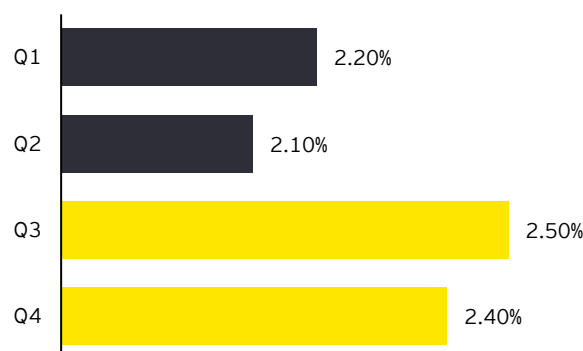
respectively in August 2023, although the year-on-year performance is not particularly positive (0.2% and -0.6% compared with August 2022).³⁰

The *mixed signals* coming from the US economy translate into expectations of a possible recession in the coming quarters, as estimated through yield curve analysis, among other indicators.³¹ At the moment, however, the most widely accepted thesis remains that of a *soft landing*, and not of a recession. The mixed signals force us to observe very carefully and to consider the potential spillovers on European economies.

Adding to the expectations of recession through yield curve analysis are the latest Federal Reserve Bank of New York estimates in August 2023, which show average GDP growth over the next four quarters in a range of -1.45% to +2.3% (median at 0.5%),³² further highlighting the high uncertainty and potentially weak economic activity.

Figure 7

US GDP 2023, Annualized % change (QoQ)



Source: EY calculations on Federal Reserve Bank of New York, US Bureau of Economic Analysis (BEA) data. Bars in yellow represent forecasts for upcoming quarters (New York Fed Staff Nowcast). Rates of change are annualized.

²⁵ Gross Domestic Product (Third Estimate), Corporate Profits (Revised Estimate), Second Quarter 2023 and Comprehensive Update, <https://www.bea.gov/news/2023/gross-domestic-product-third-estimate-corporate-profits-revised-estimate-second-quarter>.

²⁶ Bureau of Economic Analysis, Personal Income and Outlays, August 2023, <https://www.bea.gov/news/2023/personal-income-and-outlays-august-2023>.

²⁷ Abdelrahman, H., Oliveira, L., E. Excess No More? Dwindling Pandemic Savings, Federal Reserve Bank of San Francisco, SF FED BLOG, August 2023.

²⁸ Refer, for example, to De Soyres, F., Moore, D., Ortiz, J. (2023). Accumulated Savings during the Pandemic: An International Comparison with Historical Perspective. FEDS Notes, Federal Reserve Board of Governors, June 23; Briggs, J., Pierdomenico, G. (2023). Excess Savings: Still Large, but Less Important. Global Economics

Analyst, Goldman Sachs, June 30; Aladangady, A., Cho, D., Feiveson, L., Pinto, E. (2022). Excess Savings during the COVID-19 Pandemic. FEDS Notes, Federal Reserve Board of Governors, October 21.

²⁹ US Bureau of Labor Statistics, Employment Situation Summary. For more information, <https://www.bls.gov/bls/news-release/empsit.htm#2023>.

³⁰ Industrial Production and Capacity Utilization, August 2023. For more information, <https://www.federalreserve.gov/releases/g17/current/default.htm>.

³¹ For more information, https://www.newyorkfed.org/research/capital_markets/ycfaq#/.

³² Federal Reserve Bank of New York, Outlook-at-Risk: Real GDP Growth, Unemployment, and Inflation, <https://www.newyorkfed.org/research/policy/outlook-at-risk#root:growth-at-risk>.

The Federal Reserve Bank of New York also publish the near-term forecasts of the US economy's performance. More specifically, an annualized growth rate³³ of 2.5% and 2.4% respectively is expected for the third and fourth quarters of 2023.³⁴

With reference to other major global economies, no particular growth is recorded for the United Kingdom, where the quarterly GDP estimate shows 0.2% growth in the second quarter, driven mainly by growth in private consumption (0.7%).³⁵ However, short-term data show a slightly improving situation: in July, the services sector recorded slight month-on-month growth (0.5%) after the previous month's small expansion (0.2%).³⁶ On the other side, the construction and industry sectors contracted (by -0.5% and -0.7% compared to June growth of 1.6% and 1.8% respectively).^{37, 38} The inflation rate continues to remain high, although slowly declining: an overall (*headline*) rate of 6.7% was recorded in August, 0.1 point lower than the previous month's figure. *Core* inflation also fell, from 6.9% in July to 6.2% in August.³⁹ The situation is complex in the United Kingdom, adding further challenges to the international scenario, as weak growth corresponds to less demand for foreign goods, with an associated slowdown in international trade.

Moving to Asia, the subdued performance of the Chinese economy has resulted in GDP growth in recent quarters that is not particularly dynamic. After the 0.5% growth recorded in the last quarter of 2022, the first and second quarters of 2023 recorded growth of 2.2% and 0.8%, respectively.⁴⁰

Recent months also showed no signs of recovery for the third quarter. China's industrial activity accelerated in August compared with the previous month (4.5% annual growth in August compared with 3.7% annual growth in July) but still down from the 5.6% recorded in April 2023.⁴¹

Also experiencing a more pronounced slowdown is investment in real estate, which in the first eight months of 2023 (January-August) contracted by 8.8% compared to the same period in the previous year. This downward trend is also confirmed by data in previous months, demonstrating a sector that is strongly in crisis.⁴²

With reference to retail sales, after the first four months of 2023, trend growth (year-on-year) gradually declined until it reached 2.5% growth in July, followed by a slight recovery in August (4.6%).⁴³ The slowdown in consumer demand is also reflected in a negative performance of imports, which fell 7.3% in August 2023 compared to the same month the year before.⁴⁴ Weak domestic demand is accompanied by equally struggling foreign demand (-8.2% growth in exports expressed in dollars compared to the same month of the previous year).

China's economic slowdown has major global spillovers, as the OECD pointed out in its latest *Economic Outlook in September*.⁴⁵

In addition, this slowdown adds further complexity to the economic picture in those countries that see China as a major trading partner. In this regard, reference is mainly made to Asian countries (such as New Zealand, Australia, Korea, Indonesia, and Japan), Russia,

³³ For more information, <https://www.bea.gov/help/faq/463>.

³⁴ For more information, <https://www.newyorkfed.org/research/policy/nowcast#/overview>.

³⁵ Office for National Statistics (ONS), GDP first quarterly estimate, UK: April to June 2023, <https://www.ons.gov.uk/economy/grossdomesticproductgdp/bulletins/gdpfirstquarterlyestimateuk/apriltojune2023>.

³⁶ Office for National Statistics, Index of Services, UK: July 2023, <https://www.ons.gov.uk/economy/economicoutputandproductivity/output/bulletins/indexofservices/july2023>.

³⁷ Office for National Statistics, Construction output in Great Britain: July 2023, <https://www.ons.gov.uk/businessindustryandtrade/constructionindustry/bulletins/constructionoutputingreatbritain/july2023>.

³⁸ Office for National Statistics, Index of Production, UK: July 2023, <https://www.ons.gov.uk/economy/economicoutputandproductivity/output/bulletins/indexofproduction/july2023>.

³⁹ Office for National Statistics, Consumer price inflation, UK: August 2023, <https://www.ons.gov.uk/economy/inflationandpriceindices/bulletins/consumerpriceinflation/august2023/pdf>.

⁴⁰ National Economy Showed Good Momentum of Recovery in the First Half Year, http://www.stats.gov.cn/english/PressRelease/202307/t20230715_1941276.html.

⁴¹ Industrial Production Operation in August 2023, http://www.stats.gov.cn/english/PressRelease/202309/t20230926_1943199.html.

⁴² Investment in Real Estate Development for Jan-Aug 2023, http://www.stats.gov.cn/english/PressRelease/202309/t20230926_1943204.html.

⁴³ Total Retail Sales of Consumer Goods in August 2023. For more information, http://www.stats.gov.cn/english/PressRelease/202309/t20230926_1943205.html.

⁴⁴ For more information, <http://english.customs.gov.cn/Statics/74b1cc93-39e8-4ee8-ba4d-13cbab252e6f.html>. The contraction is reduced to -1.6% if imports expressed in Chinese currency are considered. For more information, <http://english.customs.gov.cn/Statics/5aab5f33-58ae-4ac6-ac0c-9875c817ebe9.html>.

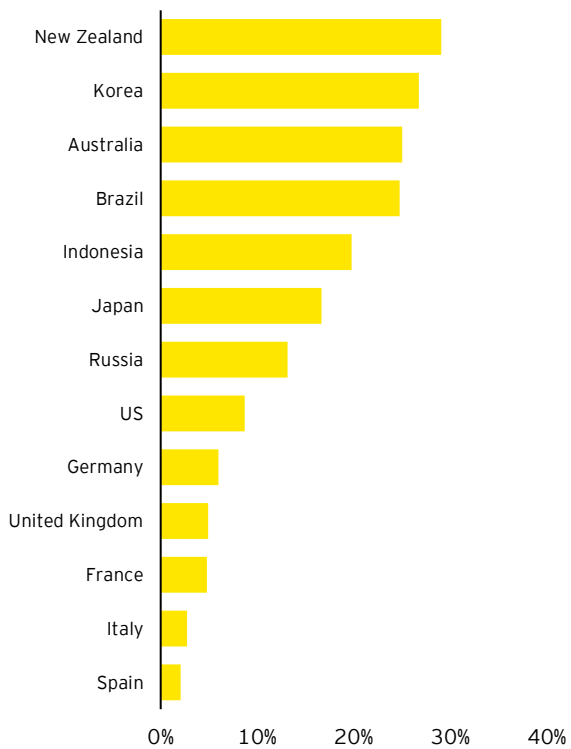
⁴⁵ The OECD estimates that under a scenario characterized by a 1% contraction in household consumption, a 5% reduction in private investment and a reduction in real estate investment of about 8%, world GDP growth would shrink by 0.6 percentage points, which is associated with a 1.25 percentage point reduction in volume trade. For more information, see OECD Economic Outlook, Interim Report September 2023: Confronting inflation and low growth.

and some European countries (such as Germany and the United Kingdom).

One more factor that must be taken into account, given the approaching winter season, is the possible increase in the number of COVID-19 infections. Although the application of new restrictions seems very remote, it is important to consider that an increase in contagion could lead to restrictive measures which, even if not particularly severe, could consequently have a negative impact on the world economy.

Figure 8

Export to China (% of total export)



Source: EY elaborations on OECD data. Data refer to the latest available quarterly values by country.





The Eurozone economic framework and economic indicators

The Eurozone economy shows subdued growth. In the second quarter of 2023, growth stood at 0.1% compared to the previous quarter, following a similar growth in the first quarter (0.1%). Above average growth for France in the second quarter (0.5%), while stable growth was recorded for Germany (0.0%) after two quarters of negative economic growth (-0.4% and -0.1% in the fourth quarter of 2022 and first quarter of 2023). Complex situation also for Italy, with GDP growth at -0.4% compared to the previous quarter. Weighing on the performance is mainly household consumption, with almost no growth (0.1%), and a negative export performance (-0.7% on a quarterly basis).

Industrial production in major eurozone countries is still contracting. The July 2023 figure shows a contraction of 1.1% compared to the previous month, which translates into a 2.0% decline compared to the same month of the previous year. This trend is also due to Germany's struggling industrial activity, which shows a -1.4% contraction in July compared to June 2023 and a 2.5% contraction compared to July 2022. The latest observation referring to August show a non-improving situation (essentially zero economic growth for Italy and Germany of 0.2% and 0.1%, and contraction for France and Spain, -0.2% and -0.7% respectively).

Figure 9

GDP - index 2015=100

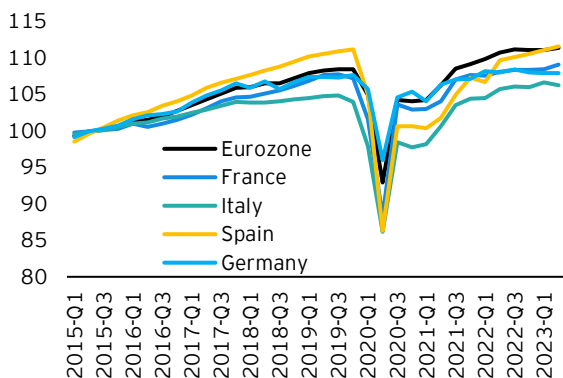
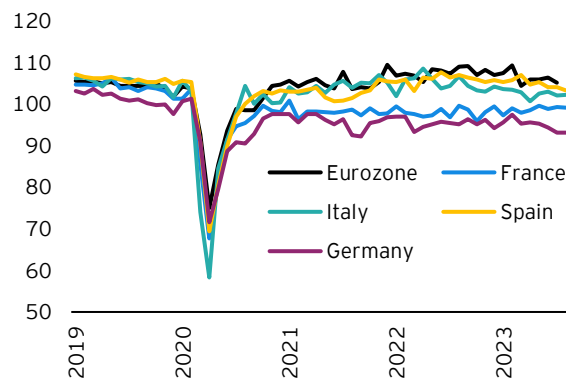


Figure 10

Industrial production - index, 2015=100



Source: EY calculations on Eurostat data, European Commission (*Business and consumer surveys*). For industrial production, reference is made to NACE Rev. 2 B-D codes (*Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply*). Latest observation for GDP: second quarter 2023; for industrial production: August 2023.

Given the interconnection of the German industry and the Italian one, a negative performance in the German industry is reflected in the Italian industry. In fact, it is important to note that about 30% of Italian manufacturing exports within the Eurozone go to Germany. The negative performance of Italian industrial production (0.2% growth in August on a monthly basis, -4.2% year-on-year) is also partly explained by this relation.

With reference to the causes and factors explaining the performance of the German industry, it is possible to identify two important elements hampering the activity, namely the energy intensity of German industry and international trade trends.

With reference to the first point, German industry is characterized by more than twice the energy consumption of the Italian industry. This is particularly important because, while it is due to the size of German industry (more than twice the size of Italian industry in value added),⁴⁶ on the other hand it might also be difficult to handle energy supply during periods of crisis such as the one experienced during 2022. This should also be considered in light of the weight of the industry sector in the total economy: the latter, in fact, accounts for about 25% of total German value added (in Italy, 19%), with the consequence that the German economic system is more exposed to possible shocks in the sector.

In addition, it is important to note that the overall volumes of German exports of industrial goods have been shrinking in recent years. Exports of goods from German industry in Netherlands, United Kingdom and France, accounts for half of the overall reduction in industry good exports recorded between 2015 and 2023 (roughly 8% over 14%).

Figure 11

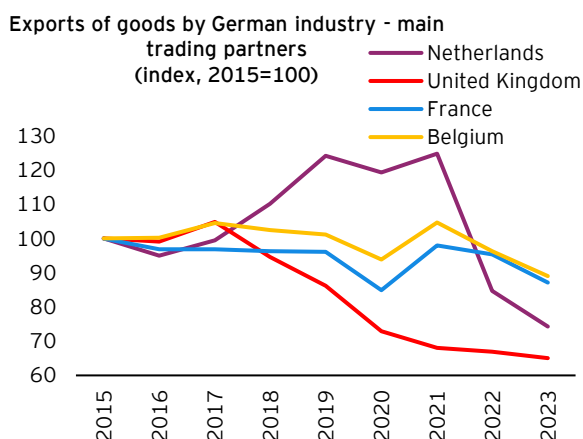
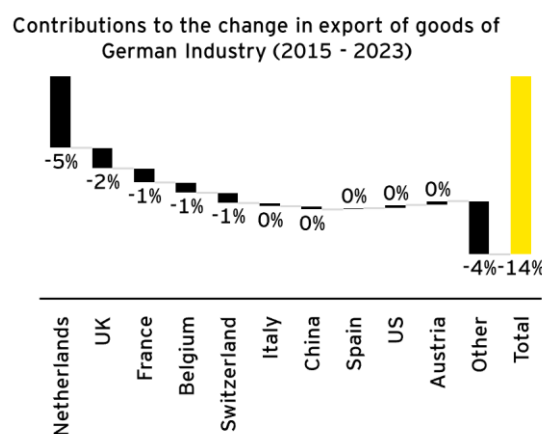


Figure 12



Source: EY elaborations on DESTATIS data. The analysis compares different years considering data available from January to July, so that 2023 can also be considered. Contributions to change are calculated as the change in the sum of cumulative monthly exports by volume between January and July 2015 over cumulative monthly exports between January and July 2023.

Back to the overall scenario, the analysis of the PMI indicator⁴⁷ for manufacturing and services shows some interesting and more recent details of the situation for the two major sectors.

The latest manufacturing PMI show a negative trend for Eurozone manufacturing, with major countries experiencing persistent signs of contraction in recent months. Prominent among them is Germany, still below the expansion level (value of 50), although the decline appears to have momentarily halted. Expectations are thus that manufacturing and industrial production in the major single-currency economies will continue to perform negatively in the coming months.

⁴⁶ Reference is made to value added at chained prices 2015.

⁴⁷ The Purchasing Managers' Index (PMI) is one of the most popular economic indices, i.e., an index of the prevailing direction of economic trends in the manufacturing, construction, and service sectors, obtained through timely surveys of the most representative companies in the relevant sectors. Values above 50 indicate an upward trend in economic activity, values below 50 a decline.

Services sector PMI is also declining in the main European countries (with the sole exception of Germany), after several months above the expansion threshold. This figure is even more significant when compared with the trend of PMI indices in previous months: while previously the manufacturing sector showed weakness, but was accompanied by an expanding services sector, in recent months it is reasonable to expect that the services sector will not offset the negative performance of manufacturing.

Figure 13

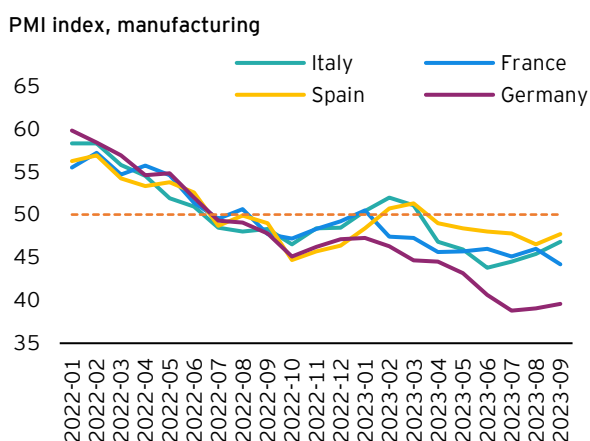
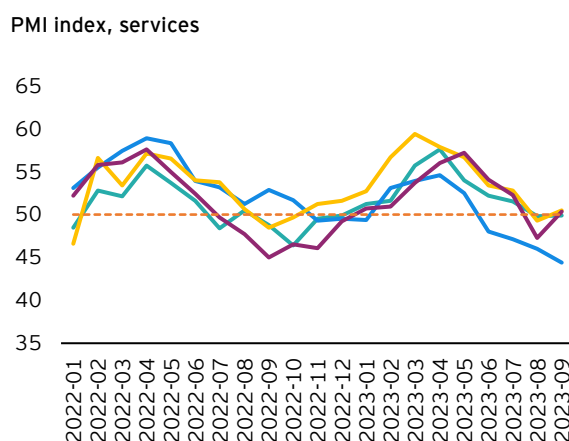


Figure 14



Source: EY calculations on S&P Global data. Latest observation: September 2023.

Monetary policy, prices and bank credit

The restrictive monetary policy in place is acting like a drag to the Eurozone economy. The European Central Bank continues to raise interest rates in the Eurozone by choosing to raise benchmark interest rates by an additional 25 basis points in its September 14 meeting.

Figure 15

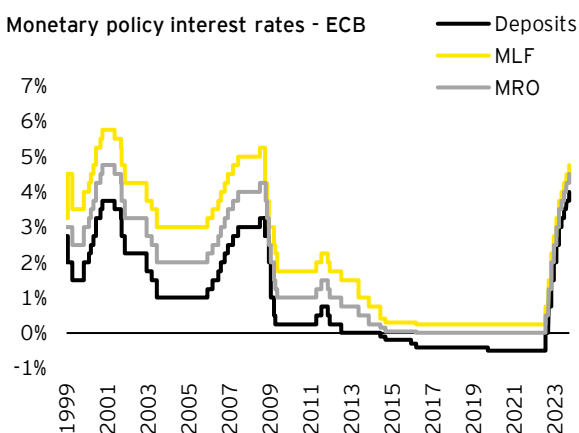
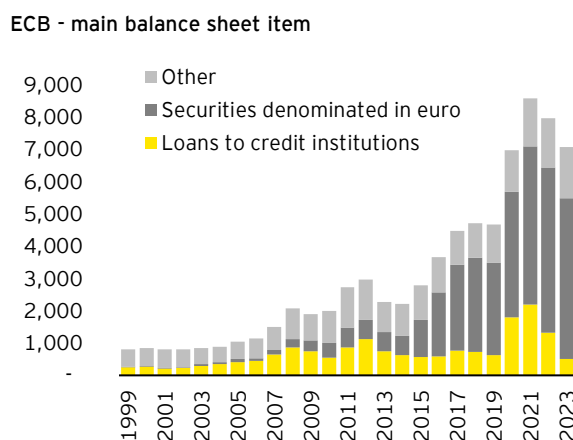


Figure 16



Source: EY calculations on European Central Bank data. MLF = marginal lending facility; MRO = main refinancing operations. Deposit rate refers to deposits at the central bank. Balance sheet items - loans to credit institutions: considers loans to euro area credit institutions related to euro-denominated monetary policy operations (miscellaneous items include main refinancing operations and LTROs); securities denominated in euro: considers euro-denominated securities of euro area residents (miscellaneous items include

assets acquired for monetary policy purposes); other: miscellaneous items include gold and foreign currency-denominated claims on euro area residents and nonresidents. The latest available figure for 2023 refers to the *weekly financial statement* dated September 29, 2023.

The interest rate on the main refinancing operations and the interest rates on the marginal lending facility and deposits with the central bank⁴⁸ were raised to 4.50%, 4.75% and 4.00%, respectively, effective from September 20, 2023.⁴⁹ Maintaining interest rates at these levels for as long as necessary will bring a substantial contribution to achieving the goal of price stability, according to the Governing Council.⁵⁰

The restrictive monetary policy pursued by the European Central Bank is justified by a still-too-high inflation rate, and the consequent willingness to keep interest rates high as long as necessary to bring inflation back to the 2% target in the medium term.⁵¹ With reference to inflation rate trends in the Eurozone, it is interesting to note that *core* inflation (i.e., underlying inflation)⁵² continues to be higher than *headline inflation* (inflation that considers all goods in the basket used to monitor price trends). A similar phenomenon occurred during the pandemic crisis, when the price of energy declined significantly due to the slowdown in global economic activity: a *core* inflation rate greater than the *headline* inflation rate indicates, in fact, a higher rate of change in the core component than in energy and/or unprocessed food.

Figure 17

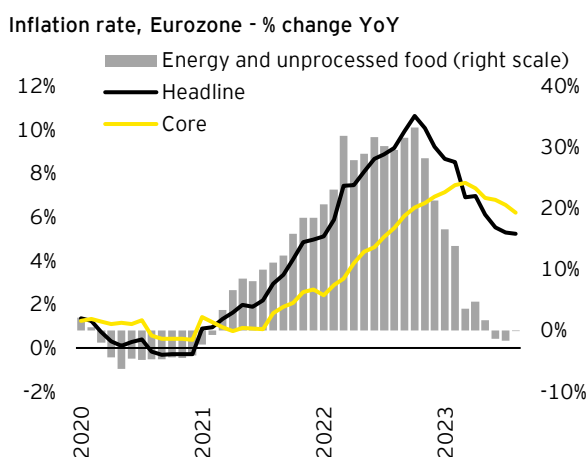
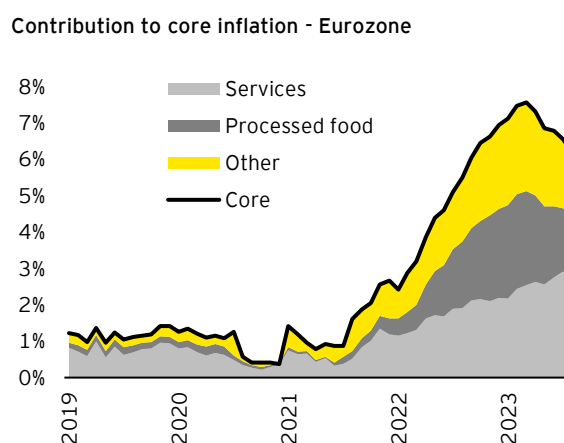


Figure 18



Source: EY calculations on Eurostat data. *Headline* measure considers all goods in the basket for calculating price change; *core* measure considers goods in the *headline* basket net of energy and unprocessed food. Rates refer to harmonized rates. Latest observation: August 2023.

In the latest figures, the underlying component shows a reduction in the year-over-year growth after the peak reached in March 2023 (7.6%), standing at 6.2% in August 2023. The underlying component is still driven by services inflation (5.4% is the services inflation rate as of August 2023), while the food

⁴⁸ The interest rate on deposits with the central bank is one of three reference rates that the ECB sets every six weeks as part of its monetary policy decisions. This rate defines the interest that banks receive on their overnight deposits (for the duration of one business day) with the central bank. The other two reference rates are the rate on main refinancing operations (MRO) and the rate on marginal lending operations (MRO). The rate on the MROs defines the cost at which banks can obtain credit from the central bank with a maturity of one week. If banks need overnight liquidity, they can use the marginal lending facility by paying a higher rate. For more information, see https://www.ecb.europa.eu/stats/policy_and_exchange_rates/key_ecb_interest_rates/html/index.it.html.

⁴⁹ For more information, <https://www.ecb.europa.eu/press/pr/date/2023/html/ecb.mp230914~aab39f8c21.en.html>.

⁵⁰ "The Governing Council considers that the key ECB interest rates have reached levels that, maintained for a sufficiently long duration, will make a substantial contribution to the timely return of inflation to the target,"

<https://www.ecb.europa.eu/press/pr/date/2023/html/ecb.mp230914~aab39f8c21.en.html>.

⁵¹ For more information, <https://www.ecb.europa.eu/press/pr/date/2023/html/ecb.mp230914~aab39f8c21.en.html>.

⁵² Reference is made to ISTAT's definition of core inflation, which considers the consumer price index net of changes in energy goods and fresh food.

component (excluding fresh food) slowed down, although its persistence. In general, it is important to note that the decline in inflation is also partly due to a "base effect".⁵³

Among the various elements influencing inflation expectations, geopolitical uncertainty and energy price trends must be mentioned. On the latter, it is important to emphasize how the impact of energy price developments on inflation in each Eurozone member country varies depending on several elements considered. Indeed, the transmission of supply shocks of energy goods is estimated to be more intense on the overall price level in economies that already have high inflation⁵⁴ and more significant on output in economies with lower inflation rates.⁵⁵

It is therefore important to consider that the combination of high energy prices and other instability factors, such as pressures along global supply chains, has led to heterogeneous inflation rates within the Eurozone.

Figure 19

Range of inflation in eurozone member countries

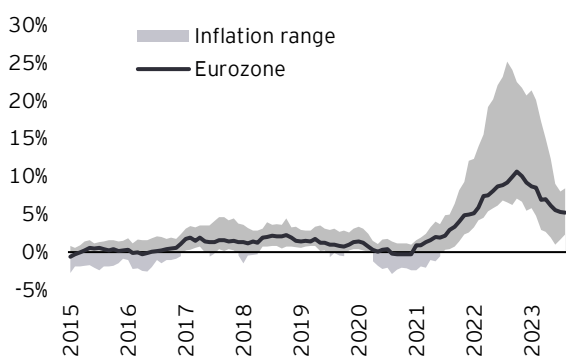
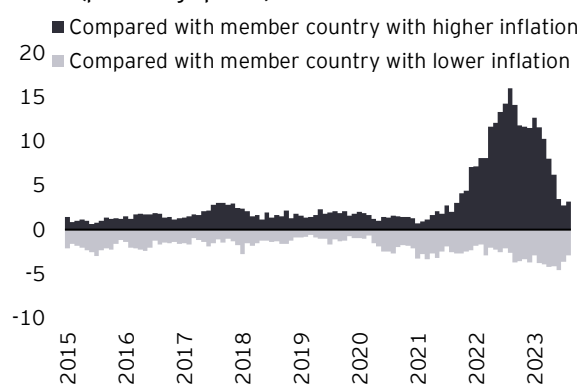


Figure 20

Eurozone inflation rate differential (percentage points)



Source: EY elaborations on Eurostat data. Inflation is calculated as annual change in harmonized price indices in Eurozone member countries (20 countries). Latest observation: August 2023.

The presence of these differentials, especially if persistent in the medium to long term, could reflect divergent cost trends or structural inefficiencies, such as rigidities in goods and labor markets,⁵⁶ resulting in a potential loss of price competitiveness and worsening foreign trade position.⁵⁷

Considering the high inflation and rising interest rates, there are also questions about the impact of the expansionary monetary policy of the past 15 years, following both the financial crisis in 2008 and the pandemic crisis in 2020.⁵⁸ In this regard, a recent study by the European Central Bank has shown how the monetary policy of low long-term interest rates and low inflation does not jeopardize macroeconomic stabilization in the event of negative (inflationary) supply shocks upon exiting the low interest rate environment.⁵⁹

⁵³ In measuring inflation, price changes from one year to the next are generally compared. In 2022, prices grew at a particularly high rate due to geopolitical tensions with Russia and the sudden rise in commodity and energy prices. Comparing today's price indexes with those of the previous year, the differences appear marked. This phenomenon is known as the "base effect." For more information, ECB Economic Bulletin, Issue 1 / 2023.

⁵⁴ An empirical analysis regarding the prices of individual goods indicates that prices change more frequently when inflation is high. Refer in this regard to Nakamura, E., Steinsson, J., Sun, P., & Villar, D. (2018). The elusive costs of inflation: Price dispersion during the US great inflation. *The Quarterly Journal of Economics*, 133(4), 1933-1980; Alvarez, F., Beraja, M., Gonzalez-Rozada, M., & Neumeyer, P. A. (2019). From hyperinflation to stable prices: Argentina's evidence on menu cost models. *The Quarterly Journal of Economics*, 134(1), 451-505.

⁵⁵ De Santis, R. A., & Tornese, T. (2023). Energy supply shocks' nonlinearities on output and prices. Working paper series, No 2834, European Central Bank.

⁵⁶ Filip, D., Momferatou, D., & Setzer, R. (2023). Inflation and competitiveness divergences in the euro area countries. *Economic Bulletin Boxes*, 4.

⁵⁷ Obstfeld, M., & Rogoff, K. (2007). The unsustainable US current account position revisited. In *G7 current account imbalances: Sustainability and adjustment* (pp. 339-376). University of Chicago Press.

⁵⁸ The analysis of this phenomenon is rooted in a large body of literature on the effectiveness and consequences of monetary policy, among which numerous works can be cited (think of the work of Taylor (1993), or more recent works such as Paloviita et al. (2017), Andrade et al. (2018), Paloviita et al. (2020), Maih et al. (2021), Andrade et al. (2021), Budianto et al. (2023)).

⁵⁹ Briciu, L., Hohberger, S., Onorante, L., Pataracchia, B., Ratto, M., & Vogel, L. (2023). *The ECB Strategy Review-Implications for the Space of Monetary Policy* (No. 193). Directorate General Economic and Financial Affairs (DG ECFIN), European Commission.

As pointed out in previous versions of the EY Italian Macroeconomic Bulletin, the increase in interest rates by the European Central Bank also has significant impacts on credit trends for the private sector.⁶⁰ This trend is also confirmed by the ECB's own latest credit survey. Indeed, Eurozone banks reported that their credit standards for loans or lines of credit to businesses and households tightened further in the second quarter of 2023, although the net percentage of banks reporting tightening was lower or similar than in the previous quarter. The non-positive economic outlook remains in the background, as well as specific-sector issues. In the third quarter of 2023, Eurozone banks expect further tightening of lending criteria for business and household loans (with the exception of home purchase loans, whose conditions are expected to remain unchanged), but at a slower pace than in the second quarter. In terms of sectors, banks reported a net decline in demand for loans or lines of credit in all major economic sectors, which was particularly pronounced in the real estate sectors. The net decline in loan demand was more moderate in the manufacturing, services, and wholesale and retail trade sectors. In the second half of 2023, euro area banks expect a further net decline in loan demand in all major economic sectors, albeit at a more moderate pace.⁶¹

In any case, the credit crunch is expected to have limited overall effects at the moment, as shown by the European Central Bank's latest macroeconomic projections: in fact, the ECB expects the Eurozone's real GDP growth rate to slow to 0.9% in 2023 (from 3.5% in 2022), before recovering to 1.5% in 2024 and 1.6% in 2025, thus incorporating a 0.1 percentage point decline for 2023 and 2024 compared to the March 2023 forecasts representative mainly of tighter credit conditions.⁶²

⁶⁰ EY Italian Macroeconomic Bulletin No. 3 | June 2023.

⁶¹ The euro area bank lending survey, Second quarter of 2023.

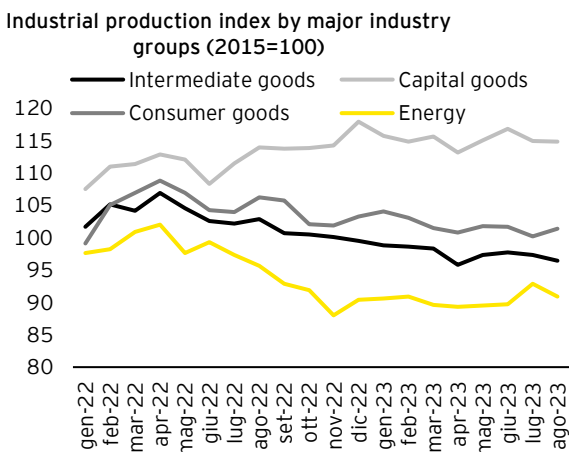
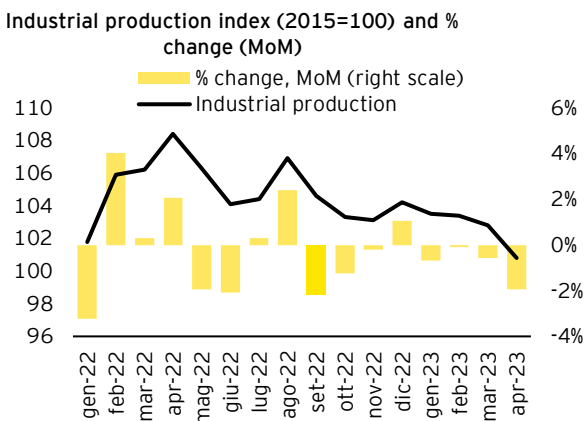
⁶² Eurosystem staff macroeconomic projections for the euro area, European Central Bank, June 2023.

The Italian economy

Real economy and bank credit

As mentioned earlier, industrial activity in Italy recorded weak monthly growth in August (0.2%), following a decline in July (-0.9%). This trend reflects the one in the manufacturing sector, which expanded slightly (0.2%), after a 1.2% contraction in July 2023.

Figure 21



Source: EY elaborations on ISTAT data. Latest observation: August 2023.

Looking at the main categories, the production of intermediate goods and energy contracted compared to the previous month, contrarily from capital (essentially flat) and consumer goods (positive growth).

The growth in consumer goods mainly reflects the increase in the production of durable goods, which shows significant growth compared to the previous month (4.4%). The production of non-durable goods also expanded, albeit more moderately (0.6%).

Overall, the industrial sector is not experiencing a dynamic activity. Among the various causes behind this phenomenon is the general economic slowdown, especially among the most important trading partners. Germany, France, and Spain account for about 30% of the market for manufacturing goods exported from Italy; Germany alone accounts for about 12% of the total. A slowdown in these economies, and especially in Germany, has therefore major spillovers on all Italian industrial activity.

Moreover, the current level of interest rates is affecting the cost of credit for businesses and households, which increased by about 3.5 and

1.9 percentage points respectively in the period between July 2022 and August 2023.⁶³

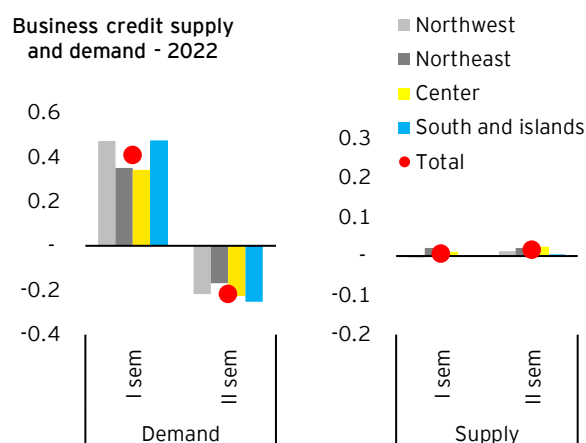
As mentioned above, credit standards for businesses tightened further in the second quarter of 2023, albeit to a lesser extent than in previous quarters. On the one hand, in fact, after the restrictions experienced since the second quarter of 2022, credit standards on loans for house purchases remained unchanged, differently from what experienced by businesses, which reported a slight tightening of credit conditions.

With regard to the credit demand, this has decreased for both businesses and households (for consumption purposes and for home purchases). For the former, the new marked reduction reflects the rise in the general level of interest rates and the resulting decline in investment. For the latter, the higher level of interest rates and the worsening of confidence about the current economic situation exerted a negative contribution on consumer credit demand.⁶⁴

If the national picture that emerges is one of slowing trends in credit supply and demand, surveys at regional level provide greater level of detail. In this case, data availability is less recent than at the national level.

After expanding in the first half of 2022, firms' demand for credit has contracted mainly due to economic slowdown, persistent geopolitical uncertainty, and the high interest rates level. This decline in demand has affected all regions of the country, with a more pronounced decrease in the South. The reduction in demand was particularly marked in the manufacturing and service sectors, after a significant increase in the first half of the year. In the construction sector, on the other hand, a heterogeneous trend occurred across different regions: while the Northeast saw a decline in loan applications, the other areas saw an increase.

Figure 22



Source: EY elaborations on Bank of Italy data (*Regional Bank Lending Survey*). The values expressed represent the diffusion index, which summarizes information on the evolution of credit demand in the two semesters of the year. Positive values of the index signal a growth in demand, negative values a decline. For more information, <https://www.bancaditalia.it/statistiche/tematiche/moneta-intermediari-finanza/intermediari-finanziari/indagine-credito-bancario/index.html>.

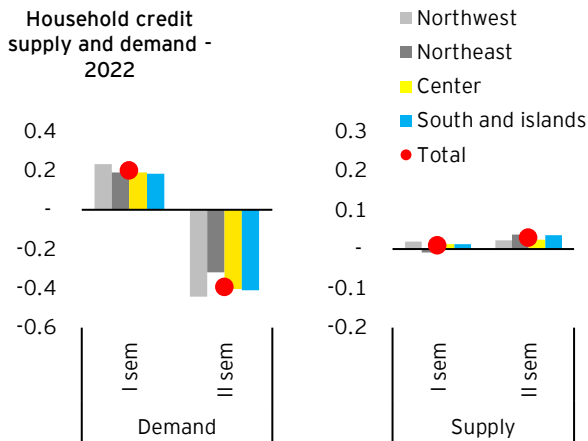
In the second half of 2022, credit standards were characterized by greater prudence, especially in the north-central regions. Credit criteria tightened for manufacturing firms and, to a greater extent, for those in the construction sector; they remained largely stable for firms in the service sector.

With reference to the demand and supply of credit to households, after the growth observed in the first part of 2022, the household demand for home purchase loans declined considerably in all regions of the country in the second half of the year, mainly due to rising interest rates.

Figure 23

⁶³ The cost of bank loans for businesses refers to the average cost of bank loans; the cost of loans for households refers to the average cost of home financing, calculated as a 24-month moving average on the aggregation of short-term and long-term rates on new volumes. "Firms" refers to non-financial corporations resident in Italy (adjusted

based on the ESCB methodology); "households" refers to households resident in Italy (adjusted based on the ESCB methodology). ⁶⁴ Bank Lending Survey (BLS), Bank of Italy. For more information, <https://www.bancaditalia.it/statistiche/tematiche/moneta-intermediari-finanza/intermediari-finanziari/indagine-credito-bancario/index.html>.



Source: EY calculations on Bank of Italy data (*Regional Bank Lending Survey*). Household credit refers to loans for the purchase of a home by consumer households. The values expressed represent the diffusion index, which summarizes information on the evolution of credit demand in the two semesters of the year. Positive values of the index signal a growth in demand, negative values a decline. For more information, <https://www.bancaditalia.it/statistiche/tematiche/moneta-intermediari-finanza/intermediari-finanziari/indagine-credito-bancario/index.html>.

The criteria for granting mortgages to households for home purchases were slightly stingier in all geographic areas. A moderate tightening of credit conditions was also found for consumer credit in all regions of the country.

According to the forecasts of the banks that are part of the panel, demand for mortgages is expected to have fallen further in the first half of 2023 in all regions, while there could be a slight recovery in demand for consumer credit. In terms of supply, the conditions applied to household loans are expected to be even more selective in all geographic areas.⁶⁵

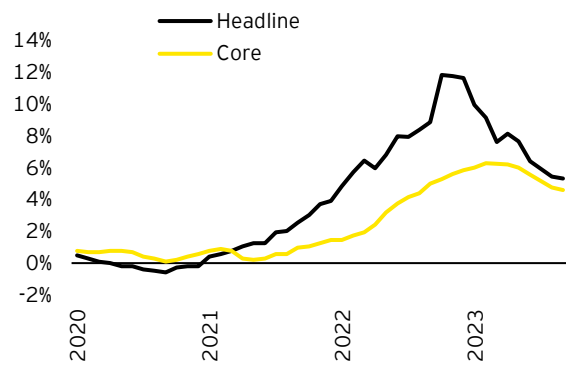
Inflation trends in Italy

Inflation remains at a very high level, although down from what was observed in the second half of 2022. In September, *headline* inflation figure was 5.3%, stable from 5.4% in August and down from 5.9% in July. *Core* inflation (i.e., excluding energy and fresh food) also declined, marking an annual change of 4.6% in August, down from 4.8% and 5.2% in the previous two months.

Figure 24

⁶⁵ The demand for and supply of credit at the territorial level, Bank of Italy, July 2023.

Headline and core inflation - % change YoY, Italy



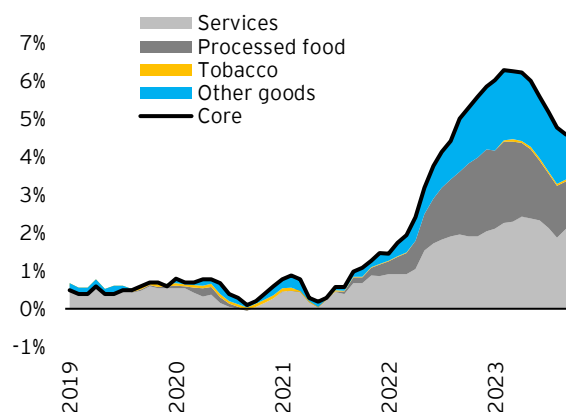
Source: EY elaborations on ISTAT data. Latest observation: September 2023.

Except for the increase recorded in April, the overall inflation trend seems to be in a downward direction.

Producer prices index in August confirms this trend: the producer price for industrial activity (excluding construction) rose slightly in August (+0.5%) compared to the previous month but compared to the same period of the previous year, it experienced a sharp slowdown (-12.2% in August after -10.2% in July).

Figure 25

Core inflation - components



Source: EY elaborations on ISTAT data. Latest observation: September 2023.

Inflation data thus show an improving trend, although still far from the ECB's price stability target (which is identified as an inflation rate around 2%).

In this regard, it is important to keep in mind that, from a statistical point of view, the calculation of the consumer price index is not always straightforward, even more in times of severe crisis and upheavals in consumer habits. The pandemic crisis provides an interesting example: first, during the first wave of the pandemic, nearly one-third of the prices in the harmonized consumer price index basket had to be estimated, as traditional price collection was limited, especially during lockdown periods. Indeed, in normal times the previous year's expenditures are a good proxy for the current year's expenditures (provided that relative prices and consumer preferences do not change much),⁶⁶ during the pandemic consumers were forced to change their consumption patterns dramatically. Moreover, the weights in the Harmonized Consumer Price Index did not reflect the radical changes in consumption patterns during the pandemic because they were built on consumer spending in previous years.⁶⁷

As already stated before, price dynamics have different effect on households depending on the income categories considered.

The role of consumer expectations in determining future price finds ample space in the economic literature,⁶⁸ and is important as it has implications for workers' wage bargaining, investment,⁶⁹ and future consumption.⁷⁰ In this regard, it is pointed out that a higher expected change in the price level translate into a higher probability of increased consumption in the short run.

Analyzing perceptions about price trends among households in Italy in the 12 months prior to the survey from the European Commission and in the 12 months after, expectations seem to point to falling inflation in the coming months. This could

then translate into lower consumption in the short term, with potential reduction in the inflation rate.

Figure 26

⁶⁶ Osbat, C., Conflitti, C., Bellocca, G.-P., Eiglsperger, M., Goldhammer, B., Kuik, F., Menz, J.-O., Ruml, F., Saez, M., Segers, L., Siliverstovs, B., Touré, A. and Wieland, E. (2023), "Measuring inflation with heterogeneous preferences, taste shifts and product innovation: methodological challenges and evidence from micro data," Occasional Paper Series, No. 323, ECB, Frankfurt am Main.

⁶⁷ Henkel, L., et al. (2023). Price setting during the coronavirus (COVID-19) pandemic. ECB Occasional Paper, (2023/324).

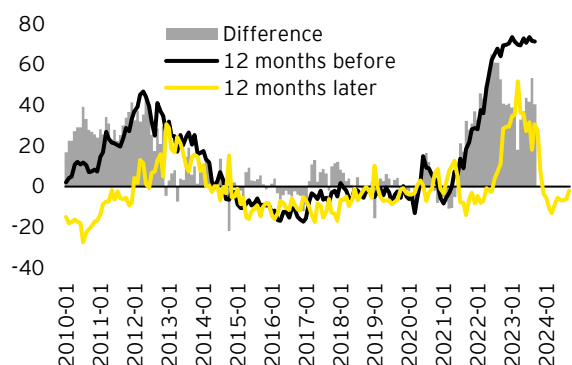
⁶⁸ Rudd, J., & Whelan, K. (2007). Modeling inflation dynamics: A critical review of recent research. *Journal of Money, Credit and Banking*, 39, 155-170. Among the various works that can be cited are the

contributions Phelps (1967) and Friedman (1968) relating to the conception of the "expectation-augmented Phillips Curve," the contribution of Sargent (1971) and Lucas (1972) on rational expectations, and those of Fischer (1977) and Taylor (1979).

⁶⁹ Bernanke, B. (2007). Inflation expectations and inflation forecasting. Technical report, Board of Governors of the Federal Reserve System (US).

⁷⁰ Duke, I., Kenny, G., & Reuter, A. (2018). Inflation expectations, consumption and the lower bound: micro evidence from a large euro area survey.

Perception of consumer price



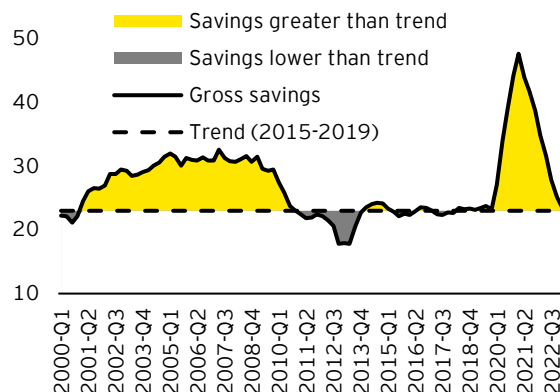
Source: EY elaborations on European Commission data (Business and consumer survey). The curve for expectations for the twelve months following the survey has been shifted by twelve months, so that it can be compared with the perception for the same month in the twelve months prior to the survey. The gray bars represent the difference between the perceived price level in the previous twelve months and the perceived price level in the following twelve months, shifted by twelve months. Latest observation: August 2023.

Moreover, it is important to consider an additional element to analyze current and future consumption, namely the amount of gross savings in Italy. Indeed, the pandemic period induced "forced" savings, due to the restrictions implemented. Gross savings peaked in the first quarter of 2021, then fell to levels more in line with pre-pandemic figures. Excess savings supported consumption, although its level is still below pre-pandemic levels. However, it is important to consider that the amount of savings that actually fueled new consumption may actually have been less than what was accumulated: indeed, it must be emphasized that these resources are unevenly distributed, that some of the savings were partly invested (e.g., in investment funds and equity investments), and that inflation partly eroded their purchasing power.⁷¹ It is expected, in any case, that higher propensity to consume will provide considerable support to the economy in the coming quarters.

Figure 27

⁷¹ Felici, S., Rapacciuolo, C. (2023). How are Italians' savings doing?, January 2023.

Gross savings (bn €)

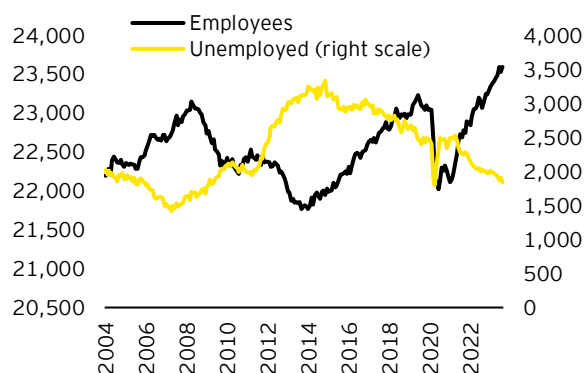


Source: EY elaborations on ISTAT data. Gross savings is calculated as a four-period average of quarterly values. Trend is calculated as the 2015-2019 average. Latest observation: 2023 Q1.

Equally important for consumption analysis is labor market trends. The number of employed reached all-time highs in August 2023 (about 23.6 million), providing support for domestic demand.

Figure 28

Employment (thousands) and unemployment rate - Italy



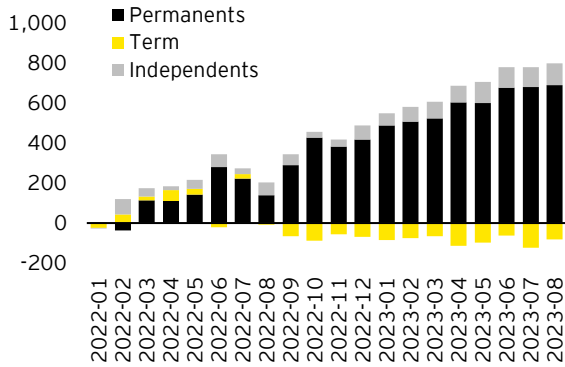
Source: EY elaborations on ISTAT data. Latest observation: August 2023.

Regarding the increase in the number of employees, it is interesting to note that most of the new workers were placed with permanent contract, while the others appear as self-employed: this reinforces the goodness of the trend taking place in Italy, thus reducing the possibility that new entrants to the labor market

may soon find themselves without employment, with positive effects on consumption.

Figure 29

Employment by contract type - cumulative increase from December 2021, thousands



Source: EY elaborations on ISTAT data.

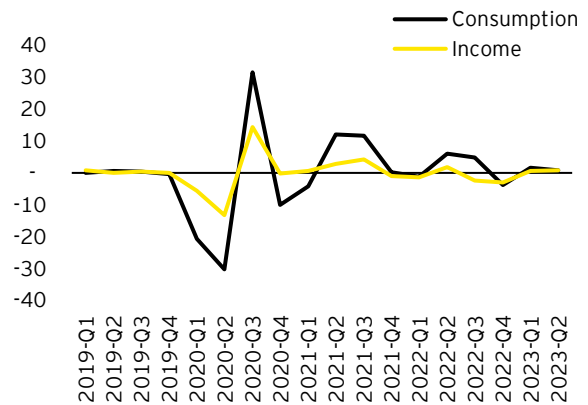
Overall, consumption is supported by positive labor market trends, which in aggregate partly reduces the erosion of workers' real incomes due to rising inflation.

In addition, the "forced" savings accumulated during the pandemic crisis allowed, in the previous quarters, to maintain the level of consumption around pre-covid levels, although still below in absolute terms.^{72,73}

Any slowdown in the positive labor market trend could result in a potential slowdown in consumption in the coming quarters.

Figure 30

Consumption and income - Italy (bn, var. QoQ)



Source: EY elaborations on ISTAT data. Consumption refers to real household final consumption; income refers to wages deflated using the consumption deflator.

⁷² Colabella, A., Guglielminetti, E., Rondinelli, C. (2023). The distribution and use of Italian households' savings after the pandemic, Bank of Italy, Questioni di Economia e Finanza number 797, October 2023.

⁷³ Guglielminetti, E., Rondinelli, C. (2021). Consumption and saving patterns in Italy during Covid-19, Bank of Italy, Questioni di Economia e Finanza number 620, June 2021.

Focus: the distribution of income globally and in Italy

Main messages:

1. *Analyzing the trend of global income distribution over the past century, it is possible to identify three main phases: the first (beginning of the century) characterized by high inequality within countries; a second (around the 1980s) characterized by a reduction in income concentration; and a third, characterized by divergent dynamics among different countries (polarization).*
2. *Several causes can be identified for these dynamics. In more recent times, globalization and the slowing growth of major global economies have played a key role.*
3. *Between 1991 and 2016, the difference in average income between the highest and lowest income brackets in Italy widened significantly. This is also partly due to a decline in the contribution of earned income to median income.*

An analysis of income distribution globally, and within countries, is a crucial element in understanding growth dynamics among and within countries.

Starting from a historical perspective, it is possible to affirm that at the beginning of the 20th century, the world's major economies exhibited a high degree of internal inequality. This was the result of a process of increasing income concentration, although the high level of inequality had already been present since the nineteenth century. Subsequently, during the first eighty years of the 1900s, there was a reduction in inequality in many countries, largely due to a decrease in the concentration of wealth and capital income at the top of the distribution. While towards the end of the 1900s several countries shared a similar path in relation to income distributional dynamics, thereafter, the trends became increasingly different and divergent.⁷⁴

This heterogeneity has led to a greater polarization of income distribution globally: although, in fact, between the fall of the Berlin Wall (1989) and the Great Financial Crisis (2008) worldwide inequality has been reduced, important differences have occurred between and within countries. China's rapid growth, for example, has allowed Chinese households to move increasingly into the higher income brackets of the world; on the other hand, some African countries, such as Nigeria and Côte d'Ivoire, have been characterized by the reverse process.⁷⁵ Wealth has thus become increasingly concentrated in some of the world's major economic blocs (such as the US, China, and Europe),⁷⁶ a phenomenon partly due to a failure of convergence between poorer and richer countries (*catching-up*).⁷⁷

The dynamics described above can be represented through the Gini coefficient, which is one of the main measures of inequality. The Gini coefficient measures the degree of income inequality within a population, and is a coefficient whose value ranges from 0 (zero inequality) to 100 (maximum inequality).^{78, 79}

Figures 31 and 32 show what has just been described. In the years between the fall of the Berlin Wall and the great financial crisis of 2008, the Gini coefficient first remained essentially stable (red line) and then followed a downward path. Underlying this reduction is a partial convergence of average income between countries (light gray bar), however, partly offset by an increase in differences within countries (black bar). The negative effect of within-country income differences persists to this day, albeit somewhat reduced.

⁷⁴ Roine, J., Waldenström, D. (2014). Long run trends in the distribution of income and wealth, Working Paper 2014:5, Uppsala Center for Fiscal Studies.

⁷⁵ Lakner, C., Milanovic, B. (2015). Global Income Distribution: From the Fall of the Berlin Wall to the Great Recession, The World Bank Economic Review.

⁷⁶ Zucman, G. (2019). Global Wealth Inequality, NBER Working Paper Series, Working Paper 25462.

⁷⁷ Johnson, P., & Papageorgiou, C. (2020). What remains of cross-country convergence?. *Journal of Economic Literature*, 58(1), 129-175.

⁷⁸ Gini, C. (1914). "On the measurement of the concentration and variability of characters," *Proceedings of the Royal Venetian Institute of Science, Letters and Arts*, 73, 1203-1248.

⁷⁹ Stone, G. (1915). "Of the relations between indices of variability," *Proceedings of the Royal Venetian Institute of Science, Letters and Arts*, 74, 775-804.

Figure 31

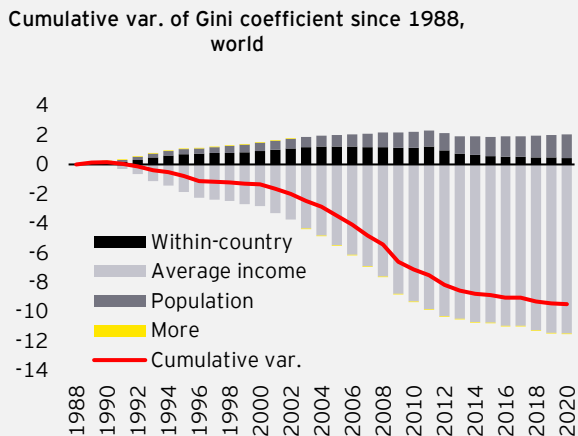
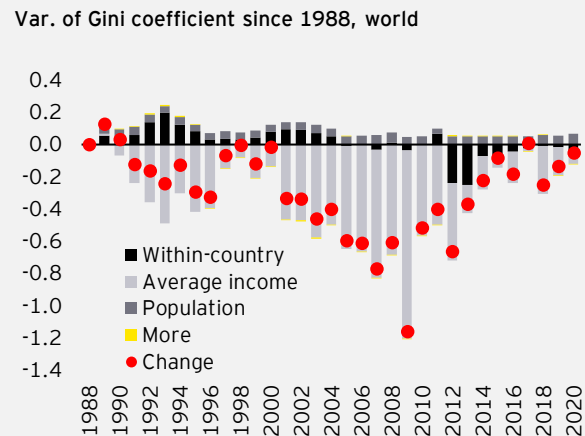


Figure 32



Source: EY calculations on Bruegel data. Within-country: refers to the change in the Gini coefficient within individual countries. *Average income*: refers to the change in the Gini coefficient linked to convergence in average income. *Population*: refers to the variation in the Gini coefficient related to variation in a country's population (the impact of which may be significant).⁸⁰ The dataset contains updated estimates of the global and regional Gini coefficient contained in Darvas (2019).⁸¹ Last update: January 13, 2023.

In analyzing the process underlying different income distribution among countries, we start with the hypothesis formulated by Kuznets in 1955:⁸² the hypothesis states that at generally very low-income levels inequality must be low, since practically everyone lives at a subsistence level. As the process of growth begins, income inequality increases because the weight of the industrial sector, in which both productivity and wage levels are higher than in the agricultural sector, increases more and more. In the early stage of development, both physical and human capital are scarce and unevenly distributed. As the two types of capital accumulate and spread more widely among the population, the rate of return on physical capital declines while wage differences between skilled and unskilled labor narrow. The distribution of income then becomes more equal.

This hypothesis plays a key role in the economic literature and has been the subject of controversy many times. Based on this hypothesis, a more elaborate hypothesis has subsequently been constructed, which takes into account other elements in explaining inequality. Specifically, it can be argued that income distribution is determined by (1) a factor that is, from the perspective of policy makers or society as a whole, "given" in the short run; and (2) social choice (or public policy). The given factor is the level of development as measured by income (GDP) per capita. The public policy factors are (1) the percentage of workers employed in the state and para-state sectors; and (2) the size of government transfers, measured as a share of the country's GDP. Income distribution is also seen as the product of social choices mediated through elections, and democratic participation, lobbying activities of different social groups, social preferences, or historical developments. Thus, some countries may have a majority of workers in the state sector because socialist or communist parties have historically been stronger; or the population may have a strong preference for poverty eradication and income redistribution through transfers.⁸³

Another factor underlying redistributive dynamics is globalization. There is a vast economic literature on the effects of globalization on income distribution: in this regard, we can cite studies on how globalization has affected wage and income inequality in the United States or Western Europe through greater integration of markets for goods, factors of production and technology (which has resulted in greater demand for higher-skilled workers and, consequently, widened the gap between them and lower-skilled

⁸⁰ Rougoor, W., & van Marrewijk, C. (2015). Demography, Growth, and Global Income Inequality. *World Development*, 74, 220-232.

⁸¹ Darvas, Z. (2019). 'Global interpersonal income inequality decline: the role of China and India', *World Development* 121, 16-32.

⁸² Kuznets, S. (1955) 'Economic Growth and Income Inequality', *American Economic Review*, 45(March): 1-28.

⁸³ Milanovic, B. (2000). Determinants of cross-country income inequality: An augmented Kuznets' hypothesis. *Equality, Participation, Transition-Essays in the Honor of Branko Horvat*. London: St. Martin's, 48-79.

workers)⁸⁴ or studies on how globalization has affected income distribution at the global or international level, mainly through differences in average per capita growth rates among countries.⁸⁵

In this regard, it is interesting to note that the impact of globalization and trade openness on the distribution and inequality of wealth depends in part on the average income level of the country under consideration: at a very low-income level, higher income benefit from the opening of the economy. As the income level rises, that is, in countries with incomes between \$4,000 and \$7,000 per year in international prices, the situation then seems to change, and the relative income of the lower income brackets experiences higher growth rates than that experienced by the higher classes (first two deciles). Thus, it could be argued that the effect of openness on income distribution depends on the country's average income level.⁸⁶ One explanation for this phenomenon has to do with the level of education and *skills* of workers: in fact, the opening up of less wealthy countries may result in an increase in inequality by favoring workers with medium to high levels of education and reducing the income share of workers with low levels of education, workers who generally lack the knowledge and skills needed by firms in wealthier countries. It is therefore through more widespread education that openness exerts an equalizing effect on income.

More recent analyses also show that those with higher income levels have experienced slower income growth in recent years than in previous years: indeed, it is possible to say that globally, lower incomes have experienced higher growth since 2008. As an example, consider that incomes around the median distribution in the United States (50th percentile) experienced less than 4% cumulative growth between 2008 and 2013, and its global income position, due to slow growth, deteriorated from 94th to 93rd percentile. Similarly, Italy's median slipped from 89th to 84th percentile overall and the UK's from 94th to 90th. On the other hand, China's median income has more than doubled and its global income position has risen from the 51st to the 60th percentile. Similarly, India's median grew by 66% and its global income position improved from 21st to 24th global percentile.⁸⁷

In dealing with the topic of inequality and at the international level, and the relative causes underlying its dynamics, it is important to keep in mind that the analysis presents varying degrees of difficulty. This is due, for example, to the need to analyze the dynamics of inequality in a large number of countries, the need to use standard measures of inequality between and within countries,⁸⁸ or the not always clear definition of global income distribution as a result of aggregating different surveys.⁸⁹

Polarization is not just between different countries, but also within individual countries, especially with reference to the least developed countries. This is evident from Figures 33 and 34, where the contribution of within-country inequality to world inequality is significant (black bar). Indeed, it has been shown that inequality exhibits a "bimodal" character in the early 1970s, i.e., a high number of countries with average levels of distributional asymmetry is accompanied by a more limited presence of countries with high inequality, mainly in Latin America. The next two decades are characterized by more homogeneous levels of inequality, suggesting a convergence of class structure among countries. As the 2000s approached, the bimodal character emerged again, and in a more pronounced way: the number of highly polarized societies in fact increased, driven by frictions of transition in the former USSR area and lack of improvement in historically unequal societies. This phenomenon also affected Italy.⁹⁰

⁸⁴ Slaughter, Matthew J. and Phillip Swagel (1997), "The Effect of Globalization on Wages in the Advanced Economies," International Monetary Fund Staff Studies for the World Economic Outlook, December 1997; Dluhosch, Barbara (1998), "Globalization and European Labor Markets," October 1998, CEPR Discussion Paper No. 1992; Schott, Peter K. (1999), "One Size Fits All? Specialization, Trade and Income Inequality," October 31, 1999.

⁸⁵ Milanovic, (1999); Milanovic and Yitzhaki, (1999); Melchior et al. (1999); Schultz (1998), Sala-i-Martin (2002).

⁸⁶ Milanovic, B. (2005). Can we discern the effect of globalization on income distribution? Evidence from household surveys. The World Bank Economic Review, 19(1), 21-44.

⁸⁷ Milanovic, B., (2020). Elephant who lost its trunk: Continued growth in Asia, but the slowdown in top 1% growth after the financial crisis.

⁸⁸ Atkinson, A. B., & Brandolini, A. (2009). On analyzing the world distribution of income. Study Service Discussion Topics, Number 701, Bank of Italy.

⁸⁹ Anand, S., & Segal, P. (2008). What do we know about global income inequality?. Journal of Economic Literature, 46(1), 57-94.

⁹⁰ Biancotti, C. (2004). A Polarization of Polarization? The Distribution of Inequality 1970-1996. Study Service Discussion Topics, Number 487, Bank of Italy.

Figure 33

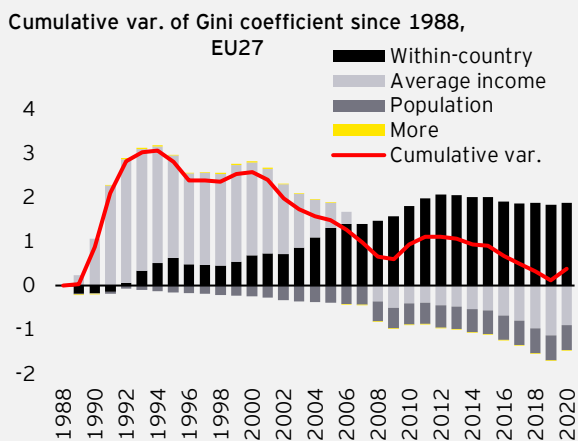
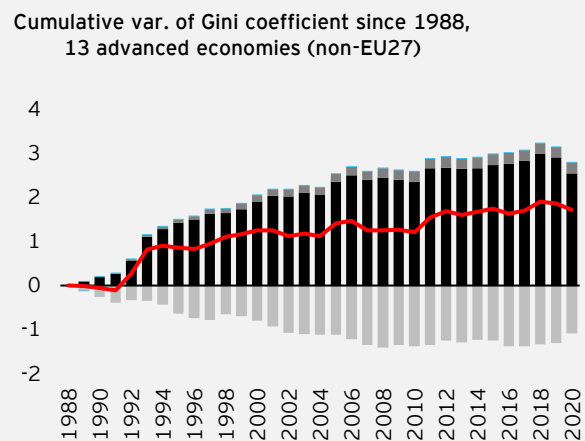


Figure 34



Source: EY elaborations on Bruegel data. The dataset contains updated global and regional Gini coefficient estimates from Darvas (2019).⁹¹ Last update: January 13, 2023. Last data available: 2020. The 13 advanced economies are: Australia, Canada, Hong Kong (China), Iceland, Israel, Japan Korea, New Zealand, Norway, Singapore, Switzerland, Taiwan, and the United States.

In this regard, an important source of information for Italy is provided by the Bank of Italy's surveys of Italian household budgets⁹²: although these types of surveys have limitations and open points, they contain a wealth of data that is very useful for analyzing various economic phenomena in our country.^{93,94} Cross-referencing these data with other sources, it is possible to identify three main phases in the trend of inequality in the post-war period: an initial phase of stability, or moderate decline, in the 1950s and 1960s; a sharp decline in the 1970s; and a period of fluctuation around a trend from the 1980s onward.⁹⁵

From the early 1990s to the present, the income gap between the richest and the poorest segments has been increasing ever since. Indeed, if at the beginning of the 1990s the average (equivalent) income of those belonging to the tenth income decile in Italy was about seven times that of the lowest income brackets (first decile), in the last 30 years this ratio has increased, reaching a value of about twelve times that of the least affluent brackets, as shown in Figure 35. This phenomenon is also due to a reduction in income in the first decile of about 40% over the past 30 years, compared with an average growth of about 1%.

⁹¹ Darvas, Z. (2019), 'Global interpersonal income inequality decline: the role of China and India', *World Development* 121, 16-32.

⁹² The survey has been conducted by the Bank of Italy since the 1960s to collect information on the income, wealth and savings of Italian households. In the latest surveys, the sample consists of about 7,000 households (16,000 individuals), distributed in about 300 Italian municipalities. For more information, <https://www.bancaditalia.it/pubblicazioni/indagine-famiglie/index.html>.

⁹³ Baffigi, A., Cannari, L., & D'Alessio, G. (2016). Fifty years of Italian household income and wealth surveys: History, methods and future prospects. Bank of Italy Occasional Paper, (368).

⁹⁴ Limitations include: the difficulty of international comparability, consistency not always present between microeconomic information and aggregate estimates, timeliness of estimates, and others. There are many studies related to measurement error, under-reporting, nonresponse related to the Household Budget Survey. These include Battistin et al. (2003), Biancotti et al. (2004), Brandolini et al. (2004), Bonci et al. (2005), Conti et al. (2014), D'Alessio, Iezzi (2015), D'Alessio, Neri (2015). For more information, <https://www.bancaditalia.it/statistiche/tematiche/indagini-famiglie-impres/bilanci-famiglie/metodologia-ibf/index.html>. Interesting in this regard is the following quote, "The experience to date suggests that sample surveys are unlikely by themselves to provide a fully satisfactory source of information about the size distribution of wealth as a whole. ... Sample surveys may be a valuable supplement to the estate data, throwing light on the wealth not covered by the estate returns; they may also provide useful information about the holdings of certain types of assets (e.g. consumer durables). But in our view they cannot provide an alternative to the estate method as a source of evidence about wealth-holding at the top of the scale." Atkinson, A. B. and A. J. Harrison (1978), *Distribution of Personal Wealth in Britain*. Cambridge: Cambridge University Press.

⁹⁵ Brandolini, A. (1999). The distribution of personal income in postwar Italy: source description, data quality, and the time pattern of income inequality. Study Service Discussion Topics, Number 350, Bank of Italy.

Figure 35

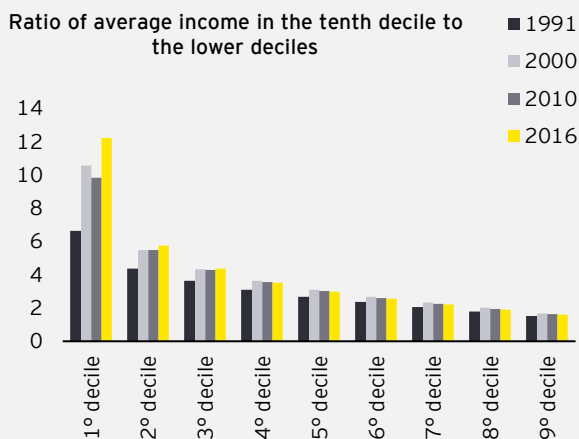
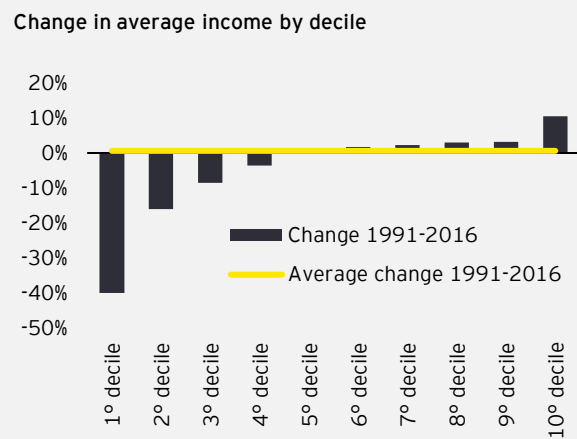


Figure 36



Source: EY elaborations on Bank of Italy data (Survey of Italian household budgets). Average income refers to median equivalised income, which is the income that a member of a household would have to have to achieve the same level of well-being as if he or she lived alone. For more information, https://www.bancaditalia.it/pubblicazioni/indagine-famiglie/bil-fam2020/Fascicolo_IBF_2020.pdf. The ratio of median income in the 10th decile to the lower deciles is given by the ratio of the median equivalent income in the 10th decile to the median equivalent income in the lower deciles. Average income data were deflated by taking into account the index for annual revaluations available from the survey itself.

A more general analysis of the trend in average net household income (excluding financial capital) in Italy over the past twenty-five years shows that the latter has shrunk by about 10%. This figure is the result of a major contraction in income from self-employment (-17%) and wage labor (-43%), partly offset by growth in income from transfers (+11%) and real capital (+18%).⁹⁶

Figure 37

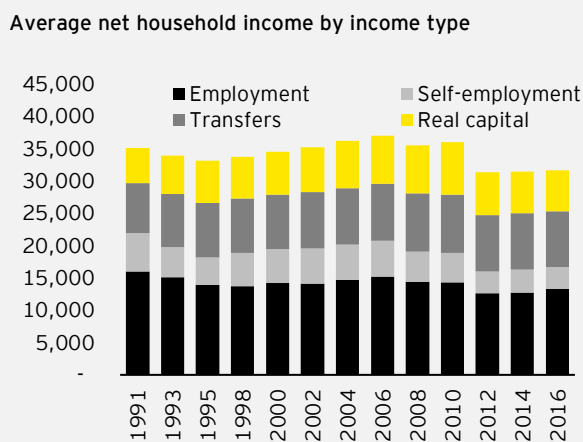
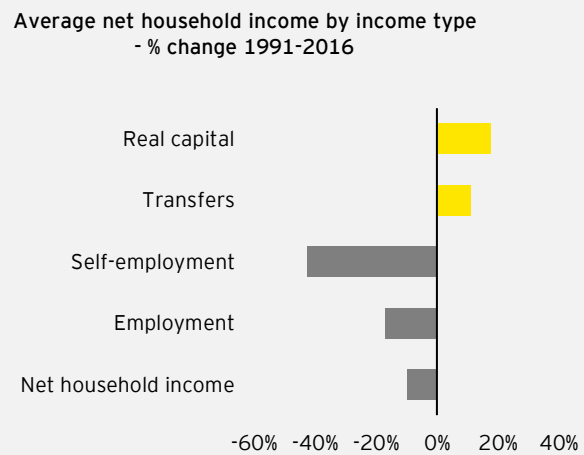


Figure 38



Source: EY calculations on Bank of Italy data (Survey of Italian Household Budgets). Average income data were deflated by taking into account the index for annual revaluations available from the survey itself. Net income refers to net income excluding financial capital, net of expenses, taxes and contributions paid. For more information, <https://www.bancaditalia.it/statistiche/tematiche/indagini-famiglie-imprese/bilanci-famiglie/documentazione/index.html>.

Opposite to the declining total income since the early 1990s, the total net wealth of Italian households grew by 18%. This increase is mainly the result of a similar magnitude of growth (+20% over the period) in

⁹⁶ Transfer income: sum of income from transfers and pensions; investment income: sum of income from buildings and financial capital.

the value of real assets,⁹⁷ which is matched by a 17% increase in financial assets and a 58% increase in liabilities.

The analysis on income distribution and inequality in Italy also contains interesting implications when studied from a regional profile. Different regions, in fact, show a different degree of income concentration. As pointed out in a study by the Bank of Italy, "the picture that emerges from the results confirms the traditional gap between the regions of the Central North and those of the South, in terms of both income and wealth. For both of these variables, concentration appears higher in the southern regions and lower in the North and especially in the Center."⁹⁸ In some regions, the higher concentration is attributable to sociodemographic factors: the number of income earners and the size of the municipality of residence are the variables that mostly explain inequality in some regions of the Center and the South. A further element to consider in explaining this phenomenon is female labor participation: the increase in female employment, in fact, plays an equalizing effect, an effect whose magnitude has grown over time (more significant in the late 1990s than in the late 1970s) and more important in northern regions.⁹⁹

Based on what was shown above, it is therefore possible to say that middle- and lower-income brackets have lost purchasing power over the past 20-30 years. Moreover, this phenomenon may have potentially worsened as a result of the price increases experienced in recent years.

In this context, it is important to note how the price increase weighs more heavily on the poorest households, due to the different composition of household consumption across income brackets: consider, for example, that spending on food and energy, i.e., the components that have experienced the greatest price increase, accounts for households belonging to the first quintiles a greater percentage of total spending than households in the fourth and fifth income quintiles.¹⁰⁰ Specifically, for households belonging to the first income quintile, food spending amounts to about 26% of total spending, compared with 14% for the fifth quintile; another example is regarding energy spending, which, for the first quintile, amounts to 12% of total spending, compared with 7% for households belonging to the fifth quintile.

With reference to household income, it is also important to note that a large portion of tax revenue from personal income taxes is attributable to the middle-income bracket (29,000-55,000 euros). This is made evident in Figure 39, which shows the percentage of taxpayers and the related net tax to them in tax year 2021. Here it can be seen that about 20% of taxpayers correspond to about 30% of the revenue related to this tax, or about 53 billion euros.

These numbers take on even more significance when compared to the estimated size of the unobserved economy in Italy, estimated by the Italian National Institute of Statistics (ISTAT) to be around 203 billion as of 2019, or 11.3% of GDP.¹⁰¹ Tax revenues and the unobserved economy also fit into a context of high interest rates, which has an impact, among other aspects, on the cost of public debt. The latter is estimated, as of 2023, at more than 78 billion.¹⁰²

⁹⁷ The value of real assets is the sum of the value of real estate owned by the family (housing, land, and other buildings), the value of real assets of businesses owned by the family (and where family members work as independent contractors), and valuables. For more information, <https://www.bancaditalia.it/statistiche/tematiche/indagini-famiglie-imprese/bilanci-famiglie/documentazione/index.html>.

⁹⁸ Cannari, L., D'Alessio, G. (2003). The distribution of income and wealth in Italian regions. Study Service Discussion Topics, Number 482, Bank of Italy.

⁹⁹ Del Boca, D., Pasqua, S. (2003). Employment patterns of husbands and wives and family income distribution in Italy (1977-98). *Review of Income and Wealth*, 49(2), 221-245.

¹⁰⁰ Is the Italian economy still resilient to uncertainty and shocks?, Forecast Report - Centro Studi Confindustria, Fall 2022.

¹⁰¹ ISTAT, Unobserved economy in the national accounts. For more information, <https://www.istat.it/it/archivio/275914>.

¹⁰² Economic and Financial Document 2023 - Update Note, p. 58.

Figure 39

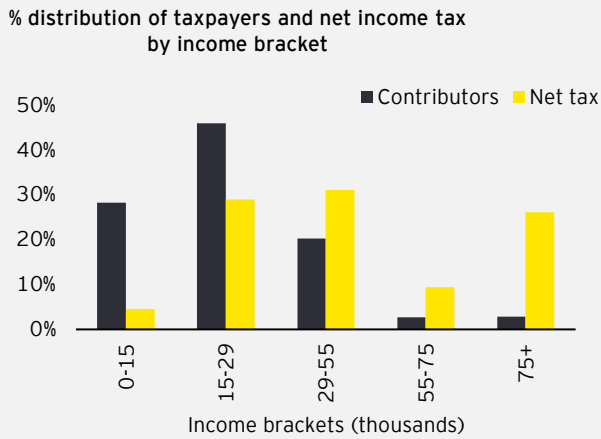
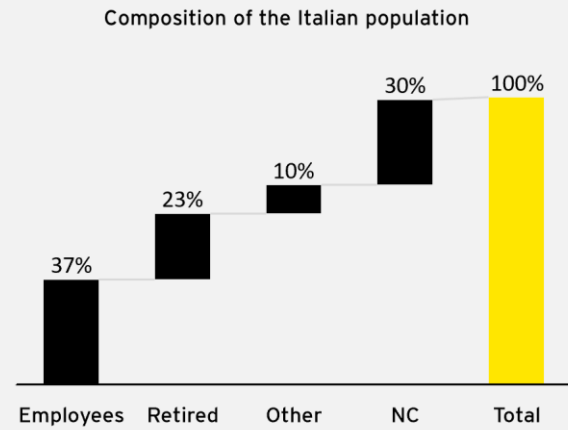


Figure 40



Source: EY calculations on Ministry of Economy and Finance data. NC: noncontributors. Amounts may not report at 100% due to rounding.

Finally, it is useful to highlight the composition of the Italian population from a tax perspective. Out of a total population of about 59 million people, 37% are employees, 23% are pensioners, 10% refer to other categories (e.g., self-employed), and 30% are noncontributors.¹⁰³

¹⁰³ Reference is made to tax year 2021. Ministry of Economy and Finance - Department of Finance. For more information, https://www1.finanze.gov.it/finanze/pagina_dichiarazioni/public/dichiarazioni.php.

The Italian economy: GDP and EY forecasts

In the second quarter of 2023, GDP contracted by 0.4% from the previous quarter and grew by 0.3% from the second quarter of the previous year. The figure represents a downward revision from the preliminary estimate at the end of July 2023, when it showed a growth of 0.3% compared to the previous quarter and 0.6% growth year-over-year. This contraction is the result of a substantially flat consumption growth compared to the previous quarter (0.0%), a sharp decline in investment (-1.7%), and a reduction in exports (-0.6%) linked to a slowdown in the world economy.

With reference to consumption, the null growth recorded in the second quarter of 2023 was mainly due to a reduction in household purchasing power caused by a decline in real incomes due to high inflation. This reduction was offset by a strong labor market and the "forced" savings generated during the pandemic period. On the other hand, for what concerns the investment performance, the higher cost of credit, as a result of the monetary tightening applied by the European Central Bank, was the main factor weighing it down.

Figure 41

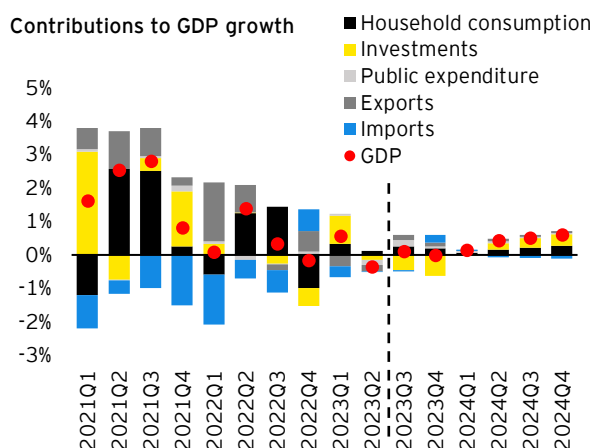
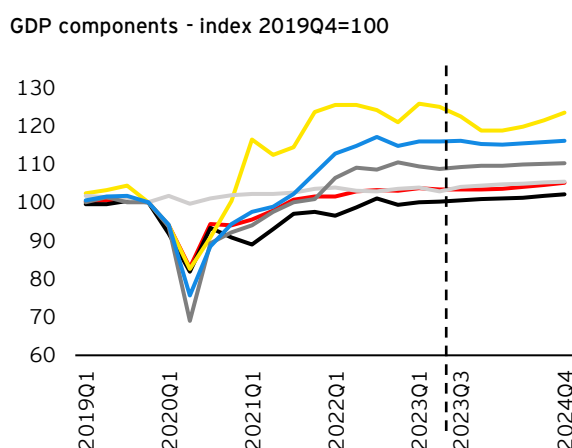


Figure 42



Source: EY elaborations on Eurostat data and EY forecasts. EY forecasts begin with the third quarter of 2023. "Investment" refers to fixed investment, which includes gross fixed capital formation, changes in inventories, acquisitions less disposals of valuables, and depreciation.

Based on the information in the previous sections and the latest observation, it is possible to outline the outlook for the Italian economy for the coming quarters.

Following the slowdown of the Italian economy in the second quarter of 2023, it is expected that 2023 will close with overall growth of 0.7%, with the third and fourth quarters characterized by essentially flat growth. A slightly more dynamic 2024 (0.8%) is then expected, with the economy accelerating in the second half of the year.

Household consumption, the most significant component of GDP, will drive growth in 2023 thanks to a 1.5% increase over 2022, losing some of the momentum in the following year (1.1% in 2024). Private consumption, in fact, benefits in 2023 from the health of the labor market and the presence of excess savings mainly accumulated during the pandemic period. In 2024, consumption will continue to show resilience due to an even higher propensity to consume than historical regularities. GDP growth will also be supported by a positive contribution from net exports due to a decline in imports and a restoration of world trade.

Investment is expected to slow in 2023 (-0.4%) and the following year (-0.7%); in fact, even in the absence of further monetary restrictions, it is still discouraged by high interest rates.

The labor market is expected to remain stable at current levels and healthy, with an unemployment rate in 2024 just above 7%. For what concerns the inflation estimate, it is expected to decline in 2023 and then fall significantly in 2024 but will show some persistence in the food and services components.

Table 1: Forecast of the Italian economy

	2020	2021	2022	2023	2024
GDP, % var.	-9.0%	8.3%	3.9%	0.7%	0.8%
Household consumption, % var.	-10.4%	5.3%	5.0%	1.5%	1.1%
Total investment, % var.	-8.0%	20.7%	10.1%	-0.4%	-0.7%
Exports, % var.	-14.3%	14.0%	10.7%	0.6%	0.7%
Imports, % var.	-12.7%	15.2%	13.1%	0.9%	-0.2%
Unemployment rate	9.4%	9.5%	8.1%	7.6%	7.2%
Consumer price index, % var.	-0.1%	1.9%	8.2%	5.9%	2.7%
Deficit, % of GDP	-9.5%	-8.8%	-7.9%	-4.8%	-4.2%
Public debt, % of GDP	155.0%	147.2%	141.6%	141.6%	142.7%

Source: forecasts from EY Italy's Macroeconometric Model, "HEY-MoM," The area in gray represents the forecast horizon, Changes in The GDP and its components are calculated on values expressed in real terms.

The public deficit is expected to be 4.8% in 2023 and 4.2% in 2024, while public debt will be affected by low GDP growth between 2023 and 2024, standing at 142.7% of GDP in 2024. The forecast remains subject to a scenario of high uncertainty and thus has major risks, mainly related to the global macroeconomic environment of reference, both downward and upward.

The impact of a partial implementation of the RRP

The forecasts just described assume the actual implementation of the reforms and projects of the RRP as envisaged in the Update Note of the Economic and Financial Document 2023. An analysis that considers a partial implementation of the plan can be added to the *baseline* scenario.

Specifically, two alternative scenarios to the baseline forecast are identified, which include:

- *Scenario 1*: An expenditure equal to 90% of the resources planned for 2023 and 2024;
- *Scenario 2*: An expenditure equal to 70% of the resources planned for 2023 and 2024.

Resources are assumed to be spent on public investment (estimated to be 62% of total resources), collective consumption (12%) and other spending categories (e.g., incentives of various kinds, 26%).¹⁰⁴

¹⁰⁴ For a breakdown by type of expenditure (investment, consumption or other), see working paper No. 2 *A macroeconomic assessment of the Italian National Recovery and Resilience Plan*, march 2022, Ministry of Economy and Finance.

Figure 43

Real GDP, Italy (mln €)

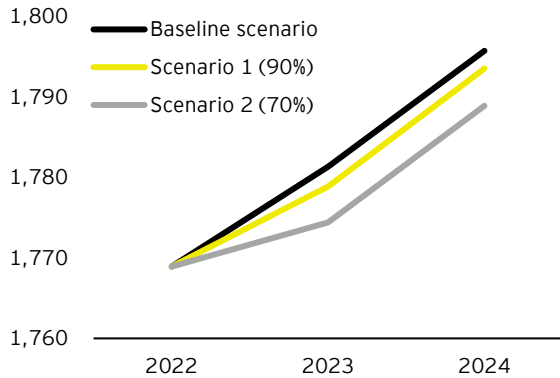


Table 2: GDP growth in the three scenarios

	2023	2024
Baseline	0.7%	0.8%
Scenario 1 (90%)	0.6%	0.8%
Scenario 2 (70%)	0.3%	0.8%

Source: Elaborations from EY Italy's Macroeconometric Model, "HEY-MoM."

Taking these two scenarios into consideration, it is estimated that in Scenario 1 (i.e., case of spending RRP resources at 90% of what is planned for 2023 and 2024), GDP would experience 0.6% growth in 2023 and 0.8% growth in 2024. In Scenario 2 (spending of RRP resources at 70% of what is planned for 2023 and 2024), the Italian economy would experience growth of 0.3% in 2023 and 0.8% in 2024, thus marking a decidedly underwhelming year of growth. As mentioned above, therefore, RRP resources are an important lever of Italian GDP growth in 2023 and 2024, in a context of rising interest rates that discourage private consumption and investment.

Assumptions behind forecasts

The forecasts described above are based on a series of assumptions that outline the baseline scenario.¹⁰⁵ Specifically, the following assumptions are considered:

- ▶ **International trade:** a slowdown is assumed in 2023 followed by a marked acceleration in 2024;
- ▶ **Natural gas:** the price of natural gas (referred to the Dutch Title Transfer Facility) is assumed to be around \$18/mmbtu by the end of 2023, and around \$23/mmbtu by the end of 2024;
- ▶ **Oil:** oil prices are assumed to be around \$83 per barrel in 2023,¹⁰⁶ and, after a rise in early 2024, remain stable in subsequent years around \$85;
- ▶ **Exchange rate:** the euro/dollar exchange rate is assumed to be 1.09;
- ▶ **Public expenditure:** the projections contained in the Ministry of Economy and Finance's latest Economic and Financial Document Update Note are considered;¹⁰⁷
- ▶ **Monetary policy and interest rates:** a pause in the rise of the three benchmark interest rates is assumed for the last months of 2023. Thereafter, a reversal is assumed, leading to a reduction of about half a percentage point in benchmark rates by the end of 2024. The long-term (10-year) interest rate is also expected to follow a similar trend but showing a gradually narrowing differential with the short-term rate.

Assumptions are made based on data available as of October 11, 2023. Data in the analysis are updated as of October 11, 2023.

Finally, considering the current scenario and the very strong uncertainty, some downside and upside risks are listed below to support a more complete view of what might happen in the future:

Risks to the upside

- ▶ Reduction of tensions between Russia and Ukraine: tensions related to the conflict could reduce in the short/medium term, consequently reducing instability in the macroeconomic framework;
- ▶ Labor market: low pressure of the wage component on the price level, reducing the risk of inflation rate persistence;
- ▶ Monetary policy: halt of monetary tightening by the European Central Bank and less pressure on domestic demand;
- ▶ Fast readjustment of supply chains: faster readjustment of European and global value chains would mean less pressure along them, bringing with it greater security of supply and global trade;
- ▶ Accelerating domestic demand: growth in domestic demand, especially consumption, could prove more significant than expected, thanks in part to a healthy labor market. The combination of a resilient labor market and sustained wage growth could largely offset the erosion of purchasing power after the phasing out of fiscal support measures.

¹⁰⁵ The data are updated to July 3, 2023.

¹⁰⁶ Reference is made to the price of Brent.

¹⁰⁷ Economic and Financial Document, Update Note, 2023.

Downside risks

- ▶ Increased geopolitical tensions: the Russia-Ukraine conflict may not be resolved in the short/medium term, perpetuating geopolitical insecurity. Added to this is a worsening of the Israeli-Palestinian issue, which, if other countries become involved, would have even more significant humanitarian and economic spillovers;
- ▶ Stronger-than-expected impact of restrictive monetary policy on the real economy: the ECB and other global central banks may continue with restrictive monetary policy for longer than expected if inflation persists in different economies. This may result in a risk of prolonged low growth due to lower consumption and investment discouraged by high interest rates;
- ▶ Stress in the financial system: high interest rates can translate into greater stress for financial institutions, impacting savers and tightening credit conditions, both in the United States and the Eurozone;
- ▶ High public debt: the post-pandemic increase in public debt, together with current high interest rates, poses new challenges to its sustainability in Eurozone economies, especially in the most indebted ones such as Italy. This could ultimately translate into greater risks of stress in financial markets;
- ▶ RRP: Failure to fully achieve the goals of the RRP and its partial implementation could slow the pace of growth of investment, and thus of the Italian economy as a whole; the issue could also have spillovers on potential GDP and thus on medium- to long-term growth prospects;
- ▶ Emerging economies: rising global interest rates have an impact on emerging economies through several channels (low US growth; depreciation of emerging country currencies, potentially raising interest rates to avoid excessive depreciation; increased financial fragility);
- ▶ Monetary policy transmission channels: some structural factors such as the presence of a high proportion of households with fixed-rate debt, or an economy where the service sector is preponderant, may hinder the transmission mechanisms of monetary policy, thus requiring more time to exert their effects;¹⁰⁸
- ▶ Increased distress in real estate: maintaining interest rates at a high level may add further pressure on the housing market, discouraging home and real estate purchases.

¹⁰⁸ ECB, the risks of a stubborn inflation, June 2023, https://www.ecb.europa.eu/press/key/date/2023/html/ecb.sp230619_1~2c0bdf2422.en.html.

Technical Appendix

HEY-MOM: Hybrid EY MOdel for the Macroeconomy¹⁰⁹

Building a new macro-econometric model has required optimizing an inevitable trade-off between building a model that emphasizes data information (such as the ARIMA and VAR models, which make no use of economic theory whatsoever) or a model that pays attention only to the foundations on which its relationships are based (in the extreme case, the calibrated RBC-DSGE models that pay no attention to the data in their variables).¹¹⁰ This trade-off has been emphasized several times in the literature, see for example the reflections in Granger (1999) and Pagan (2003).

In the construction of HEY-MOM, an attempt was made not to neglect either of the above two ingredients (economic theory and data), in an effort to produce a hybrid model with a careful balance in specifying relationships (a) based on micro-founded economic behavior and at the same time (b) careful in the application of rigorous statistical information evaluation techniques. An example of a hybrid model is MARTIN, the model currently in use at the Australian Central Bank (see Cusbert and Kendall, 2018).

In a nutshell, the role of HEY-MOM is to unify the analytical framework of macroeconomics in EY. To do this, the model refers to the main aggregates of the Italian economy, grounded in empirical data, non-monetary in nature, with explicit long-run relationships among the variables it studies, and oriented mainly toward establishing short-term forecasts (over a two-year horizon).

The economic foundation

Rigidity in the movement of prices and wages implies rigidity in the speed with which macroeconomic systems adjust to unexpected shocks. Thus, on the one hand in the model market demand drives short-term fluctuations, as outlined by Keynesian theories, while in the long run supply determinants drive the state of the economy.

Long-run output (the economy's potential) depends on the joint effect of trends in total factor productivity, labor supply and duration in hours, and, finally, the capital stock. These factors are combined by Cobb-Douglas-type technology with constant returns to scale. The demand for factors of production is that which minimizes cost given a planned level of output in the context of an economy in which oligopolistic forms of competition hold, in which firms are free to set prices on the basis of a margin over labor costs and, at those prices, are willing to collectively meet any level of market demand. Wages are defined on the basis of a "Phillips curve" driven by inflation rate inertia, labor productivity, and the distance between actual and natural unemployment rates (defined by the long-run state of the labor market). Actual output is composed of the following domestic and foreign demand items: private (household) and public consumption; private and public investment by asset type (residential and nonresidential buildings, machinery and equipment, and research and development expenditures); and imports and exports.

In each period, the gap between actual and potential output retroacts on prices (through changes in margins), which, in turn, interact with demand components. In this way, equilibrium between supply and demand is achieved.

Data evaluation techniques

The rate at which the economic dynamics outlined above evolve over time is estimated using econometric methods based on the actual time series of the variables of interest in the model.

¹⁰⁹ The model was created in collaboration with the Department of Economic Sciences at the University of Bologna.

¹¹⁰ "ARIMA" stands for "Autoregressive integrated moving average," "VAR" for "Vector autoregression," "RBC-DSGE" for "Real Business Cycle - Dynamic. Stochastic General Equilibrium."

To this end, the model uses a combination of the London School of Economics approaches and Fair's (2004) revisiting of the Yale Cowles Commission approach. The synthesis carried out in HEY-MOM uses cointegration methods (Engle and Granger, 1987, and Johansen, 1995) to estimate long-run relationships among nonstationary variables (Dickey and Fuller, 1979), interpretable in light of economic theory and identified by state relationships whose parameters are estimated on the basis of error-corrected models (Hendry et al., 1984, and Pesaran et al., 2001). In the absence of exogeneity of some explanatory variables in the model, the relationships are first inspected following the instrumental variables estimation approach, and then finally estimated at three stages (Hsiao, 1997). The overall result is a model composed of 74 equations, of which 29 are stochastic and 45 are accounting identities. The forecasts and analyses performed are conditional on the delineation of scenarios for 65 exogenous variables classifiable into: fiscal and monetary policy instruments, foreign bloc, and economic indicators.

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