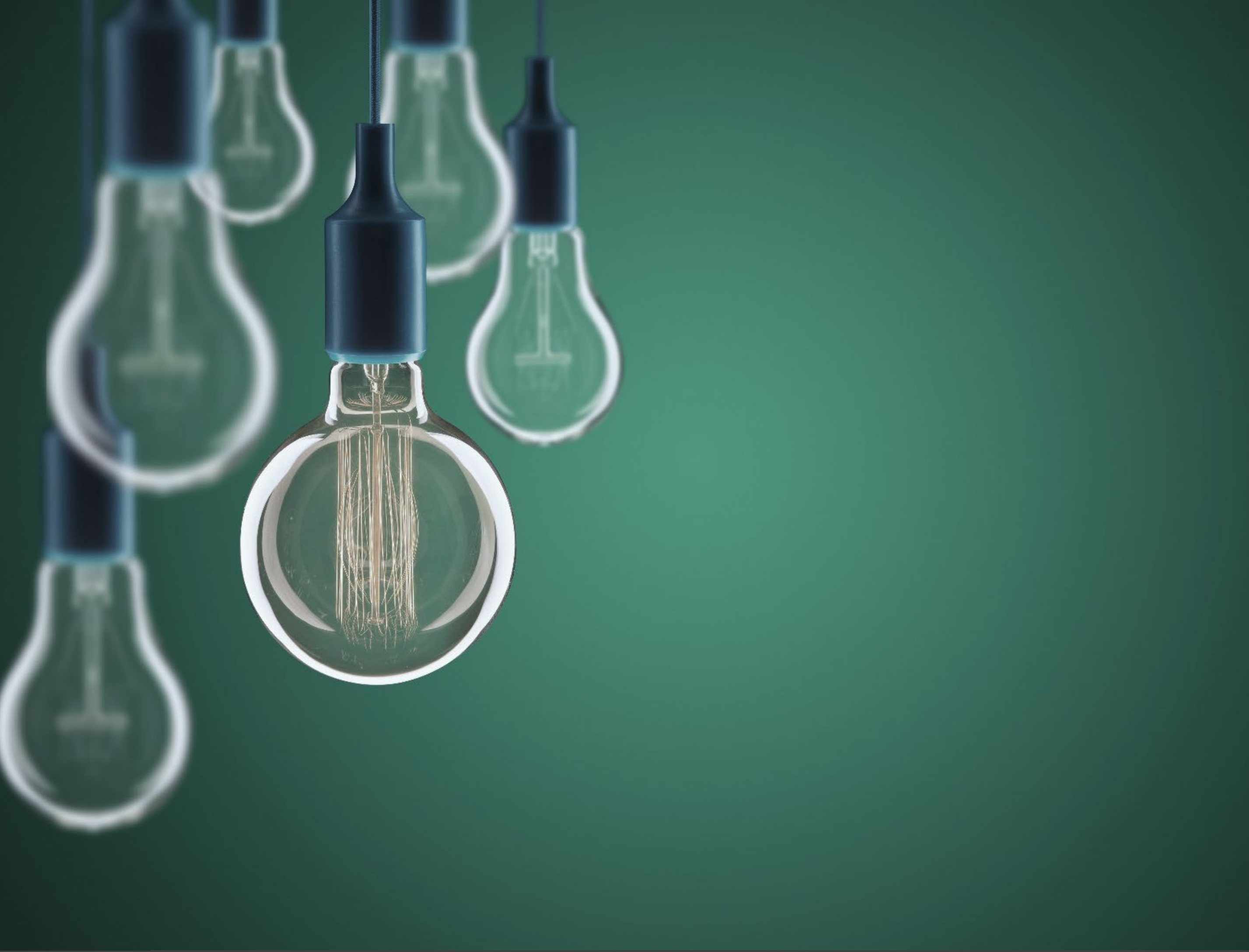


ENERGY OUTLOOK

Year VII n°21 - Oct 2022

Macroeconomic Outlook

2022 GDP projections were revised higher to account for the positive performance observed over the first semester. The prospects for 2023 are not bright, though. The limits of Russian gas supply and the related surge on energy prices weight on GDP growth, combining with the deterioration of international trade and the tightening of financial conditions. **Italian GDP is now foreseen to stall at a 0.1% growth in 2023 (y/y) and then resume to a 1.4% (y/y) increase in 2024,** supported by the progressive stabilization of energy prices and the resumption of global trade and investments. **The inflation outlook remains under pressure,** with spill-over effects of energy and food prices on other sectors expected to keep inflation above 2% over the next two years, despite an ongoing monetary policy normalization process.

REF-E OSSERVATORIO ENERGIA

MBSCONSULTING
A Cerved Company

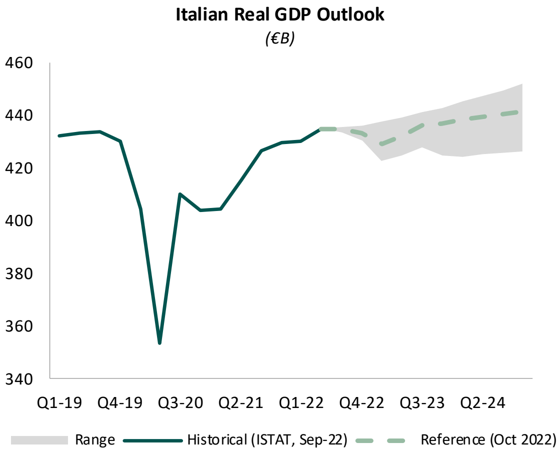
FRAME OF REFERENCE AND METHODOLOGY

REF-E Energy Outlooks are elaborated by MBS Consulting experts on the base of proprietary suites and market knowledge. Econometric and structural models, as well as our expert sensitiveness, detailed knowledge of regulation, and accurate monitoring of market outcomes underlie our elaborations.

Gas and electricity forecasts take into account the diverse geopolitical and economic hypothesis deriving from the potential war duration and outcome. The European Union and each single nation reaction to the disruption generated from the deterioration of both diplomatic and commercial relations with Russia are seen as key determinants of the future equilibrium of the energy markets.

In this perspective, we defined three scenarios. The **Worst Case** is characterized by permanently high prices amid a long lasting conflict which would lead to import-export bans and economic retaliation, trade flows interruption, commodities supply sharp reduction, negative o zero economic growth and the energy transition process failure. In the **Reference scenario**, prices will remain high in the short-term amid diplomatic and commercial tensions, while the energy transition process will continue and dependence on Russian commodities will be reduced. Gas and other fossil fuels supplies from alternative routes will increase initially limiting prices upward potential and successively leading to a normalization path. The economic growth suffers a contraction over the next two years, followed by recovery. The **Best Case** scenario would materialize in the event of favourable weather conditions and a fast energy transition, supported by low inflation and a faster economic recovery, reducing demand over the next few years. This would limit prices upside potential and then fuel a downward acceleration.

ITALIAN MACROECONOMIC OUTLOOK



MBS Consulting elaborations and forecasts (Oct 2022)

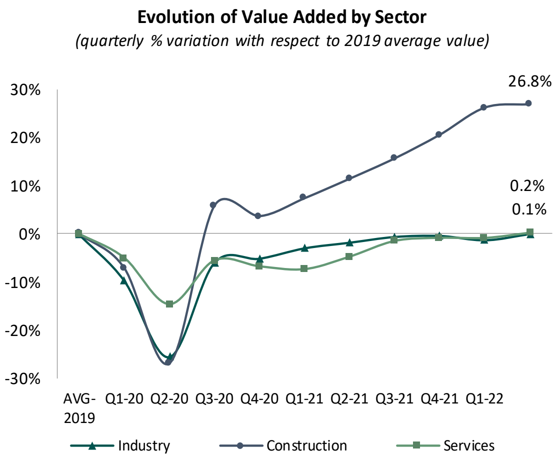
The Italian GDP growth weakens under skyrocketing prices, high uncertainty, international trades deterioration and less accommodative monetary policy. Reference projections foresee GDP growing 3.4% in 2022, and then stalling in 2023 (+0.1% y/y). The lowering of prices and the gradual recovery of demand and investments from the end of 2023 should sustain GDP resumption in 2024 (+1.4% y/y). The evolution of the Russian-Ukrainian war remains the major risk factor. In the event of Russian gas flows towards Europe reducing further over the next winter, this would significantly increase the risk of gas shortages in Italy and of further pressure on prices, driving GDP projections towards the Worst-case scenario (-1.6% in 2023 and +0.0% in 2024).

Energy prices are expected to remain sustained until Spring 2023 and spill-overs effects on other sectors should keep inflation under pressure over the next year. In our Reference scenario, yearly inflation averages 7.8% in 2022, 4.5% in 2023 and 3% in 2024.

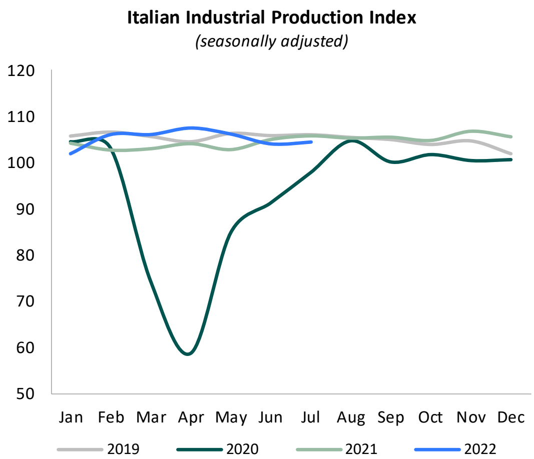
Q2-2022: Italian GDP Above Pre-Pandemic Levels

In Q2-22, the Italian GDP outperformed expectations, recording a solid 1.1% quarterly increase that drove 2022 GDP growth forecast above the 2019 level. The construction sector, still strongly incentivized by public support schemes, contributed with a 0.5% increase in the value added, while the industry and the services sectors reported a 1.3% and 1.1% growth, respectively, strongly supported by the strengthening of domestic and foreign demand. The almost complete removal of pandemic restrictions allowed a gradual normalization of consumption habits, leading to an increase of domestic demand for semi-durable goods, in particular clothes, and for services, while eased health concerns favored the resumption of tourism flows. In addition, the construction sector boosted demand for industrial inputs.

Between the first and the second quarter of the year, households spending increased by 4.1%, despite a minor contraction in families purchasing power (-0.1%). Consumption increased consequently and saving propensity decreased to 9.3% (-2.3 percentage points), which remains between 1 and 2 percentage points above pre-pandemic levels still. Meanwhile, incentives schemes and favorable financial conditions continued to support investments, although at a slower pace (+1.1% q-on-q).



MBS Consulting elaborations

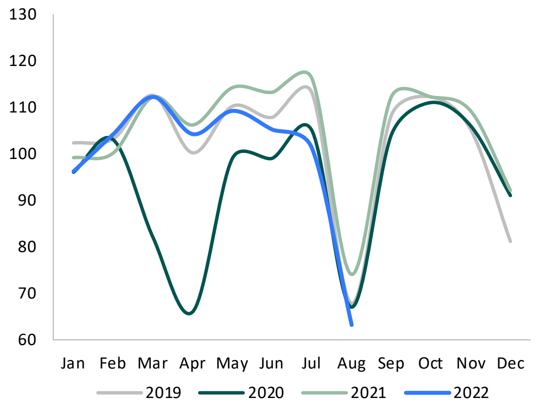


MBS Consulting elaborations

H2-2022: The Industry and Construction Output Weakens Under Skyrocketing Prices

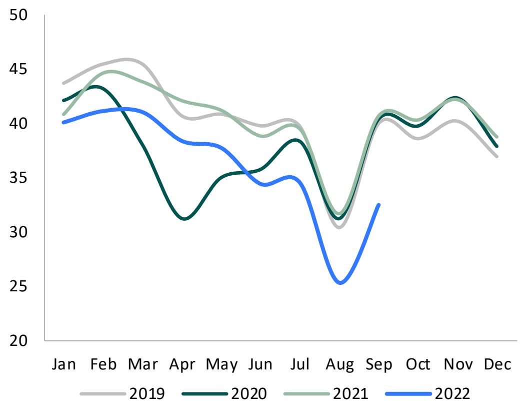
High frequency indicators point to a weakening of the economic activity starting from the third quarter of this year, especially in the **industry sector**, strongly affected by rising energy costs and exports contraction. The industrial production index is below 2021 levels since June, with energy intensive industries being reporting the largest year-on-year drops in production (metals industry -8% y/y, plastics industry -6% y/y). The contraction of gas and electricity consumption in the industrial sector became significant in June, when it moved below the 2020 threshold, while the manufactory confidence index trend has been negative since the beginning of this year. Raising costs for row materials also weighed on the **construction sector,** with the fourth consecutive contraction of the production index seen in July. Uncertainty on compensations established by deduction schemes weighted on the construction confidence index instead, with a contraction seen in summer. Only the retail sector indicators are positive. Retails sales recorded an increase in July, mainly driven by non-food items, and the retail confidence index showed an increasing trend starting from March 2022.

IMCEI Index for Electricity Industrial Consumption *(no calendar adjustment)*



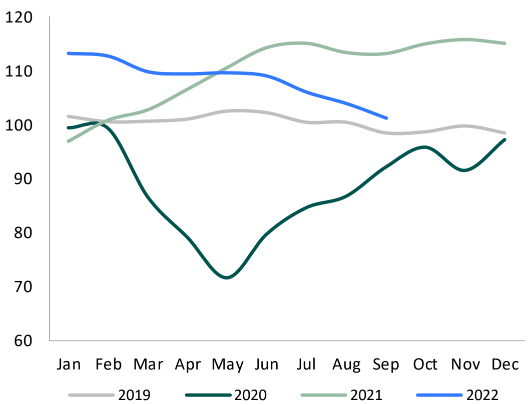
MBS Consulting elaborations

Gas Average Daily Industrial Consumption *(Mmc - weekdays only)*



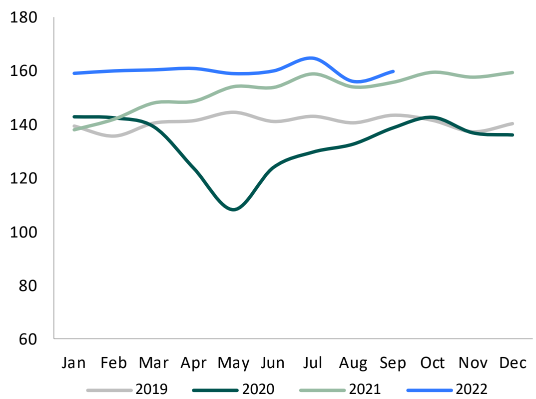
MBS Consulting elaborations

Manufactory Confidence Index *(seasonally adjusted)*

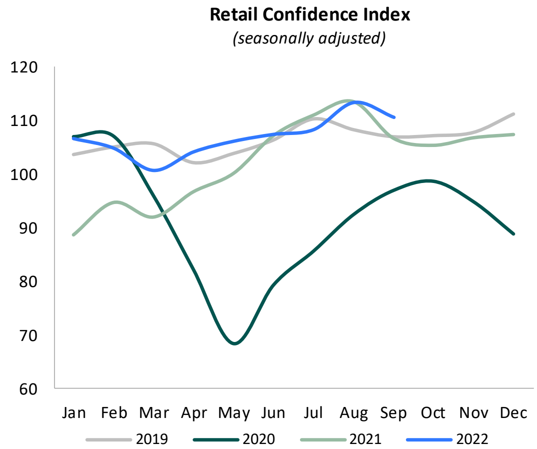


MBS Consulting elaborations

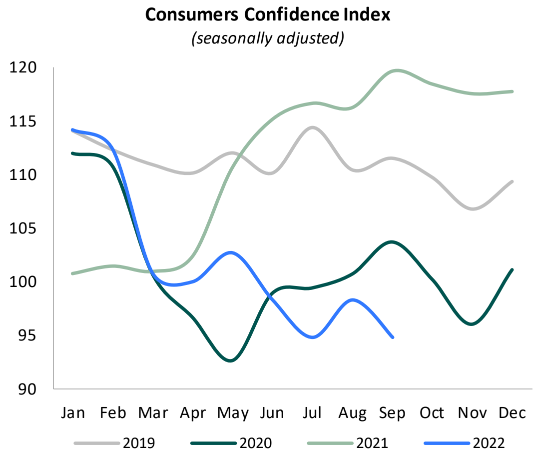
Construction Confidence Index *(seasonally adjusted)*



MBS Consulting elaborations



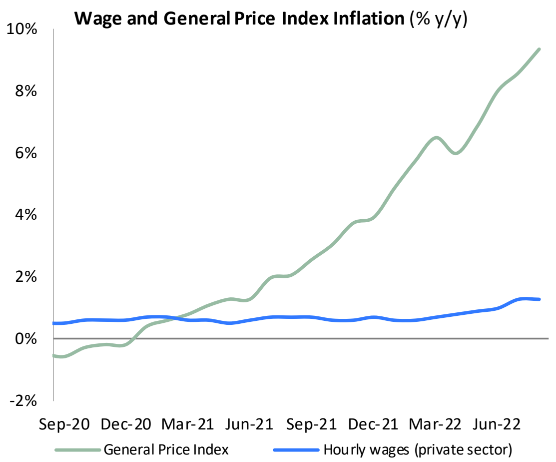
MBS Consulting elaborations



MBS Consulting elaborations

The Labor Market May Suffer from the Economic Slow-down

Starting from March, the number of employees and independent workers was back above pre-pandemic levels, mainly due to the recovery of employed workers. Based on August data, self-employed workers are still 160 thousand units lower than in December 2019. The overall working population in the market is 500 thousand units below pre-pandemic levels, with the labor market occupancy rate at its highest level (60.3%). The unemployment rate settled at 7.8% in August, the lowest level since 2009 (excluding spring 2020), but it is seen to increase towards the end of the year, following the expected economic outlook deterioration.



MBS Consulting elaborations

Despite a significant increase of the consumer price index over the first semester of the year (+6.3% y/y), wages increased by less than 1% (y/y). In Italy, the adjustment of private sectors wages to inflation is disciplined by national contracts, re-negotiated every three years, and it is based on the evolution on the harmonized consumer price index netting out prices of imported energy products. Wages adjustments should hence be delayed and remain limited compared to inflation. This limits the risk for inflation spiral effects, but weights on families disposable incomes and on domestic consumption. The government supported families incomes with tax cuts on gas and gasoline consumption, reductions of gas and electricity bills' general costs, social bonuses for low income families and direct transfers to individuals with incomes below given thresholds, with an overall public expenditure of 45 billion € (63 billion €, if industry support schemes are included). The latter interventions are not enough to completely contrast rising prices though, and the new government still has to confirm their renewal for the next months.

GDP Projections: Russian Gas Cuts Weight on Economic Growth Perspectives

2022 GDP forecasts have been upwardly revised following the more positive than expected outcome of the first half of the year. Italian GDP is now foreseen to increase by 3.4% in 2022, under the assumption of a minor contraction over the last quarter of the year. However, the ongoing geopolitical tensions originating from Russia's attack on Ukraine, further cuts of gas imports, rising prices and the overall worsening of the global economic framework lead to a downward revision of 2023 forecasts, with year-on-year growth seen as limited to +0.1%.

A gradual reduction of the European dependency from Russian gas and an expected contraction of gas prices would support a progressive resumption of investments and international demand. Should this materialize in the second half of the next year, 2024 GDP growth would rise to +1.4% y/y in our **Reference scenario.**

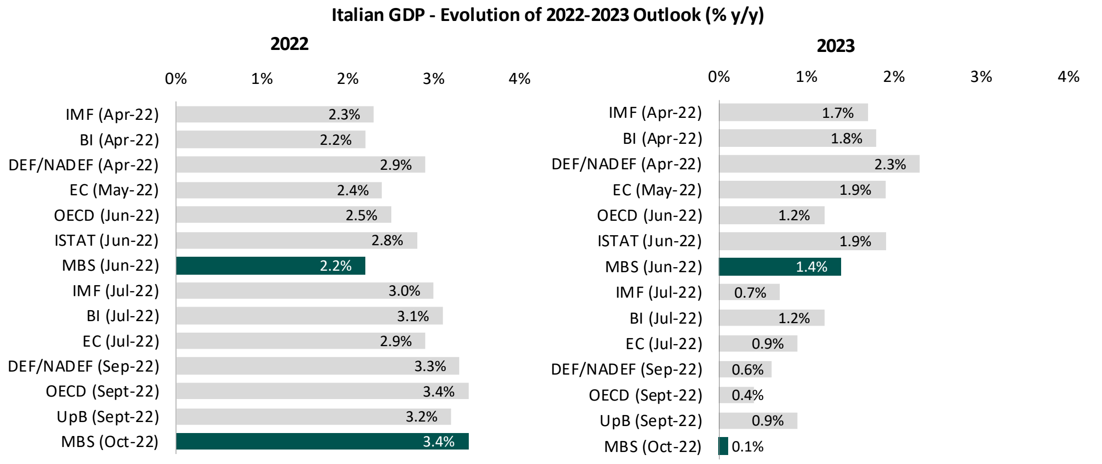
The latter forecast is based on the following assumptions:

- The war does not end over the forecasting horizon and sanctions remain in place
- The European Commission maintains its internal cohesion on geopolitical and strategical decisions
- Russia limits gas exports flows towards Europe, but Italy is able to satisfy final demand with alternative sources and by incentivizing consumption savings
- High energy prices lead to high industry costs, stifling production, and weight on families disposable income, limiting demand
- The European Central Bank gradual normalization of the monetary policy continues, keeping inflation expectations under control
- Inflation pressure gradually weakens throughout 2023 and 2024 as energy prices pressure fall and spillovers effects are absorbed
- Global trade weakens in the short term as many advanced economies suffer a recession, but gradually recovers from the second half of 2023
- Investments growth suffers from high uncertainty and from the tightening of financial conditions over the next year, but then gradually strengthens supported by private sector incentive schemes and the Recovery and Resilience plan resources

Geopolitical tension remains the major source of risk, with an higher probability of pending towards the Worst-case scenario. Throughout this year, Italy has significantly decreased its dependency form Russian gas imports, bringing it from almost 40% in 2021 to below 15%.

In the **Worst-case scenario**, should Russia completely annul the export of gas towards Italy or if other gas suppliers fail to satisfy the newly agreed supplies, Italy would run into even more severe gas shortages requiring the introduction of more severe energy consumption limitations and pressure on prices may increase further. In this event, GDP would be expected to fall by 1.6% in 2023 and then stall on a zero growth in 2024.

Under the optimistic assumption of a quicker resolution of geopolitical tensions and of a faster stabilization of energy prices, foreseen by the **Best-case scenario**, GDP would report a 1.4% increase in 2023, followed by an almost 2% growth in 2024. In this scenario, we also assume that Italy completes the implementation of the EU NRRP (National Recovery and Resilience Plan) reforms and investments in an effective way, despite the initial delay due to the inflation impact on interventions expected costs.

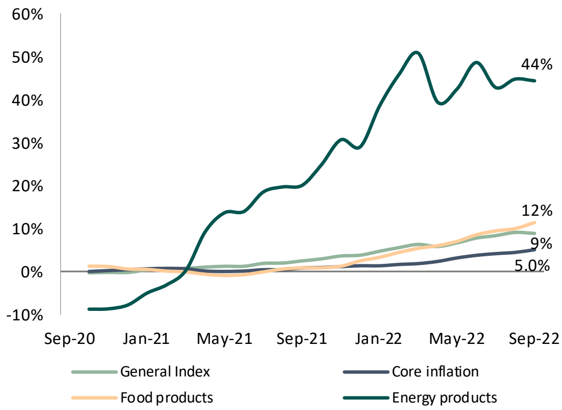


MBS Consulting eleborations

Inflation: Geopolitical Tensions Keep Prices Under Pressure

Over the first three quarters of the year, the Italian energy prices index reported year-on-year increases between 40% and 50%, driving the yearly average inflation level, up to September 2022, at 7.0%. Russian cuts to gas supplies to Europe keep the gas price close to the recent record highs. In August, both the TTF and the PSV settled at an average price above 230 €/MWh, more than 10 times higher than the pre-pandemic average price. September prices moved below August highs (-24% the PSV, -21% the TTF), but were still well above last year levels (+190%). Gas prices are not expected to move lower before Spring 2023, the year-on-year comparison with last year highs should limit the index yearly increase over the next months, though. Food prices continue to show relevant yearly increases as well. In September, the food price index has recorded an above 10% yearly increase. Over the past months, energy and food prices increases started to spill-over to other sectors, driving September core inflation, which does not consider food, tobacco and energy products, to an yearly increase of 5%.

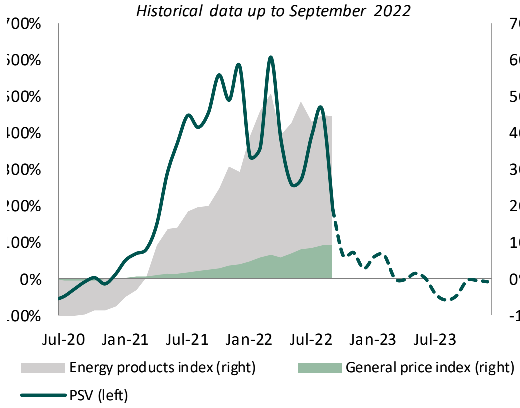
Inflation Indexes (% y/y)



MBS Consulting elaborations

Year-on-Year Evolution of Monthly PSV Prices and Price Indexes (% var)

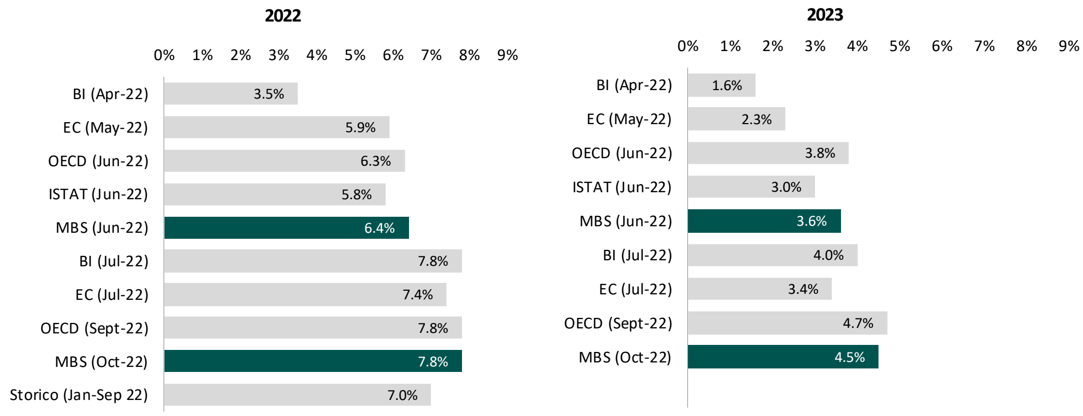
Historical data up to September 2022



MBS Consulting elaborations and forecasts (Oct-2022)

Under our **Reference scenario**, inflation is foreseen to average 7.8% this year and 4.5% in 2023. Despite the stabilization of energy prices expected from mid-2023, the delayed transmission of price increases to other sectors would keep inflation high over the next year. An easing of inflation pressures to an yearly average increase of 3% is now expected only from 2024. In the **Worst-case scenario** persisting high energy prices would push yearly inflation at a 8.2% increase in 2022, followed by additional 6.0% and 4.0% increases in 2023 and in 2024, respectively.

Italian inflation: 2022-2023 Outlook (% y/y)



MBS Consulting eleborations

Monetary Policy Normalization Speeds-up

The recent inflation surge led Central Banks to accelerate the monetary policy normalization process. Last summer, the European Central Bank (ECB) ended the net purchases under the *Asset Purchase Programme* and decided the first increases of the ECB interest rates (+50 basis points in July and +75 basis points in September). The ECB moved with a little delay compared to the Federal Reserve (Fed), that has by now increased the rate of the Fed funds in the 3.00-3.25 range.

Inflation in the Eurozone increased throughout the year, reaching a 10% yearly increase in September. Meanwhile, the yearly increase of US prices fell to +8.3% in August, after having settled above 9% in June. Both in the Eurozone and in the US, current inflation and near term forecasts remains above the 2% average target (on medium-long term), new rates increases are hence expected over the next months. The Fed and ECB have temporarily abandoned their forward guidance and they have announced that new rates increases will be evaluated and implemented over the next meetings, based on the inflation outlook evolution.

EDITOR-IN-CHIEF
Virginia Canazza

DIRECTOR OF ENERGY OBSERVATORY
Claudia Checchi

EDITOR
Simona Soci

TEAM
MBS Consulting Practice Energy

PUBLISHER
MBS Consulting S.p.A.

EDITORIAL OFFICE, EDITING
Dalia Imperatori
Phone +39 02 89096061
E-mail: d.imperatori@mbsconsulting.it

SUBSCRIBERS
A2A SPA, ACEA ENERGIA SPA, ACEGAS APS AMGA, AXPO ITALIA SPA, CSEA CASSA PER I SERVIZI ENERGETICI E AMBIENTALI, CVA ENERGIE SRL a s.u., DOLOMITI ENERGIA SPA, E.ON ITALIA SPA, EDISON SPA, ENGIE ITALIA, ENI PLENITUDE SPA, EP PRODUZIONE SPA, ERG SPA, F2i SGR, HERA TRADING SRL, IREN SPA, REPOWER ITALIA SPA, SHELL ENERGY ITALIA SRL, SORGENIA SPA, SR INVESTIMENTI, TENARIS DALMINE, TERNA SPA, TIRRENO POWER SPA

MBS Consulting S.p.A.
Società diretta e coordinata da Cerved Group S.p.A.

via degli Olivetani 10/12
20123 Milano

www.ref-e.com - www.mbsconsulting.com