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OUTLOOK FOR THE ITALIAN ECONOMY 2026–2027

- Italian GDP is expected to grow by 0.7% in both 2026 and 2027, following an increase of 0.5% in 2025 (Table 1). Over the forecast horizon, GDP growth would be entirely supported by domestic demand net of inventories (+0.9 and +0.5 percentage points, respectively). In contrast, net foreign demand, negatively affected by the conflict in the Middle East and the resulting increase in energy prices, would contribute negatively in 2026 (-0.2 percentage points) and be neutral in 2027.
- In 2026, household and NPISH consumption expenditure is expected to decelerate compared with the previous year (+0.6%, from +1.1% in 2025), constrained by the moderation in the positive dynamics of per capita wages and rising inflation. In 2027, growth is projected to slightly accelerate (+0.7%). Gross fixed capital formation would continue to expand, albeit at different rates over the two years: growth is expected to reach +2.2% in 2026, supported by measures linked to the National Recovery and Resilience Plan (NRRP); in 2027, a marked slowdown is projected on an annual average basis (+0.5%), driven by less favourable financing conditions and the scaling back of public incentives under current legislation.
- Employment, measured in terms of labour units (LU), is expected to record slower growth in 2026 (+0.7%, after +1.3% in 2025), accompanied by a further decline in the unemployment rate (5.5%, down from 6.1% in 2025). In 2027, labour unit growth is projected to decelerate further (+0.4%), while the unemployment rate is expected to stabilise.
- Commodity price dynamics are expected to feed through into inflation, which is projected to rise sharply during 2026: the household consumption expenditure deflator would average 2.9% over the year, before returning to 2.0% in 2027 as international tensions gradually normalise.
- Against an international backdrop characterised by geopolitical tensions, forecast outcomes are more than ever dependent on baseline assumptions. A key factor concerns the duration of the conflict. A simulation exercise was conducted using Istat's MeMo-It model to assess, under an alternative scenario, the potential effects on the Italian economy of a prolonged conflict between Iran and the United States.

TABLE 1. FORECASTS FOR THE ITALIAN ECONOMY – GDP AND MAIN COMPONENTS

Years 2024–2027, chain-linked volumes for demand components; year-on-year percentage changes and percentage points.

	2024	2025	2026	2027
Gross Domestic Product	0.8	0.5	0.7	0.7
Import of goods and services (FOB)	-1.0	3.6	1.7	1.8
Export of goods and services (FOB)	-0.4	1.2	1.1	1.7
DOMESTIC DEMAND (INCLUDING INVENTORIES)	0.6	1.3	0.8	0.6
Residential household consumption expenditure and NPISH	1.2	1.1	0.6	0.7
General Government Consumption	1.5	0.6	0.3	0.4
Gross fixed capital formation	-3.1	3.5	2.2	0.5
CONTRIBUTION TO GDP				
Domestic demand (net of inventories)	0.3	1.5	0.9	0.5
Net export	0.2	-0.7	-0.2	0.0
Inventories	0.3	-0.2	0.0	0.1
Household consumption expenditure deflator	1.7	1.5	2.9	2.0
Gross domestic product deflator	2.0	2.0	2.1	1.9
Compensation of employees per full-time equivalent	2.8	2.6	2.1	2.1
Full-time equivalent employment	2.2	1.3	0.7	0.4
Unemployment rate	6.4	6.1	5.5	5.5
Trade balance (level as % of GDP)	2.1	1.9	1.5	1.5

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The international framework

International cycle affected by the consequences of war

Since the early months of 2026, the consequences of the new geopolitical crises have significantly increased uncertainty regarding the outlook for the international business cycle. The sharp rise in energy commodity prices has already begun to pass through to consumer prices, leading, on the one hand, to expectations of interest rate increases by central banks and, on the other hand, to deteriorating business and consumer confidence, with possible repercussions for consumption and investment trends.

Major international institutions forecast a slowdown in the global economy, assuming a rapid resolution of the conflict in the Middle East. The latest estimates by the European Commission indicate a deceleration in global GDP growth in 2026 (+2.8%, from +3.4% in 2025), followed by a renewed acceleration in 2027 (+3.2%), a pattern shared by both major advanced and emerging economies (Table 2).

In the United States, economic growth in 2025 was supported by robust investment, particularly in the technology sector, and by accommodative monetary and fiscal policies. Over the forecast period, GDP growth is expected to remain broadly stable (+2.2% and +2.1% in 2026 and 2027, respectively, following +2.1% in 2025). This outlook reflects lower exposure, relative to other economies, to the adverse effects of the conflict in the Middle East, as the United States is a net exporter of energy goods. However, inflation is nevertheless expected to increase. Rising prices, together with more moderate employment growth, are expected to weigh negatively on household consumption. Investment, especially in technology-related sectors, will continue to support growth, alongside tax incentives for investment introduced by the U.S. government. In 2027, the anticipated decline in energy prices and the easing of tariff-related pressures are expected to moderate inflation dynamics, enabling the Federal Reserve to maintain a neutral monetary policy stance.

TABLE 2. MAIN VARIABLES RELATING TO THE GLOBAL ECONOMY AND MAJOR ECONOMIES

Years 2025–2027, levels and year-on-year percentage changes

	2025	2026	2027
Brent crude oil (dollars per barrel)	69.0	93.5	82.3
USD to Euro exchange rate	1.13	1.17	1.17
Natural gas price (TTF, EUR/MWh)	36.4	41.9	36.0
Global trade in volume* **	4.5	1.9	3.0
**GROSS DOMESTIC PRODUCT ** **			
World	3.4	2.8	3.2
Developed countries	2.0	1.7	1.8
USA	2.1	2.2	2.1
Euro Area	1.4	0.9	1.2
Emerging and developing countries	4.5	3.7	4.2
China	4.9	4.5	4.4

Source: Istat data processing.
* Global export of goods and services in volume
(**): DG-ECFIN Spring Forecasts (2026)

For the euro area, the impact of higher energy costs, tighter credit conditions, and increasing geopolitical and trade uncertainty are expected to result in a deceleration of GDP growth relative to the previous year (+0.9%, from +1.4% in 2025). Rising inflation is expected to weigh on consumption, also through an increase in precautionary savings. As regards firms, moderate production expectations and heightened uncertainty are likely to reduce investment needs, while elevated energy prices may further erode profit margins. In 2027, the gradual easing of commodity price pressures and the resolution of geopolitical tensions are expected to create conditions for growth to accelerate (+1.2%).

These developments imply heterogeneous dynamics across the major economies. In Germany, following modest growth in 2025 (+0.2%), GDP growth is projected to accelerate over the forecast period (+0.6% and +0.9% in 2026 and 2027, respectively), supported by public consumption expenditure, defence-related investment, and transfers to the private sector. Rising inflation is expected to erode households' real income and weigh on consumer confidence,

constraining private consumption growth in 2026. In 2027, more moderate price dynamics and easing uncertainty are expected to support a recovery in private consumption. Stronger domestic demand would stimulate imports, reducing the contribution of external demand to GDP growth amid continued export-side difficulties. In France, GDP growth is expected to remain broadly in line with the previous year in 2026 (+0.8%, after +0.7% in 2025), supported by net exports, against a backdrop of subdued private consumption constrained by the impact of higher energy prices on disposable income. In 2027, a recovery is expected (+1.1%), driven by the aerospace sector and increased orders in the defence industry, supporting both investment and net exports. In Spain, GDP growth is projected to remain robust in 2026, albeit slowing over the forecast horizon (+2.4% and +1.9% in 2026 and 2027, respectively, after +2.8% in 2025), largely driven by domestic demand and supported by favourable labour market developments and investment growth.

Among emerging economies, China's outlook points to a gradual moderation, with GDP growth projected at 4.5% in 2026 and 4.4% in 2027. Consumption is expected to remain weak, constrained by sluggish income growth, unfavourable labour market conditions, elevated precautionary savings, and negative wealth effects stemming from the real estate crisis. Export dynamics remain uncertain due to the conflict in the Middle East and mounting protectionist pressures on Chinese manufactured goods.

In line with the assumptions adopted by major international institutions, this forecasting exercise also assumes a relatively rapid resolution of the conflict as the baseline scenario. Beginning in March, supply-side disruptions associated with the conflict in the Middle East pushed oil prices to nearly double levels recorded in the first two months of 2026 (Figure 1), peaking at USD 120 per barrel in April. Uncertainty regarding the end of hostilities is expected to continue to support elevated crude oil prices in the short term; subsequently, prices are assumed to decline gradually, with timing depending on the normalisation of maritime traffic through the Strait of Hormuz and the repair of damaged extraction and refining infrastructure. For 2026, the average Brent crude oil price is assumed to be USD 93.5 per barrel, followed by a marked decline in 2027 of 12.0% (to USD 82.3 per barrel).

The conflict in the Middle East has also affected natural gas prices, albeit to a lesser extent than oil prices, because gas supply is more dependent on regional infrastructure and local contractual arrangements. Following the 2022 energy crisis, Europe (including Italy) increased storage capacity, diversified suppliers, and reduced industrial consumption. Nevertheless, gas prices rose substantially, particularly in March, before moderating slightly. For 2026, the average natural gas price is projected to increase relative to 2025 (+15.2%, reaching EUR 41.9 per MWh), before returning in 2027 to average levels broadly in line with those prevailing in 2025 (EUR 36 per MWh).

As regards international trade, the effects of the conflict in the Middle East are expected to lead to a marked slowdown in global trade volumes in 2026 (+1.9%, after +4.5% in 2025), followed by a return to stronger growth in 2027 (+3.0%).

In the first months of 2026, the nominal euro–US dollar exchange rate (averaging 1.13 in 2025) appreciated, driven mainly by geopolitical developments (averaging 1.17 US dollars per euro between January and May). Over the forecast horizon, a technical assumption of stability at the average levels recorded in the first four months of 2026 is adopted. This would imply an appreciation of the euro of 3.8% relative to the 2025 average, with no variation projected for 2027 (Table 2).

Economic developments in early 2026 and forecasts for the Italian economy

In the first quarter of 2026, the Italian economy demonstrated resilience despite deteriorating international conditions, recording GDP growth of 0.3% quarter-on-quarter (+0.8% year-on-year). Exports represented the most dynamic component (+2.2% quarter-on-quarter), while investment (+0.7%) and household and NPISH consumption expenditure (+0.5%) also increased; imports, by contrast, declined (-0.7%).

Growth was therefore supported both by domestic demand net of inventories (+0.3 percentage points) and, above all, by net foreign demand (+0.9 percentage points). However, the contribution of the latter component is expected to weaken over the remainder of the year as global trade slows (Figure 2).

On the supply side, the first quarter of 2026 recorded no quarter-on-quarter change in value added in industry, while services posted a modest increase (+0.4%). Construction activity declined (-0.3% quarter-on-quarter), whereas manufacturing expanded slightly (+0.1%). Among services, communication and information activities and real estate activities expanded (+1.1% and +1.3%, respectively), while financial and insurance activities contracted (-1.3%).

The positive short-term signals observed in the first months of the year were, however, followed by a rapid deterioration in the international environment. Against this backdrop, in May 2026, economic sentiment showed divergent trends: consumer confidence strengthened following the marked slowdown observed between March and April, whereas business confidence continued to deteriorate, particularly in construction and market services. By contrast, retail trade confidence improved.

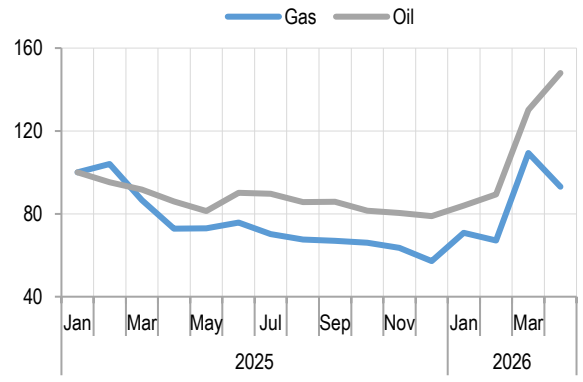
In the forecast scenario, the international environment is expected to remain characterised by the adverse effects of the conflict in the Middle East and the resulting increase in energy prices, contributing to persistently high uncertainty, slower global trade, and upward inflation pressures.

Over the forecast horizon, however, the Italian economy is expected to continue benefiting from resilient domestic demand, albeit at a slower pace than in 2025. Despite rising prices, household consumption is expected to be supported by higher disposable income and favourable labour market conditions, although moderated by slower real wage growth.

Investment is expected to continue to be supported throughout 2026 by progress on projects financed under the National Recovery and Resilience Plan (NRRP) and by public infrastructure spending. Toward the end of the year, however, higher energy and financing costs, combined with persistent uncertainty, are expected to result in a sharp contraction. In 2027, quarterly investment growth is projected to strengthen, in line with reduced uncertainty surrounding the international outlook and the recovery in foreign demand.

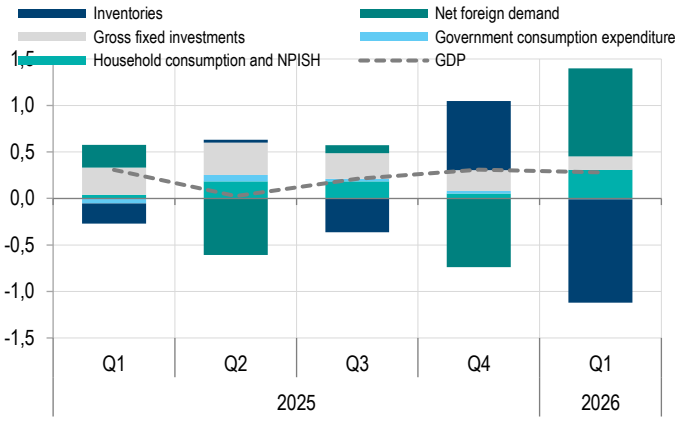
Against this backdrop, Italian GDP is projected to grow by 0.7% in both 2026 and 2027. In both years, the main contribution to growth would come from domestic demand (+0.9 percentage points in 2026 and +0.5 percentage points in 2027), while net foreign demand would contribute slightly negatively in 2026 (-0.2 percentage points) and not in 2027. The labour market is expected to remain favourable, albeit with slower employment growth compared with previous years. Inflation (here approximated by the private consumption deflator), after the sharp increase recorded in April and May, is projected to average 2.9% in 2026, then decline to 2.0% in 2027. Under this scenario, the trade balance is expected to remain positive throughout the forecast horizon (+1.5% in both years).

FIGURE 1. BRENT OIL AND NATURAL GAS PRICES.
Indices (January 2025=100)



Source: Istat

FIGURE 2. GDP AND GROWTH CONTRIBUTIONS OF DEMAND COMPONENTS. Chain-linked volumes and indices (2021=100).



Source: Istat

Consumption dynamics are expected to slow in 2026

In Italy, national final consumption expenditure increased by 0.9% in 2025. GDP growth was mainly supported by expenditure by resident households and NPISHs, which contributed +0.6 percentage points. Household final consumption expenditure grew by 1.0% in volume terms, showing a slight deceleration compared with the previous year (+1.3% in 2024). Within the domestic economy, expenditure growth was supported almost equally by services and goods consumption, which increased by 1.0% and 0.9%, respectively.

Government expenditure contributed +0.1 percentage points to GDP growth in 2025. In 2024, public expenditure on education in Italy accounted for 4.0% of GDP, remaining below the EU27 average (4.8%), as was also the case for Spain (4.1%) and Germany (4.5%). Considering education expenditure categories as defined by the COFOG99 classification, Italy's expenditure on secondary education as a share of GDP (1.8%) exceeded the European average (1.7%), as did expenditure on post-secondary non-tertiary education (0.1% compared with 0.0% for the European average). A slightly lower, yet broadly aligned, level relative to other major EU countries was recorded for pre-primary and primary education expenditure (1.4% compared with 1.7% for the European average). In comparison, the widest gap emerged in tertiary education (0.4% compared with 0.8% for the European average).

In the first quarter of 2026, the contribution of national final consumption expenditure to quarter-on-quarter GDP growth remained positive, although more moderate. Expenditure by resident households and NPISHs contributed +0.3 percentage points (+0.5% quarter-on-quarter growth), whereas government expenditure did not contribute. National final consumption expenditure increased by 0.4% quarter-on-quarter, accelerating relative to the previous three months and recording a pace broadly comparable to that of Germany and Spain (+0.4% and +0.5%, respectively), while exceeding developments in France, where consumption remained broadly unchanged. In particular, expenditure by resident households and NPISHs in Italy increased by 0.5%, whereas government expenditure remained stable.

In 2026, household and NPISH consumption expenditure is expected to decelerate to 0.6%, following 1.1% growth in 2025, reflecting a still-cautious environment for spending decisions. Despite an increase in disposable income, growth in per capita wages is expected to moderate, while the household consumption deflator accelerates, compressing real purchasing power. This is compounded by still-fragile consumer confidence: despite the recovery observed in May, the confidence index remains below levels recorded in the early months of the year, following the sharp decline between March and April (Figure 3). Tensions in the Middle East and the risk of further increases in energy prices are therefore expected to sustain elevated household caution. In 2027, a slightly stronger increase in consumption expenditure is projected (+0.7%). Government expenditure is expected to maintain a positive contribution throughout the forecast horizon. Growth is projected to slow to +0.3% in 2026 (from +0.6% in 2025), signalling a more restrained stance in public demand. A modest recovery is expected in 2027 (+0.4%); however, this would remain insufficient to restore growth rates observed over the previous two years.

Uncertainty and the withdrawal of public support weigh on investment dynamics.

In 2025, gross fixed capital formation increased by 3.5%, recording stronger growth than in France (+0.5%) and Germany (-0.2%), and second only to Spain (+5.8%). Favourable developments continued in the early months of 2026: in the first quarter, investment increased by 0.7% compared with the previous quarter, net of seasonal and calendar effects, ranking among the strongest performances across the major euro area economies. Over the same period, investment growth was more moderate in Spain (+0.3%), while France and Germany recorded contractions (-0.6% and -1.5%, respectively).

During 2026, investment is expected to continue benefiting from progress in projects financed under the National Recovery and Resilience Plan (NRRP). In the second half of the year, however, the reduction in public incentives, higher energy costs, a more restrictive monetary policy stance, and persistently elevated uncertainty are expected to result in a sharp contraction. In 2027, quarterly investment dynamics are projected to regain momentum, benefiting from declining uncertainty about the international outlook and a recovery in external demand; however, annual growth would still reflect a negative carryover effect from the contraction recorded in the latter part of 2026.

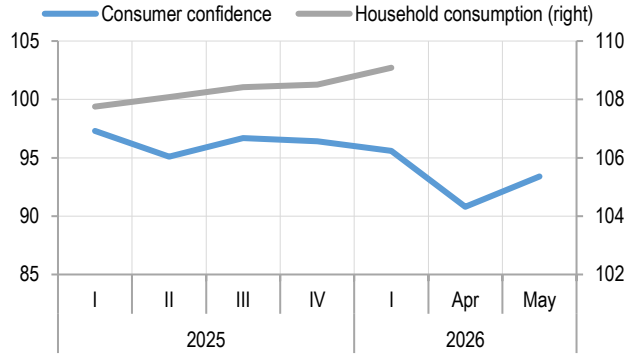
Overall, gross fixed capital formation is therefore expected to continue expanding over the forecast horizon, albeit at differing rates across the two years: growth is projected at +2.2% in 2026 before slowing to +0.5% in 2027.

Foreign trade is expected to decelerate.

Despite trade restrictions arising from U.S. tariff policy, exports of goods and services displayed substantial resilience throughout 2025, increasing by 1.4% (seasonally and calendar-adjusted chained volume measures, base year 2020) relative to the previous year; imports, by contrast, increased by 3.9%. In the first quarter of 2026, exports continued to expand (+2.2% quarter-on-quarter), while imports contracted (-0.7%).

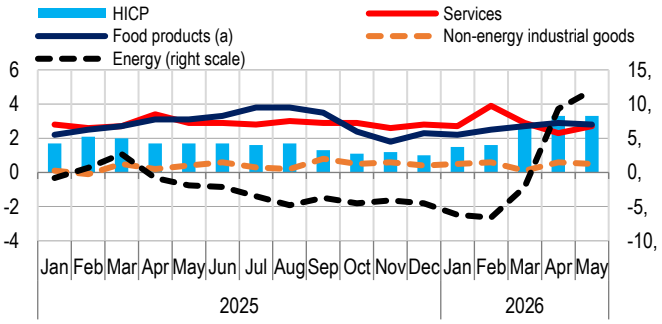
As discussed above, the consequences of the conflict between the United States and Iran—which is generating severe disruptions to trade flows and exerting adverse real effects on global economic growth and inflation—are expected to translate into a marked slowdown in international trade. Against this backdrop, Italian exports of goods and services are projected to grow only modestly, averaging 1.1% annually. Imports are expected to expand somewhat more rapidly (+1.7%), resulting in a negative net foreign demand contribution to GDP growth of 0.2 percentage points. In 2027, the resolution of the conflict and the resulting recovery in the international business cycle are expected to support a return to a slightly more dynamic growth path for both exports (+1.7%) and imports (+1.8%). Consequently, net foreign demand is projected to make a neutral contribution to GDP growth in 2027.

FIGURE 3. HOUSEHOLD CONSUMPTION EXPENDITURE AND CONSUMER CONFIDENCE. Chain-linked volumes and indices (2021=100).



Source: Istat

FIGURE 4. CONSUMER PRICE INFLATION BY SPECIAL AGGREGATES. Monthly data, year-on-year changes



Source: Istat
(a) Food products include alcohol and tobacco

Labour market is expected to lose momentum.

In the first months of 2026, the labour market continued to provide positive signals. In the first quarter, employment increased year-on-year (+0.3%, corresponding to +67 thousand persons), bringing the employment rate to 62.7% (+0.2 percentage points). Unemployment declined by 7.6% (-110 thousand persons), with the unemployment rate falling to 5.3% (-0.4 percentage points compared with the previous quarter). At the same time, inactivity increased by 0.4% (+44 thousand persons), raising the inactivity rate to 33.7% (+0.1 percentage points). In April, following stability in March, employment resumed growth (+0.5% compared with the previous month, corresponding to +123 thousand employed persons), bringing the employment rate to 63.1% (+0.3 percentage points). In the same month, both the unemployment rate, which fell to 5.1% (-0.1 percentage points from the previous month), and the inactivity rate, which declined to 33.4% (-0.3 percentage points), decreased.

Looking ahead, however, survey evidence points to less favourable labour market prospects. Employment expectations deteriorated in May 2026 in the construction, market services, and manufacturing sectors, while an improvement was recorded only in retail trade.

In the first quarter of 2026, the index of hourly contractual wages increased both on a quarter-on-quarter basis (+0.8%) and a year-on-year basis (+2.6%). The latter, however, has shown signs of deceleration since the first quarter of 2025 (when growth stood at +3.9%), although remaining above the inflation rate. The slowdown in wage dynamics is evident across all sectors, with the sole exception of public administration (where wage growth was +1.7% in the first quarter of 2025).

In the first quarter of 2026, the vacancy rate continued its gradual decline, signalling a slowdown in firms' labour demand. For the total population of enterprises with employees, the seasonally adjusted job vacancy rate was 1.7% (-0.1 percentage point from the previous quarter).

Recent short-term developments underpin the deterioration in employment expectations incorporated into the forecast, reflecting weaker demand in cyclical sectors, particularly manufacturing. However, the still-favourable dynamics of investment, exports, and services suggest that the labour market slowdown may be gradual and differentiated across sectors, mitigating the risk of a widespread and immediate deterioration in employment conditions.

Against this backdrop, labour unit (LU) growth is expected to slow substantially over the forecast horizon (+0.7% and +0.3% in 2026 and 2027, respectively, from +1.3% in 2025). The unemployment rate is projected to improve slightly further in 2026 (to 5.5%, down from 5.7% in 2025), before stabilising in 2027.

Rising energy prices drive inflation.

The pass-through of higher energy commodity prices to consumer prices became evident as early as April: the year-on-year change in the Harmonised Index of Consumer Prices (HICP) increased from an average of +1.4% in the first quarter to +2.8%, strengthening further in May (preliminary estimate) to +3.3%.

Acquired inflation for 2026 currently stands at 2.9% (compared with 2.6% for the euro area average).

The increase in HICP inflation is mainly attributable to strong rises in energy goods prices (+9.3% in April and +12.0% in May) and food prices (+2.9% and +2.8%, respectively) (Figure 4). Core inflation (excluding the more volatile components such as energy and unprocessed food) stood at 1.6% in April and 1.8% in May, below the average recorded in the first three months of the year (2.1%); the carry-over for 2026 is estimated at +1.9%. Consumer expectations of higher inflation over the next 12 months (relative to the previous 12 months) declined in May after three consecutive increases: the share of respondents expecting higher inflation fell (from 69.4% in April to 57.8%), while the share expecting lower inflation increased (from 21.8% to 28.9%). Among firms, the majority of respondents continue to report plans to keep prices unchanged over the subsequent three months (69.9% in manufacturing, 76.2% in construction, 84.4% in market services, and 72.7% in retail trade).

Given the continuously evolving international environment, inflation prospects over the forecast horizon remain closely tied to both the duration of increases in energy commodity prices and the speed and persistence with which such increases are transmitted across the various components of the price index. The household consumption deflator is projected to grow by 2.9% on average in 2026, then decline to 2.0% the following year. By contrast, the significant weight of imported components in inflation dynamics is expected to result in a more moderate path for the GDP deflator (+2.1% and +1.9% in 2026 and 2027, respectively).

Revisions to the previous forecast framework

The current forecast scenario provides an update for 2026 relative to the estimates released in December 2025 and introduces projections for 2027.

For the current year, a substantial upward revision to the Brent oil price assumption (+USD 29.5 per barrel) is recorded relative to the previous forecasting exercise. At the same time, global trade is now projected to be less dynamic (-0.3 percentage points).

These revisions have resulted in a downward reassessment of Italy’s external trade outlook, with lower projected growth rates for both imports and exports in 2026 (-0.7 and -0.5 percentage points, respectively). Domestic demand components also appear weaker, with downward revisions to both investment growth and private consumption (by -0.5 and -0.3 percentage points, respectively). Taken together, these revisions have reduced projected GDP growth (-0.1 percentage points), driven by a decline in the contribution of domestic demand (-0.2 percentage points), partly offset by a higher contribution from inventories (+0.1 percentage points).

The positive performance of the labour market in the first months of the year and recent developments in energy prices, together with the assumed trajectories over the remainder of 2026, have led, respectively, to a downward revision in the unemployment rate estimate (-0.6 percentage points relative to the December forecast) and an upward revision in both the household consumption deflator and the GDP deflator (+1.5 and +0.3 percentage points, respectively).

An alternative scenario

In the current international environment, characterised by geopolitical tensions that could substantially affect economic developments over the coming months, forecast outcomes are more than ever dependent on baseline assumptions; in this case, the key factor is the duration of the conflict. A prolonged conflict would undermine economic agents' expectations and delay the normalisation of maritime traffic through the Strait of Hormuz, thereby keeping commodity prices persistently elevated.

A simulation exercise was therefore conducted using Istat's MeMo-It model to assess the implications for the Italian economy of a prolonged conflict between Iran and the United States. Specifically, a higher Brent oil price than in the baseline scenario was assumed, averaging USD 113.5 per barrel in 2026 (+21.4%) and USD 97.5 per barrel in 2027 (+18.5%). For natural gas, a more moderate increase relative to Brent was assumed, in line with developments observed in recent months: prices are projected to average EUR 47 per MWh in 2026 (+12.2% relative to the baseline scenario) and EUR 39.6 per MWh in 2027 (+10.0%).

Based on these assumptions, Italian GDP growth would be lower than in the baseline scenario by 0.1 percentage points in 2026 and 0.3 percentage points in 2027. The persistence of elevated commodity prices would generate stronger inflationary pressures: the household consumption deflator would increase by an additional 0.4 percentage points relative to the baseline scenario in 2026, and by 0.5 percentage points in 2027. Finally, labour market effects would be limited. No differences relative to the baseline scenario are expected in 2026, whereas in 2027, labour unit growth would be 0.1 percentage point lower.

For technical and methodological clarifications

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ISTAT MACROECONOMETRIC MODEL

METHODOLOGICAL NOTE

Introduction

This note describes the main features of the economic forecasting model developed by Istat: the Macro Econometric Model for Italy (MEMo-It) [1]. The model includes 66 stochastic equations and 94 accounting identities with annual frequency, representing the Italian economic system by specifying behavioural equations for the economic agents (Households, Businesses, Public Administrations, and the Rest of the World). The time series of variables used in the model covers the period from 1970 to 2025. Where data were unavailable, ad hoc reconstructions were carried out.

The theoretical approach used in constructing the model is neo-Keynesian. In the model, short-term economic growth dynamics are driven by demand factors, while in the long term, the economy tends towards equilibrium conditions represented by potential output. The interaction between aggregate demand and supply occurs through the price system, which reacts to deviations of the actual unemployment rate from the natural rate of unemployment (NAIRU) and to imbalances between actual and potential output (output gap). The model is structured into blocks, where the direction of causality in behavioural equations and the framework of accounting identities have been predetermined.[2]

The specification and estimation of the model follow three successive steps: (a) analysis of the integration and cointegration properties of variables for individual equations or blocks of equations and assessment of weak exogeneity for blocks of relevant variables; (b) two-stage single-equation estimation of the model's variables to account for endogeneity and measurement errors in the explanatory variables; (c) combining the individual equations and blocks of the model with three-stage estimation of their parameters to take into account the covariance between error terms belonging to different stochastic equations.

The model's dynamic properties are evaluated through a predefined sequence of shock experiments on selected exogenous variables relative to the baseline solution. These exercises use deterministic and stochastic simulation techniques. The standard errors obtained during the three-stage estimation of the complete model generate the stochastic solution, allowing for the quantification of forecast uncertainty.

In its current version, the model offers an aggregate description of the economic system. Future research directions for the model's development will focus on explicitly representing the behaviour of different economic sectors and on extending the model to intra-annual economic movements.

The rest of this note is organised as follows: the second paragraph describes the characteristics of the supply block, while the third and fourth paragraphs describe the price system and the labour market. The fifth paragraph illustrates the demand block broken down by individual agents. Finally, the sixth paragraph describes the model's database.

[1] The forecasting model was developed by a research group at Istat under the scientific coordination of Professor Roberto Golinelli, full professor of econometrics at the University of Bologna, Department of Economic Sciences.

[2] The methodological foundations of the model follow the traditional approach of the Cowles Commission for Research in Economics (Klein, 1950; Fair, 2004), integrated with the fundamental works of Dickey and Fuller (1979), Engle and Granger (1987), Sims, Stock, and Watson (1990), and Johansen (1995) on estimation and inference with time series potentially generated by integrated and cointegrated stochastic processes; of Hsiao (1997a and 1997b) on the properties of estimators with instrumental variables in the context of non-stationary stochastic processes; and of Hendry, Pagan, and Sargan (1984), and Pesaran et al. (2001) on the importance of the dynamic specification of the model's equations.

Supply

The supply side is integrated into the model through the "Solow model," which holds that the stocks of productive resources (capital and labour) and technological progress are the main determinants of economic growth. This provides the basis for estimating potential output, defined as the sustainable output level that does not cause inflation to rise. In the long run, the economic system converges towards the likely growth path determined exclusively by supply forces. In contrast, in the short run, it fluctuates around this path due to shocks generated by demand forces. These fluctuations are captured by the deviations of actual output (Y_{EFF}) from its potential level (Y_{POT}), which can be summarised through the output gap, defined by the following expression:

$$GAP = Y_{EFF} / Y_{POT} - 1$$

The gap between actual and potential output is inversely correlated with the gap between actual unemployment (*UR*) and structural unemployment (*NAIRU*), according to the following relationship (Okun, 1962):

$$GAP = -b\ (UR - NAIRU)$$

Imbalances between actual and structural unemployment, and between actual and potential output, generate price changes that help rebalance the system.

In the model, potential output is measured following the production function approach, similar to the method suggested by the European Commission (see D'Auria *et al*., 2010) [3]. The central assumption is that a Cobb-Douglas production function can represent the economy's potential supply. Formally, this is expressed as:

$$Y_{POT} = f_{POT}\ (K, LP, HTFP)$$

where *LP* represents potential labour input, K is capital stock, and HTFP is the trend component[4] of total factor productivity (Solow residual). Potential labour input is obtained by filtering out the cyclical component from actual employment. The potential capital stock, *K*, is estimated using the perpetual inventory method (Goldsmith, 1951). The central assumption is that the potential capital stock coincides with the actual stock, assuming it represents the full employment utilisation of capital goods.

Prices and Wages

The mechanism for forming prices and wages drives actual demand for goods and services and employment to adjust respectively to the supply level (potential output) and possible employment, which in turn is defined by the interaction between *NAIRU* and a combination of labour force participation rate and demographic trends of the working-age population.

Using the "triangle" stylisation proposed by Gordon (1981, 1988), both the system's reference price variable (pivot) and per capita wages are affected by three main factors: (1) persistence, measured by their dynamics in previous years; (2) demand shocks, measured by the output gap and the excess of the actual unemployment rate over *NAIRU*; (3) other significant shocks, which in the Italian economic context include those arising from import prices, labour productivity shocks and labour market tensions during contract renewal phases.

The value-added deflator at factor cost (*PV*) is the model's *pivot* price:

$$dlogPV = f_{PV}\ (dlogPV_{-1}, GAP, WB/YU)$$

where $dlogPV_{-1}$ measures inertia, *GAP* measures demand shocks, and *WB/YU* (the real labour cost per unit of output, calculated as the ratio between employee income and GDP at current prices) measures productivity and labour cost shocks. The equation for *PV* can also be interpreted as a New Keynesian Phillips Curve (NKPC, Galì and Gertler, 1999), where expectations are assumed to be *backwards-looking*. [5].

[3] See also De Masi (1997), Denis et al. (2006), and Giorno et al. (1995).

4. The trend components of the variables used are obtained using the Hodrick-Prescott filter (1997).

[5] For a comparison between the triangle model and the NKPC, see Gordon (2011).

Nominal wage growth is explained by the household consumption deflator from the previous year (which implies backwards-looking inflation expectations), the unemployment rate, labour productivity, and a variable that measures labour market tensions during contract renewal phases. [6]

The import deflator is determined by the dollar price index of manufactured goods on international markets, Brent oil prices in dollars, and the nominal dollar-to-euro exchange rate[7]. Additionally, the import deflator's inflation rate from the previous year captures a persistence component.

The deflators for demand components depend on these variables and the average effective rates of indirect taxation, differentiated by value-added tax, other indirect taxes, and production contributions.

The Labour Market

The labour market block comprises three equations: labour demand, labour supply, and wages. The specification of labour demand derives directly from the production function (Hamermesh 1996 and 1999). Under the assumption of perfect competition, where the labour factor is remunerated by its marginal product, the labour demand equation is obtained, which depends positively on output and negatively on the real wage. Consequently, private sector demand (*LDP*), expressed in terms of standard full-time equivalent (*FTE*), is defined by the following expression:

$$LDP = f_{LD}\left(Y, PY, \frac{WB}{LDD}, PV\right)$$

where *Y* is the value added at current prices, *PY* is the GDP deflator, *WB* represents the total amount of employee income at current prices before social security contributions, *LDD* defines the employee full-time equivalent expressed in terms of production capacity, and *PV* is the value-added deflator at factor cost.

The public sector labour input ($\overline{LDP}$) is exogenous. It follows that the total labour input (*LD*) used in the production process is composed of:

$$LD \equiv (LDP + \overline{LDP})$$

Labour market equilibrium is achieved through the interaction between supply and demand. The model considers demographic factors and the relationship between business cycle fluctuations and participation rates (Lucas and Rapping, 1969) by using the labour force variable in the definition of the supply function.

Labour supply is defined as participation rates disaggregated by gender (*i* = F, M). More precisely, the participation rate ($PART_i$) is specified as follows:

$$PART_i = f_{LS}(\overline{POP_i}, WIPC, EMPR_i, PCH)$$

where POP_i is the population aged 15 to 64, disaggregated by gender, *WIPC/PCH* represents real per capita wages (*PCH* is the private consumption deflator), and $EMPR_i$ is the employment rate, which provides a summary measure of labour market conditions (Bodo and Visco, 1987). The two measures used in the model—standard full-time equivalent and resident employment—are consistent through a bridging equation. The unemployment rate is derived as an identity by combining information on resident employment and the labour force (supply function).

[6] The wage equation is inspired by the work of Phillips (1958), with its specification modified here to account for the inflation rate; for a discussion, see Golinelli (1998)

[7] Before introducing the euro, the reference exchange rate was between the US dollar and the Italian lira.

Demand

The model's demand side refers to the behaviour of economic agents: Households, Businesses, Public Administrations, and the Rest of the World. Households spend on consumption and residential investments, accumulating real and financial wealth. Businesses purchase all other investment goods (machinery, equipment, and others). Public Administration spending directly influences final demand through public consumption and investments. The Rest of the World determines the external component of demand, represented by net exports, i.e., exports minus imports.

Households

The permanent income hypothesis is the theoretical approach to determining household consumption (Friedman, 1957). A similar approach for Italy has been adopted by Rossi and Visco (1995) and, more recently, by Bassanetti and Zollino (2008). Actual consumption (CHO) is therefore modelled as a function of disposable income, wealth (both real and financial), and the interest rate:

$$CHO = f_{CHO}(YDH, HWFA, HWDW, PCH, IRN)$$

where YDH is the disposable income at current prices; $HWFA$ and $HWDW$ are financial and real wealth, respectively, also at current prices; PCH is the consumption deflator and IRN is the nominal long-term interest rate.

The portion of disposable income not consumed contributes to real wealth accumulation. Additionally, the share of disposable income not allocated to consumption or residential investment (IRO) contributes to the growth of financial wealth. The two wealth stocks, valued at market prices, are modelled using a framework consistent with the permanent inventory approach (Goldsmith, 1951). The equations for residential investments, real wealth, and financial wealth are as follows:

$$IRO = f_{IRO}(YDH, PIR, IRN)$$

$$HWDW = f_{HWDW}(YDH, IRO, PIR, IRN)$$

$$HWFA = f_{HWFA}(YDH, CHO, IRO, IRN, COMIT)$$

where PIR is the deflator for residential investments; $COMIT$ is the stock market index, linking the dynamics of financial wealth not only to saved income not invested in tangible assets but also to capital gains/losses on securities.

Disposable income is defined as an identity, as the sum of various components related to the institutional household sector:

$$YDH = GOSH + WBH + IDH + SBH + OCTH - (SSH + DTH)$$

$GOSH$ is the gross operating surplus, WBH is the total wages and salaries net of those from the rest of the world, IDH represents income from interest and dividends, SBH refers to net social benefits, $OCTH$ stands for other transfers, SSH denotes net social contributions, and finally, DTH represents direct taxes paid.

Businesses

Businesses contribute to the model's stylised economic framework by investing in machinery, equipment, and other productive assets. These investments, expressed as a share of potential output, are influenced by factors such as persistence, the cost of capital, gross operating income (a summary measure of profits and self-financing), and the degree of uncertainty (measured by the conditional volatility of business-cycle disturbances).

The cost of capital represents the price of the productive services a capital asset generates. It is assumed to depend on the financing cost (or the opportunity cost of foregoing an alternative investment in the case of self-financing), the economic depreciation of the capital asset during its period of use, and the capital gains or losses arising from changes in the asset purchase price.

Public Administrations

The description of the public sector within the MEMo-It model follows an institutional approach. This is characterised by algebraic identities and relationships that stylise the accounting rules (SEC95) and the regulations governing the primary aggregates of the consolidated economic account of Public Administrations (PA).

The direct relationships between PAs and the rest of the economy manifest through their effects on total demand, driven by final consumption spending, public investments, and income from the public sector. PAs also influence prices through net indirect tax rates, unit labour costs via social contribution rates, and disposable income obtained through direct taxation and transfers.

Total PA expenditures are disaggregated into final consumption spending, production subsidies, interest payments, gross fixed capital formation, investment grants, and a residual exogenous variable capturing other expenditure items. The aggregate for final consumption spending consists of two components: direct spending and wage-related expenditures. The latter is derived from the per capita average wage in the public sector (estimated in the labour market block) and the number of public employees.

Both direct spending in volume and employee numbers are considered exogenous and serve as fiscal policy instruments. Public investments are also exogenous in real terms, with their deflator derived in the price formation block. Nominal social benefits are linked to the population's age structure and a price indicator. Production subsidies and investment grants are related to the private sector's value-added investments through coefficients expressing the percentage contribution to the private sector.

Total revenues are disaggregated into social contributions, indirect taxes, direct taxes, and residual exogenous items. Social contributions are calculated as the sum of those paid by employers, employees, and self-employed workers, using specific effective average rates as the basis.

Indirect taxes include revenues from Value Added Tax (VAT), the Regional Tax on Productive Activities (IRAP), excise duties on mineral oils and derivatives, and a residual exogenous component. The model calculates indirect taxes using appropriate, exogenous, effective average rates. Revenues from excise duties on mineral oils and derivatives are computed using two equations: estimating the energy intensity of GDP (based on persistence and oil price in euros per barrel) and multiplying an exogenous effective average rate by energy consumption.

Direct taxes are the sum of revenues from personal income tax, corporate income tax, substitute tax on interest, other capital income, and a residual exogenous component. The substitutive tax on interest and capital income is estimated based on the previous year's revenue, GDP, changes in interest rates, and new financial activities approximated by household savings.

The fiscal balance of PAs is calculated as the difference between total revenues and expenditures. Public debt stock is determined by subtracting the previous year's budgetary balance from the debt stock, adding an exogenous adjustment variable to account for factors affecting debt independently of the fiscal balance (e.g., financial transactions, changes in financial instrument values, privatisations). Interest payments are calculated by multiplying the average cost by the debt stock. The average price of public debt is estimated based on short- and long-term interest rates.

Rest of the World

The specification of the external sector block is based on the accounting identity that defines the balance of transactions with the rest of the world:

$$ROWSALDO = (XO \times PX - MO \times PM) + (WB - WBH) + (APETIND - APUCP - TINDN) + ROWDT + ROWID + ROWSB + ROWOTH$$

where ($XO \times PX - MO \times PM$) represents the trade balance in value (XO and MO are export and import volumes respectively, PX and PM are their respective prices); ($WB - WBH$) are the net labour income from abroad, ($APETIND - APUCP - TINDN$) are the net indirect taxes, $ROWID$ is the net capital income from abroad, $ROWDT$ are the current taxes on income and wealth, $ROWSB$ are the social benefits, and $ROWOTH$ are the other transfers. [8]

The theoretical approach for determining the balance with the rest of the world in the model is grounded in literature (Lane and Milesi-Ferretti, 2011; Obstfeld and Rogoff, 2010). The volume of goods and services imports is specified by an equation reflecting the interaction between domestic demand and international factors.

$$MO = f_{MO}(DDO, PM, GAP)$$

where DDO is real domestic demand, PM is the imports deflator, and GAP measures the effects of short-term cyclical fluctuations.

The equation for export volumes is expressed as follows:

$$XO = f_{XO}(WDXXTR, ITXRXER)$$

where *WDXXTR* represents the value of global exports, and *ITXRXER* is the real effective exchange rate. Net capital income (which primarily includes profits and dividends) is derived through the following function:

$$ROWID = f_{ROWID}(APSALDO)$$

where $APSALDO$ represents the balance of the Public Administration account. The inclusion of this variable is justified by the expectation that an improvement in the PA balance will reduce the risk premium (Lane and Milesi-Ferretti, 2011; Caporale and Williams, 2002), thereby enhancing the balance of capital income, primarily by reducing the interest component.

Finally, the equation for other transfers (encompassing the balance of public and private transfers, both current and capital account) is given by:

$$ROWOTH = f_{ROWOTH}(ITALIA)$$

where $ITALIA$ approximates the share of Italian exports, which is assumed to have an inverse relationship with incoming transfers.

The time series used for model estimation and the treatment of exogenous variables

The model was developed using 139 basic annual time series covering 1970 to 2025 as input. The model estimation process generates 222 variables, of which 157 are endogenous (66 stochastic and 91 identities), and 65 are exogenous (including nine scenario variables).

A significant portion of the input variables comes from national accounts, which, in February 2026, released estimates related to the general revision of the National Accounts—with 2021 as the reference year—agreed upon at the European level, introducing innovations and improvements in methods and sources.

To estimate the model's relationships, a reconstruction covering the period from 1970 to 1995 was carried out. This task was facilitated by the model's compact size, which, in its current version, does not include sectoral disaggregation. The reconstruction was conducted by leveraging time-series information from the previous classification of economic activities, with particular attention to rebuilding chain-linked values for the variables in the macroeconomic framework. This effort extended the new national accounting aggregates used in the model for specification and estimation purposes back to 1970. The forecasts were produced using demographic scenarios available on **demo.istat.it** for demographic variables and the assumptions outlined in the State Budget Forecast for 2025 for public finance variables.

[8] The reference for compiling the Rest of the World accounts by Istat is the Balance of Payments prepared by the Bank of Italy, based on the concepts and definitions outlined in the 5th Edition of the International Monetary Fund's Manual. See Istat (2005), Part Two, Chapter 3 for more details.

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