023011/EU XXVIII.GP
Eingelangt am 04/06/25

EUROPEAN
COMMISSION

Brussels, 4.6.2025
SWD(2025) 212 final

COMMISSION STAFF WORKING DOCUMENT

2025 Country Report - Italy

Accompanying the document

Recommendation for a COUNCIL RECOMMENDATION

on the economic, social, employment, structural and budgetary policies of Italy

{COM(2025) 212 final}

European
Commission

Italy

2025 Country Report

ECONOMIC DEVELOPMENTS AND KEY POLICY CHALLENGES

Growth and inflation bottom out, prospects affected by uncertain global developments

Economic growth remains moderate amid the current global uncertainty, with the recovery and resilience plan (RRP) supporting investment. Real GDP growth stabilised at 0.7% in 2024, as households' desire to rebuild their savings held back private consumption, despite favourable employment and wage dynamics. After three years of rapid expansion fuelled by housing renovation incentives, investment increased slightly, primarily due to non-residential construction activity financed by the RRP. Exports of goods declined, while tourism spurred strong growth in exports of services. As imports of goods contracted even more sharply than exports, net external demand made a positive contribution to GDP growth. During the period 2025-26, economic activity is expected to continue expanding slowly, driven by increasing household consumption and by corporate investment, including in equipment, supported by RRP funding and lower interest rates. However, developments in trade policy and the surrounding uncertainty are likely to be a drag on economic growth, as the US accounts, directly and indirectly, for a significant share of Italy's exports of goods.

Inflation is expected to stabilise at around the ECB reference level. The decrease in global energy commodity prices that began in 2023 was passed on to domestic markets during last year, resulting in a sharp drop in headline inflation. Excluding volatile energy and food prices, core inflation slowed to 2.2% in 2024, with industrial goods experiencing weaker price dynamics than services. While the energy component of headline inflation is expected to rebound this year following recent international price dynamics, the other main components are set to remain contained, also thanks to expected moderate wage growth. As a result, both headline and core inflation are forecast to stand at around 2% in 2025-26.

High public debt and weak productivity growth are still vulnerabilities. The in-depth review carried out under the macroeconomic imbalance procedure earlier this year found that Italy still faces vulnerabilities relating to high government debt and weak productivity growth [1]. Sizeable debt servicing costs as a result of a high public debt ratio, and rising pension costs in the medium term due to demographic trends, will restrict the government's ability to adopt growth-enhancing fiscal policies. Weak productivity growth persists, largely due to insufficient investment in R&D and innovation, relatively low – albeit growing – tertiary education attainment, and despite recent improvements still under-developed venture capital financing, which hamper the adoption of new technologies, particularly by smaller firms. While labour market conditions improved further, participation rates remain low, especially among women and young people. Although Italian banks significantly increased their asset quality and profitability, vulnerabilities remain, though receding, due to continued exposure to sovereign debt and a sizeable stock of state-guaranteed loans. While some previous policies, including actions under the RRP, already tackled these vulnerabilities, further effective implementation of reforms and investments together with a prudent fiscal stance remain crucial.

[1] SWD (2025) 122 final.

Improvements to the primary budget balance, but public debt-to-GDP ratio on an upward trend, with policies unchanged

Italy's primary budget balance turned positive, while no reduction in government debt is expected over the coming years. Italy's government deficit fell to 3.4% of GDP in 2024, from 7.2% in the previous year, resulting in a primary surplus of 0.4% of GDP, the first since 2019. This improvement was mainly achieved through the cutback in housing renovation tax credits (around 3.5% of GDP), the phase-out of high energy price mitigation measures (1% of GDP), and buoyant personal income tax revenues. The government deficit is forecast to further decrease to 3.3% of GDP in 2025 and 2.9% of GDP in 2026, based on unchanged policies. At the same time, the decreasing trend in the public debt-to-GDP ratio up to 2023 reversed course in 2024 and is expected to rise further through 2026. This increase is driven by sizeable borrowing needs linked to the lagged fiscal impact of past tax credits for housing renovations.

Net expenditure growth is set to be marginally below the recommended maximum growth rate. In 2024, net expenditure [2] in Italy decreased by 2.2% (see Annex 1). This decrease is mainly driven by the phase-out of sizeable tax credits for housing renovations and support measures related to the energy crisis. At the same time, the revenue-decreasing impact of discretionary revenue measures, which include the cuts to the labour tax wedge, is deducted from net expenditure, thus partly counterbalancing the decrease in primary expenditure. In 2025, net expenditure is forecast by the Commission to grow by 1.2%, which is below the maximum growth rate recommended by the Council [3] The cumulative growth rate of net expenditure in 2024 and 2025 taken together is projected at -1.0%, which is below the maximum rate recommended by the Council. Taking into account the information provided by Italy in its Annual Progress Report, all the reforms and investments underpinning an extension of the fiscal adjustment to 7 years [4] that were due by 30 April have been implemented or are currently under assessment in the context of a payment request under the RRF.

Substantial fiscal pressures weigh on public finances. In recent years, tax revenues were pushed up by strong inflation and favourable economic developments, supported by improvements in tax compliance. However, over the years to come, it is uncertain whether high tax revenues can be sustained, given that nominal growth is expected to be moderate. Meanwhile significant fiscal pressures remain, including rising costs relating to the ageing of the population More specifically, public spending in Italy is skewed towards social protection (in 2024, 20.3% of GDP and 43.6% of primary expenditure) which is hard to contain in the face of demographic pressures. Moreover, Italy's pension spending is among the highest in the EU (16.1% of GDP in 2024 compared to the EU average of 11.6%, see Annex 1), making it more challenging to contain public expenditure. Although the full implementation of the 2011 pension reform will gradually reduce the burden, it is still expected to increase in the medium term due to demographic trends and the effect of

[2] Net expenditure is defined in Article 2(2) of Regulation (EU) 2024/1263 as government expenditure net of (i) interest expenditure, (ii) discretionary revenue measures, (iii) expenditure on programmes of the Union fully matched by revenue from Union funds, (iv) national expenditure on co-financing of programmes funded by the Union, (v) cyclical elements of unemployment benefit expenditure, and (vi) one-off and other temporary measures.

[3] Council Recommendation with a view to bringing an end to the situation of an excessive deficit in Italy (C/2025/5035) and Council Recommendation of 21 January 2025 endorsing the national medium-term fiscal-structural plan of Italy (OJ C, C/2025/651, 10.2.2025, ELI: http://data.europa.eu/eli/C/2025/651/oj).

[4] According to the Regulation, the required fiscal adjustment (in particular, to put or keep the government debt ratio on a plausible downward path by the end of the adjustment period or keep it at prudent levels below 60% of GDP and to bring or maintain the deficit below 3% of GDP over the medium term) should be completed in four years but may be extended over a period to up seven years if the Member State commits to a relevant set of reforms and investments.

recent early retirement schemes. As a result, fiscal sustainability risks are expected to be high in the medium term and medium in the long term. A concerted effort is needed to improve the efficiency and effectiveness of public spending, building on the measures planned by Italy in its medium-term fiscal-structural plan.

Sustained growth in permanent jobs, but low participation and skills mismatches persist

Employment growth strengthens labour market activation. Employment continued to grow robustly in 2024, outpacing real GDP growth, though it slowed down considerably towards the end of the year. An uptick in the number of hours authorised for the wage supplementation scheme, to the equivalent of 290 000 full-time jobs (50 000 more than in 2023), reflects the expectation of temporary difficult economic conditions by firms in specific manufacturing sectors. Overall, the number of employees with open-ended contracts increased further, as did the number of self-employed workers, while the use of fixed-term contracts decreased. The sustained post-Covid expansion in jobs led to record-level employment rates for both men and women, though still far below the EU average. As labour force participation did not rise in line with employment, the unemployment rate fell to an average of 6.5% in 2024, even falling to below 6% at the turn of the year. Employment and participation rates differ significantly between northern and southern regions and are structurally lower for young people and women. They also tend to reflect the greater difficulties faced by low-skilled workers – particularly younger generations – and people of migrant background (see Section 4). Employment is forecast to rise further over the period 2025-2026, though eventually falling below GDP growth. The resulting increase in productivity is likely to remain modest, in line with the sluggish performance over recent decades (see Section 2).

Skills mismatches restrict employment and productivity growth. The job vacancy rate stabilised at around 2%, a historically high level, corroborating employer survey findings that it is increasingly difficult to find suitable workers for vacant jobs. The most sought-after profiles include scientific and technical skills, not only at tertiary education level, for which insufficient numbers of workers are available. As well as having one of the lowest tertiary attainment rates in the EU, Italy does not produce enough graduates with vocational skills and has very low participation in adult learning, limiting upskilling and reskilling opportunities for both existing and prospective workers. Italy’s fast-ageing population will reduce future labour supply, unless ongoing policy efforts succeed in integrating inactive people into the workforce. In the agriculture and healthcare sectors in particular, labour shortages appear more acute given the skill profiles needed and could be alleviated through reliance on regular migrant inflows, supported by social integration and the recognition or upgrading of skills. Further enhancing active labour market policies could ensure that labour shortages do not become widespread.

Wage moderation has kept Italian firms competitive but has long restrained households’ purchasing power. In 2024, per-capita pay of employees rose by 3.4%, 0.5 pp. more than in 2023 and well above consumer price inflation, enabling a recovery in real wages. The wage moderation expected during 2025 and 2026 (3.4% and 2.5%, respectively) suggests a further marginal increase in real wages. While this allows for a growth in unit labour costs that does not substantially hamper firms’ price competitiveness, the small recovery in households’ purchasing power only partly offsets past losses (see Annex 10).

Main macroeconomic and competitiveness challenges ahead

High public debt is a drag on investment, as it both crowds out private investment and

Box 1: UN Sustainable Development Goals (SDGs)

Italy is making progress on all the SDGs related to competitiveness (SDG 4, 8, 9) and macroeconomic stability (SDGs 8, 16, 17), though overall performance remains below the EU average. In particular, outcomes for decent work and economic growth (SDG 8) and global partnerships (SDG 17) lag significantly behind, largely due to investment levels and high public debt. Italy also underperforms on innovation, industry and resilient infrastructure (SDG 9), with fewer patent applications, limited freight transport infrastructure and a lower share of households with high-speed internet.

Italy is improving on most of the SDGs related to sustainability (SDGs 2, 7, 9, 11, 12, 13, 14) and all those to social fairness (SDGs 1, 3, 4, 5, 7, 8, 10), but at the same time the indicators on clean water and sanitation and life on land show negative trends (SDGs 6, 15). Land degradation is worsening, the impact of droughts on ecosystems is increasing and the areas at risk of severe soil erosion are expanding (SDG 15). While health indicators remain above the EU average and self-perceived health has improved slightly, obesity rates and antibiotic use are on the rise (SDG 3) (see Annex 15).

limits room for public investment. However, the sustainability of fiscal policy would be ensured by compliance with the EU rules which allow for extended support for investment once RRF-funding expires.

Sluggish productivity growth is mainly due to reduced innovation capacity, limited R&D investment, and scarce supply of high-level skills. The RRP addresses some of the most pressing bottlenecks in the R&D governance and education system. Greater involvement by business in R&D financing, and of retail investors in the funding of new ventures and risk capital, appear to be necessary.

Improvements in the quality of jobs available to new entrants in the labour market would help to attract high-skilled people from abroad and retain talented young people in Italy. This requires strengthening recent efforts to ensure a better work-life balance for women (through expanded care services) and clearer opportunities to transition from school to work and from fixed-term to open-ended contracts. It also calls for reinforcing and extending efforts under the RRP in the upskilling and reskilling of adults, through further improvements to active labour market policies (ALMP) and by promoting firms' training activities.

Further improvements in the efficiency of public administration, the justice system, increased competition, simplification, a more modern public procurement framework and digitalisation are still needed to boost Italy's competitiveness. Over recent years Italy has adopted several measures in these areas, in particular through the RRP. These include the reform to reduce the length of judicial proceedings, the adoption of annual competition laws, the reforms of the industrial property code, public administration and public procurement, the simplification of several administrative procedures and a number of investments to increase the digitalisation of private firms and public administrations. Further efforts are expected to address the remaining challenges.

Boosting innovation and research would support competitiveness. Italy's private and public R&D expenditure, including by universities, is below the EU average. The limited number of large firms restricts potential private investment in R&D. Italy's R&D tax incentives are more limited and less generous than those of its EU peers. The over-reliance of Italian firms on bank credit places a particular constraint on smaller, newer and innovative firms. Moreover, strengthening recent initiatives to reduce inefficiency in the university system would allow to increase the current limited incentives for the commercialisation of research and enhance its innovative potential. It would also be crucial to foster investment in innovative technologies and technology transfer, particularly for SMEs, to streamline business incentives for R&D and innovation and to invest in critical technologies through the Strategic Technologies Platform for Europe (STEP). Finally, the role of technology transfer offices (TTOs) in enabling knowledge valorisation and of public procurement in stimulating innovation should be further improved.

A strong productivity gap persists across the country, including due to the South's lower specialisation in innovative sectors. The post-COVID growth convergence of the South is mainly due to the services and construction sectors, while significant gaps in industry remain. It is also affected by the decline in the automotive and oil refinery sectors. A clear and strategic definition of industrial policy is lacking, both at national level and for the South.

Tax evasion remains high, as does the tax burden on labour. The labour tax wedge in 2024 remains significantly above the EU average. Tax evasion remains high, despite the ambitious countermeasures taken in recent years. Other inefficiencies in the tax system remain, such as in tax expenditure.

Italian manufacturing depends heavily on imports of critical raw materials. Italy is also critically dependent on the import of semiconductors, which are needed for the green and digital transitions. Given that a high proportion of material inputs in manufacturing are imported, Italy is particularly vulnerable to supply chain disruptions.

High electricity prices weaken industrial competitiveness. Wholesale electricity prices in Italy are considerably higher than in its peer countries. This is mainly due to the electricity mix and the composition of final prices.

Italy is among the EU Member States most exposed to climate risks. The annual costs of climate change for infrastructure in Italy are high. SMEs are particularly vulnerable, with climate-related events having a significant impact on their productivity and competitiveness.

Despite measures implemented in recent years, Italy faces a significant structural mismatch in skills. Although RRF-supported actions have expanded the supply of green and digital skills, Italy has one of the highest levels of skills mismatch in the EU. Sectors such as construction, healthcare and ICT face recruitment challenges, even though the job vacancy rate does not reflect widespread labour shortages.

Atypical contracts remain widespread in Italy, together with stagnant wage growth paired with low work intensity. Though it has recently decreased, the proportion of fixed-term employees in Italy remains among the highest in the EU. Fixed-term employment is more common among vulnerable groups. A large proportion of part-time work is involuntary. Italy's structurally low labour productivity growth constrains wage growth. For these reasons, in-work poverty risks have increased, and are particularly high among part-time and fixed-term workers.

Box 2: Barriers to private and public investment

Investment prospects have been dampened by the high global uncertainty, despite RRF support. In the longer term, the opportunities for expanding corporate investments are constrained by the remaining structural weaknesses. The uncertain outlook for exports due to renewed global trade tensions and low growth in important markets, such as Germany, means that companies are holding back their investment decisions. According to the EIB's 2024 survey, the three main obstacles to Italian companies investing are uncertainty about the future (79%, with 49% considering it a major obstacle), high energy costs (70%) and labour market regulations (59%) ([5]). In addition, a large share of Italian firms consider corruption to be an obstacle to doing business (50% compared to 36% for the EU).

In recent years, Italy has made progress in a number of challenging policy areas, in particular through RRP reforms and investments. These include:

- in the area of **justice,** the recruitment of staff in order to reduce the length of judicial proceedings;
- improving the effectiveness of the **public administration**, including through strategic management of human resources;
- reducing **late payments** by public administrations, where actions have been taken to improve the payment performance of central and local administrations, including by improving monitoring and transparency;
- increasing **competition** in a number of key sectors (including electricity, gas, transport and local public services);
- reforming the **Industrial Property Code**;
- modernising the **public procurement** framework, including by simplifying procedures, increasing qualification/professionalisation of contracting authorities and introducing measures to reduce the time taken to award contracts.

Despite the positive developments, these areas would still benefit from further efforts. Moreover, the following factors contribute to **the holding back of investment and productivity growth:**

- the availability of **adequate staffing, including in terms of skills, for local public administrations** remains a challenge for the implementation of national and EU-funded investment. Lessons need to be learned from previous experiences, including under the RRP, and also as regards the pooling of resources;
- **current public expenditure for R&D and universities** is not sufficient to promote synergies between public and private investment in innovation;
- **the lack of a clear industrial strategy**, also aimed at boosting the economy of lagging regions, that takes into account new market trends, technologies and decarbonisation. A comprehensive approach integrating industrial needs with infrastructural planning and labour market policies would also be advisable;
- **weak provision of high-level skills**. Italy is poorly endowed with highly-skilled people, particularly in the ICT and scientific domains, which are most conducive to starting innovative businesses or to the take-up of new technology by existing firms;

[5] EIB Investment Survey 2024 Country Overview: Italy

Box 2:

- firms’ over-reliance on bank credit limits **private financing in support of innovation** as banks often lack the expertise to effectively screen innovative firms and their largely intangible collateral. Further development of the venture capital and private equity ecosystems, including the promotion of this asset class for institutional and retail investors, appear warranted;
- the high **tax burden** on firms and the complexity of the tax system.

The implementation of Italy’s RRP is facing several challenges and delays. At present, the country has fulfilled 43% of the milestones and targets in its RRP. Enhancing administrative capacity, notably at local level, and improving the timely detection and resolution of potential delays would support the effective execution of the plan.

It remains important to accelerate the implementation of cohesion policy programmes. The mid-term review offers opportunities to speed up progress and better address EU strategic priorities related to competitiveness, defence, housing, water resilience and the energy transition.

While Italy has leveraged the Strategic Technologies for Europe Platform (STEP) to reallocate some Cohesion Policy resources towards this priority, it can further support the development or manufacturing of critical technologies in the areas of digital and deep tech, clean and resource efficient technologies, and biotechnologies.

INNOVATION, BUSINESS ENVIRONMENT AND PRODUCTIVITY

Making business easier

The RRP's annual competition laws are a positive step towards increasing competition in a number of sectors, including services. Obstacles to the opening-up of markets and over-regulation in businesses' daily operations hinder economic growth. This is particularly evident in the services sector (see Annex 4). The low productivity of this macro sector [6] is partly explained by its specialisation, but it also stems from the sector's remaining barriers to competition, especially at retail level. Ensuring the competitive award of concessions and contracts, including in network industries and in local and regional services, is key to the effective and efficient delivery of public services to businesses and consumers. While the adoption of the annual competition laws so far included in the RRP is a positive step, their swift implementation is key to actually reducing entry barriers in several sectors.

A more effective public administration and more simplification will benefit Italy's business development. When asked how trust in Italy's public administration could be increased, 61% of citizens suggested reducing bureaucracy (EU average: 52%) and 49% called for better-skilled civil servants (EU average: 30%) (see Annexes 4 and 6). Furthermore, according to the EIB investment survey, the proportion of firms with over 10% of their staff working on regulatory requirements stood at 24%, above the EU average of 17% (see Annexes 4 and 6). In 2024 Italy continued to implement the comprehensive reform of public employment adopted in 2022 under the RRP. The plan also includes measures to simplify at least 600 administrative procedures concerning citizens' and businesses' interaction with public administrations by 2026. Keeping up the RRP efforts to implement the public administration reforms and simplify and digitalise administrative procedures remain crucial to improving Italy's business environment.

The Italian justice system maintains the positive trend in improving efficiency. Although the expected duration of civil and commercial trials remains the highest in the EU (see Annex 4), the duration of trials and the backlog in court cases continue to decrease. During 2024, as envisaged in the RRP, the recruitment or extension procedures for temporary staff of trial offices and for technical administrative staff have been completed. This was accompanied by the implementation of specific measures aimed at reducing the disposition time and civil justice backlog. Overall, the measures included in the RRP for civil, criminal and administrative courts, also making use of digital tools, are expected to further improve the efficiency of justice and the effective fight against corruption.

Italy is making significant efforts to improve the efficiency of its public procurement system but challenges persist. Beyond introducing a new Code of Public Contracts in 2023, Italy is progressing with the ambitious reform of public procurement set out in its RRP (see Annex 4). This reform is set to simplify procedures, increase digitalisation and professionalise public purchasers, and is expected to improve the speed, the competitiveness and the overall efficiency of the Italian public procurement system.

The deployment of connectivity networks is progressing. Italy's 5G coverage stood at 99.5% in 2023 and it recorded an 11

[6] OECD Economic Survey Italy 2024(2024).

percentage-point increase in very high-capacity network (VHCN) and fibre to the premises (FTTP) coverage compared to 2022 (see Annex 4). However, the urban-rural divide persists, with coverage in rural areas lagging behind at 37.7% (the EU average is 55.6% for VHCN and 52.7% for FTTP). Cybersecurity awareness appears to be widespread, with 92.9% of firms having some ICT security measures in place (EU average of 92.8%), and 62.7% making their employees aware of ICT security-related issues (EU average of 60%).

Rethinking investment in innovation

Italy's innovation and growth potential is hampered by limited private and public investment in R&D. In 2023, business expenditure on R&D was half the EU average (0.76% and 1.9% respectively). From 2001 to 2020, Italy's share of registered patents decreased both at the United States Patent and Trademark Office (USPTO), from 1.0% to 0.9%, and at the European Patent Office (EPO), from 3.76% to 3.34%. Italian patents are concentrated in traditional industries, with limited presence in high-tech sectors with more growth opportunities.

Measures to facilitate the growth of firms and better-targeted incentives would benefit R&D investment. The limited number of large firms restricts potential private investment in R&D, resulting in Italian firms accounting for just 0.4% of the top 2 000 global R&D investors' expenditure, well below peer EU countries such as Germany (8.9%) or France (2.7%). Moreover, Italy's R&D tax incentives are more limited and less generous than those of EU peers, meaning that it has a less effective framework for stimulating private investment in innovation ([7]). The Law on the rationalisation of firms' incentives ([8]) adopted under the RRP, and the commitment to redefine the national industrial strategy, offer an opportunity to focus public support on innovative firms, which play a greater role in job creation and economic growth ([9]), and on promoting firms' mergers.

Boosting Italy's capital markets would channel more savings into innovative investments and offer firms an alternative source of financing. Banks are generally less well-suited to financing innovative companies as they often lack the expertise to effectively screen innovative firms and their largely intangible collateral. In 2023, bank lending accounted for 27.6% of the sources of financing for Italian non-financial firms, while listed shares and bonds only represented 13.3%, compared to the EU average of 23.8%. Despite some improvements in recent years, Italy's market-funding ratio stood at 38.9% in 2023, significantly below the EU average of 49.6%. The Italian stock exchange (*Borsa Italiana*) remains small by EU standards, with a limited number of new listings in the main market in recent years. In 2023, market capitalisation stood at 29.1% of GDP, while the EU average was 68%. Recent efforts to reform the capital market framework are however a step in fostering capital market efficiency, providing financing and facilitating the scale-up of innovative firms, also by improving the exit options for earlier-stage venture capital and private equity investors.

The considerable savings of Italian households are an untapped potential source of support for innovation. Retail investors in Italy exhibit a conservative investment approach (see Annex 5). They also prefer investment funds rather than listed equity, which remains low by EU standards (see Annex 5). Considering the low government investment in innovation and the fact that investment funds and insurers in Italy tend to have a higher share of bonds investment, further direct or indirect involvement by households in the equity market, for example

[7] Bank of Italy: Innovazione e politiche di sostegno pubblico: un'analisi comparata (December 2024).

[8] Law No 160 of October 2023.

[9] Bank of Italy: High growth young firms in Italy (October 2024).

by strengthening the Individual Savings Plans (PIR), could provide a significant boost to innovation.

The Italian venture capital market is growing but is still limited in size. Venture capital (VC) is essential for innovation as it provides high-risk, long-term funding, along with strategic support, skills and managerial capabilities that enable start-ups to develop and scale up groundbreaking ideas. Despite a recent decline due to the macroeconomic context (inflation and interest rate), with venture capital and private equity dropping to 0.03% and 0.3% of GDP in 2023, the average VC investment has seen a nearly five-fold increase from 2011-2013 to 2021-2023. Since 2020, CDP Venture Capital, the State-owned financial vehicle for innovation, has been pivotal in the development of the market, managing EUR 3.35 billion in assets and planning investments in 50-70 new venture capital funds by 2028. As part of the recovery and resilience plan, the recent Competition Law will also further support start-ups by pushing institutional investors into the VC market (see Annex 5). Despite these efforts, the market remains fragmented, with a focus on early stages, highlighting the need for enhanced support for late-stage investments, including suitable exit options for investors, and improvements in employee stock ownership frameworks. Finally, there is room to strengthen corporate venture capital, a segment of the VC market in which Italy's large corporations and institutional investors are reluctant to invest. In this area, existing incentives for in-house R&D could be adjusted to cover investments where the R&D activity is outsourced to a start-up or is in partnership with a university.

Public procurement procedures could play a key role in fostering demand for innovative solutions. However, in terms of its innovation procurement policy frameworks, Italy is only a moderate performer [10]. The existing legal framework supports various types of procurement but lacks comprehensive definitions and national action plans to promote innovation procurement. Challenges remain in fostering competition, transparency and capacity-building, while regional initiatives, such as Lombardy's binding spending target, promote innovation in public procurement procedures.

Unlocking research potential

Relatively low public expenditure for R&I and inefficiencies in the national university system are further barriers to innovation. In 2023, Italian public expenditure on R&I stood at 0.52% of GDP, below the EU average (0.72%). The RRP provided additional resources to boost business innovation, strengthen R&I infrastructures, finance basic and applied research. Resources are allocated to higher education through the annual budget, with a performance-related share. These resources are complemented by the launch of national competitive calls for projects, but they have been irregularly held and have failed to provide a clear and predictable environment for the actors involved [11]. Overall, public funding for R&I by higher education institutions still represented just 0.33% of GDP in 2023, compared to the EU average of 0.48% [12].

Job uncertainty and an unclear career progression hamper the ability of the public research sector to attract and retain talent. The use of short-term non-tenure-track contracts for researchers is very common (65% of researchers hired by universities in 2022) [13], and career

[10] Italy's score is only 37%, well below the best performing score of Finland with 70% - Benchmarking of innovation procurement investments and policy frameworks across Europe.

[11] Consiglio Nazionale delle Ricerche,2023, *Relazione sulla Ricerca e L'innovazione In Italia, Analisi e dati di politica della scienza e della Tecnologia,* Quarta Edizione Relazione sulla ricerca e innovazione in Italia 2023. pdf.

[12] Eurostat (2023), https://ec.europa.eu/eurostat/databrowser/view/tsc00001/default/bar?lang=en&category=t_scitech.t_rd.

[13] This figure includes researchers hired as *assegnista di ricerca*, researchers of type A and B and long-term

progression is slow and uncertain, particularly for young researchers. From 2012 to 2022, the average age of teaching staff with tenure-track and long-term positions increased, with more than 56% of university professors being over 50 years old (compared to the EU and OECD average of about 40%) and with no tenure-track researcher being younger than 30 [14]. These factors, coupled with relatively low wages [15], make the Italian research sector less attractive to talent (see Annex 3).

The Italian university system provides limited incentives to focus on the commercialisation of research. On the one hand, only a very small fraction of the 30% performance-based quota of the annual ordinary funding is allocated based on the valorisation of research (representing only 1.5% of the total funding) [16]. On the other, valorisation and transfer of knowledge activities are not taken adequately into account in the career advancement and performance evaluation of researchers and professors. The current system still relies heavily on publication results rather than valorising outcomes such as entrepreneurship initiatives, patents and spin-offs.

Despite recent progress, technology transfer offices remain undersized, fragmented and with poor links to institutional investors. Technology transfer offices (TTOs) are instrumental to establishing partnerships with firms and venture funds. They advise researchers on the patenting of specific technologies and provide seed financing for spin-offs. According to the National Research Council (CNR), there is a significant gap between Italy and other peer Member States in terms of staffing and financial allocation [17]. While the RRP accelerated the establishment of TTOs, further effort is needed to increase the scale of TTOs and to foster networking activities that focus on high-impact sectors. To this end, promoting the aggregation of TTOs by thematic area or by territorial dimension and strengthening the link with national venture capital investors would be beneficial.

Develop a national industrial strategy to boost competitiveness and unlock the potential of the South

A strong productivity gap persists across the country, including due to the South's lower specialisation in innovative sectors. Although the RRP, together with Cohesion Funds, has supported southern regions and, in general, national growth in recent years, significant regional economic and social disparities remain. In the South, the post-COVID growth convergence is mainly due to the services and construction sectors, while considerable gaps remain in industry. Moreover, the South is affected by the decline of the industries in which it specialised (e.g. automotive, oil refinery).

The competitiveness of southern regions is held back by a lack of certain key factors of attractiveness. In recent decades, public investment in the South has been subdued, despite attempts to dedicate a quota of investment to southern regions that is at least proportional to its population (e.g. the clause dedicating at least 34% of ordinary public capital spending to the South, and later, the 40% national commitment for investment

researchers. ANVUR, 2023, *Rapporto sul sistema della formazione superiore e della ricerca,* Rapporto biennale | ANVUR.

[14] ANVUR, 2023, *Rapporto sul sistema della formazione superiore e della ricerca,* Rapporto biennale | ANVUR.

[15] Civera, A., Lehmann, E. E., Meoli, M., & Paleari, S. P. (2023). The Attractiveness of European Higher Education Systems: A Comparative Analysis of Faculty Remuneration and Career Paths. https://escholarship.org/uc/item/08x00432

[16] OECD, 2024, Knowledge exchange and collaboration between universities and society in Italy: The ITA.CON Project, Knowledge exchange and collaboration between universities and society in Italy | OECD.

[17] Full time equivalents employed in technology transfer offices is significantly lower in Italy then in reference cases in Europe: Italy (5-10 FTE) vs Belgium, France, UK (70-120 FTE). Relazione_sulla_ricerca_e_innovazione_in_Italia_2023.pdf

with a territorial destination). Southern regions are performing below the national average in a number of sectors and infrastructural indicators (see Annex 17). The ‘brain drain’ towards better-performing regions and an inability to attract qualified workforce further reduce their competitiveness (see Annex 17).

A new industrial policy is needed to identify key investments and policy actions beyond 2026. The government recently adopted the Green Book for a national industrial strategy and the Strategic Plan for the Single Special Economic Zone (SEZ)**.** The publication of the ‘Made in Italy 2030’ Green Book by the Ministry of Enterprises and Made in Italy (MIMIT) aims to kick-start a debate on the need for a new industrial strategy. The Green Book identifies four main topics: strengthening the national industrial identity, promoting the triple transition (green, digital and geo-political), redefining the role of the State in the economy and developing the international dimension of Italy’s industrial policy. Each of these topics is associated with a strategic action and 15 objectives. In parallel, the SEZ plan aims to introduce an industrial strategy for the whole southern territory, identifying several broad sectors as strategic, mostly focusing on those that already have an already established presence, namely tourism, automotive, agri-food, electronics & ICT, and quality Made in Italy (e.g. fashion, wood-furniture sector). Four additional strategic supply chains have been identified in light of their competitive performance: chemical and pharmaceuticals, shipbuilding and naval, aerospace and railways. Finally, the plan also aims to develop cross-cutting technologies, in line with the sectors identified by the STEP programme: digital technologies, cleantech and biotech. Italy is already making a considerable effort in this direction, allocating nearly EUR 3 billion to STEP priorities within cohesion policy programmes.

The development of a clear industrial policy is hampered by fragmented governance. The SEZ and the national plans are developed according to two separate governance systems: the former managed by the SEZ mission structure and the latter by MIMIT, in an already fragmented national industrial policy context. At central level, financial support measures for research and innovation are split among different ministries. At sub-national level, regions also engage in their own innovation strategies and support schemes with minimal national coordination. Finally, while the centralised governance of the SEZ through a single mission structure can ensure good coordination across the whole southern area (compared to the previous eight locally defined SEZs), dedicated regional departments for investment and innovation (such as that of the Campania region) could provide the necessary territorial reference to attract investment.

A more concrete and modern strategic plan is needed. Strategic sectors need to be better identified, taking into account new industrial trends and technologies, in order to target policy measures more effectively and integrate them with infrastructural investment, and concrete actions are also needed. The SEZ plan aims to identify the area's industrial specialisation. However, it lacks a territorial dimension and a development strategy for the key industrial districts identified. Specifically, strategic value chains are selected from a list of traditional sectors that does not take into account the development of new technologies and hence the creation of new value chains (e.g. renewable energies, digital infrastructures and AI). A better *ex ante* definition of value chains could improve the process of identifying those that are strategic. Moreover, there is a temporal mismatch between the plan's longer horizon and the incentives to promote the attraction of new investments that are only envisaged for one year. The plan would benefit from a mapping of priority investments and the identification of concrete actions and targeted long-term goals.

A more growth-friendly tax system

The efficiency of Italy’s tax system has improved, but some weaknesses remain in relation to the tax mix and evasion. Tax revenues to GDP declined marginally in 2023 thanks to a general tax reform, but remain relatively high compared to the EU average, with the largest contribution coming from labour taxation. The labour tax wedge declined markedly in 2023 thanks to the measures taken. In 2024, the tax wedge further declined at most income levels, while for single earners at average wage it increased substantially, as the average wage rose above the threshold for reduced social security contributions. Overall, despite the measures adopted, the tax wedge in Italy remains significantly above the EU average. Special regimes and the wide range of tax expenditures, including on VAT, make the tax system highly complex and erode the tax base, resulting in significant revenue loss. Shifting the current high tax burden on labour to other underused sources of revenue, which are less detrimental to growth, would help to raise economic potential. Furthermore, taxes on energy are not designed to encourage the transition to clean technologies. Finally, tax evasion remains high, though the ambitious countermeasures taken in recent years, including under the RRP, are bearing fruit (see Annex 1). At the same time, recent measures similar to tax amnesties risk being counter-productive in terms of tax compliance, while the system of prior agreement between the administration and small businesses on their tax liabilities (*concordato preventivo biennale*) warrants close monitoring. Cadastral values are still not in line with current market values, since they have yet to be fully and comprehensively updated.

In its medium-term fiscal-structural plan (MTFSP), Italy committed to new measures on taxation. These include a permanent reduction of the tax wedge, additional tax administration targets, a review of the scope of tax expenditures and the updating of cadastral values for certain properties, which would partly address past country-specific recommendations. However, more effort is needed to fully address the challenges faced by the taxation system. Some MTFSP commitments have already been implemented via the 2025 budget, including the permanent cut of the tax wedge and a first reduction in tax expenditures.

DECARBONISATION, ENERGY AFFORDABILITY AND SUSTAINABILITY

Italy's clean tech edge and raw material challenge

Italy is one of the European leaders in clean technologies, with a significant number of solar PV and wind manufacturing facilities. Italy accounts for 14% of the EU's manufacturing capacity for solar PV, 4% for wind power and a negligible share for battery and storage technologies. Italy is also home to at least 50 factories that specialise in the manufacturing of heat pumps, further diversifying its manufacturing portfolio. It is also an EU and global leader in the production of cables and systems for power transmission and distribution.

Italian manufacturing depends heavily on imports of the critical raw materials and semiconductors needed for the green and digital transitions, such as microchips, lithium, cobalt and rare earths, which are essential for producing high-tech products, including electric vehicles, wind turbines and electronics. This creates significant challenges in terms of sustainability and resilience, such as supply chain risks, environmental degradation and social concerns. With 48% of material inputs in manufacturing being imported in 2022 (EU average: 22%), Italy is particularly vulnerable to supply chain disruptions.

Italy is a top performer in the circular economy, including critical raw materials, partly mitigating the risk of supply chains disruptions. The rate of circular use of materials was 20.8% in 2023 (EU average: 11.8%), making it one of the top EU countries in that regard. The recycling rate for e-waste, a key source of critical raw materials, is above the EU average, at 88.9% in 2021.

Several investments and policies to strengthen Italy's strategic autonomy are ongoing. As part of the recovery and resilience plan, Italy is participating in several important projects of common European interest (IPCEIs) in the areas of batteries, microelectronics and hydrogen. Other key industrial investments to increase Italy's capacity to manufacture strategic products, such as solar panels and semiconductors, have received grants from the RRF. Finally, the RRP also invests in the recovery and recycling of electrical and electronic waste (WEEE) and of critical raw materials, by financing the improvement of existing plants, the construction of new WEEE plants, and urban mining and eco-design.

Boosting the decarbonisation of Italian industry

Italy's manufacturing sector has a similar intensity of greenhouse emissions as the EU overall, but its share of energy-related emissions is significantly higher. Around 22% of Italy's total greenhouse gas emissions come from the manufacturing sector, as in the EU overall (see Annex 7). Since 2017, the greenhouse-gas intensity of Italy's manufacturing industry fell by just 4%, well below the EU average (20%). At more than two-thirds in 2023, Italy's share of energy-related greenhouse emissions from industry (as opposed to emissions related to industrial processes and product use) is the highest in the EU, where this share stands at 57% overall.

Compared to the EU overall, Italy's manufacturing sector is less intensive in terms of emissions from processes and product use. Between 2017 and 2022, the intensity of energy-related GHG emissions from manufacturing in Italy fell by 13%, which is similar to the EU average. Over the same period, the intensity of process- and product-use-related emissions fell by 23% (as in the EU overall), just 62% of the EU total. In that period, the share of electricity and renewables in final energy consumption in manufacturing was broadly stable, at around 41%. This was also the case with the energy intensity of Italian manufacturing, which fell by about 5%.

Lowering electricity prices and reducing volatility for industrial competitiveness

High electricity prices stifle industrial competitiveness. In 2024, wholesale electricity prices in Italy exceeded those in Germany, by 60%, in Spain, by 99% and in France, by 116%. Two main factors explain this gap: the electricity mix and the composition of final prices. First, costly gas-fired power generation accounts for 41% of the electricity mix (the second largest share in the EU) and sets the electricity market price around 60% of the time. Second, final electricity prices are inflated by high taxes and levies, which presents a particular challenge for energy-intensive industries (see Annex 8). For these users, non-recoverable taxes account for 19% of the final electricity price (compared to the EU average of 12%), while gas is nearly tax-exempt (around 2% compared to the EU average of 9%), disincentivising electrification.

Renewable electricity needs to be deployed more quickly to increase its share in the energy mix and mitigate prices. A more transparent and accessible legislative framework for permitting could accelerate deployment. In this regard, the collection, compilation and consolidation of existing permitting rules under the REPowerEU chapter of the RRP will be crucial. Investments in storage and demand response mechanisms are essential to increase system flexibility, enabling it to cope with the intermittent nature of renewable energy sources (see Annex 8). This would allow renewables to meet demand more consistently, increasing the likelihood that these cheaper electricity sources set the marginal price, particularly during peak periods. The 'Simplification of authorisation procedures for renewable plants' reform under the RRP facilitates these investments. In the meantime, long-term price stabilisation mechanisms, such as contracts for differences and power purchase agreements (PPAs), can shield both renewable energy producers and industrial consumers from gas-driven price volatility, provided they do not undermine electricity market liquidity. A reform under the REPowerEU chapter of the RRP establishes a guarantee scheme to mitigate the risk associated with renewable PPAs and promote their uptake. Faster uptake of renewables in the energy mix would moreover help to meet the Effort Sharing Regulation target.

Addressing climate risks

Italy is among the EU Member States most exposed to climate risks, which weighs on Italy's economic performance. Between 1980 and 2023, Italy recorded 21 822 fatalities and almost EUR 134 billion in economic losses caused by weather and climate-related extreme events [18]. The annual costs of climate change for infrastructure in Italy are estimated to be around EUR 2 billion in 2030 [19]. Projections suggest a cumulative negative impact on GDP per capita of 3.7% in 2050 and 8.5% in 2080 [20]. SMEs are particularly vulnerable, with climate-related events having a significant impact on their productivity and competitiveness. A study by the Bank of Italy found that Italian SMEs affected by extreme events face a 4.8% higher bankruptcy risk than other firms, with surviving companies seeing a fall in turnover and employment of 4.2% and 1.9% respectively, over the following

[18] EEA, 2024, European Climate Risk Assessment.

[19] MIMS 2022, Cambiamenti climatici, infrastrutture e mobilita, Link.

[20] Ronchi, E. 2019, *Relazione sullo stato della green economy*, Link.

three years [21]. Increasing the use of nature-based strategies would help to mitigate floods, heatwaves, droughts and wildfires (see Annex 9).

Italy's hydrogeological vulnerability exacerbates these risks, making climate adaptation a pressing priority, as well as increasing water efficiency, conservation and resilience. According to the Italian Alliance for Sustainable Development (ASviS), Italy's annual expenditure on damage from hydrogeological risks tripled to EUR 3.3 billion between 2010 and 2023 [22]. There is ample room to improve the effectiveness of climate adaptation policies and water management, beyond the actions included in the recovery and resilience plan and those financed under cohesion policy. Reducing the fragmentation between different authorities and bodies, both at national and local level, would improve the analysis, planning and implementation of mitigation measures, as well as the management of critical events. In principle, all of these actions would be under the remit of the observatory on climate change adaptation, provided for under the National Adaptation Plan (NAP), approved in 2023, which is however not yet operational. Sustainable water management remains a major environmental issue, particularly in terms of governance, surface water body rehabilitation and water efficiency.

Soil loss, degradation and sealing continue to worsen, increasing the need for actions to improve soil resilience. This would help to reduce hydrogeological risk and maintain productivity. National statistics showed that 20 hectares of soil per day were converted to artificial land cover (land take) in 2023. The estimated annual economic losses from the decline in ecosystem services due to land consumption between 2006 and 2023 range from EUR 8.22 to EUR 10.06 billion [23]. Furthermore, at EU level, Italy suffers from one of the highest levels of agricultural productivity loss due to soil erosion, with an estimated crop productivity loss of EUR 619 million per year [24].

Italy's high exposure to climate risk is not balanced by sufficient insurance coverage. Only 4% of the losses due to weather and climate-related events that occurred between 1980 and 2023 were covered by insurance. This is well below the EU average (18.9%) [25]. Considering the high proportion of companies and households exposed to climate risk and that extreme events are expected to increase in the future, the wide insurance protection gap has significant economic implications for individuals, enterprises and public finances recovering from the effects of climate-related disasters. The effective implementation of the recently adopted provisions for mandatory company insurance for extreme events and natural disasters would be a first step towards filling this gap. Current legislation does not provide for a mandatory or semi-voluntary insurance scheme for housing.

[21] Bank of Italy, 2022, *Gli effetti del cambiamento climatico sull'economia italiana. Un progetto di ricerca della Banca d'Italia*, Occasional Paper 728, p. 50, QEF_728_22.pdf.

[22] Italian Alliance for Sustainable Development (ASviS), 2023, Rischio idrogeologico in Italia, senza prevenzione costi triplicati in 13 anni.

[23] ISPRA, 2024, Consumo di suolo, dinamiche territoriali e servizi ecosistemici. Edizione 2024 – SNPA – Sistema nazionale protezione ambiente, pp.199-200 & p. 343.

[24] Panagos P. et al. Cost of agricultural productivity loss due to soil erosion in the European Union, 2018, Table 6 Land Degradation & Development | Environmental & Soil Science Journal | Wiley Online Journal.

[25] EEA, 2024, Economic losses from weather- and climate-related extremes in Europe.

SKILLS, QUALITY JOBS AND SOCIAL FAIRNESS

Despite rising employment rates, Italy's labour market faces stagnant productivity growth and significant skills mismatches, hindering competitiveness. Amid weak productivity dynamics, the robust employment growth of recent years has not been matched by real GDP gains. Italy's inability to raise productivity growth stems from various mutually reinforcing structural factors. Notwithstanding some advancements achieved through recent RRP measures, the structural weakness of the education and training system hinders talent development, leaves demand for skilled labour unmet and discourages investment in innovative ventures. In turn, Italy's predominance of low-tech jobs and low job quality fail to provide adequate returns on education, depressing labour force participation and leading talented young people to emigrate. To meet current and future labour market demands and enhance productivity, skills levels should be improved throughout the life cycle, while job quality raised.

Lifelong skills development is crucial for Italy's competitiveness

Italy's declining performance in basic skills development in science and mathematics, calls for strengthening its education system. The OECD PISA 2022 basic skills survey highlighted the continued declining trend in basic skills performance, especially in mathematics and science, placing Italy behind the EU average. Additionally, PISA results highlight persistent underperformance of pupils from disadvantaged socio-economic backgrounds and of those enrolled in vocational education tracks. Despite the reform efforts promoted through the RRF, the country still struggles with structural teacher shortages in certain fields and regions. To equip the greatest number of young people with adequate basic competences, on which they can build more advanced and/or labour-oriented skills, the worst-performing schools and lower-achieving students need targeted support. Offering experienced teachers financial incentives to move to the most disadvantaged schools could improve the proficiency of those schools' pupils. Extending school time (*tempo pieno*) in schools that do not currently offer it could help, as would a general roll-out of the *Piano Estate* summer school initiative. An improved system of in-service training for teachers has also been introduced. Assessing its impact and structurally innovate teaching methods, with a focus on STEM subjects, could help improving performance in basic skills development.

Skills demand in the short term requires strengthening the vocational education and training (VET) system and increasing provision of work-based learning. Italy faces a significant structural skills mismatch. In 2024, it recorded the second-highest level of macroeconomic skills mismatch in the EU, and 40% of workers employed in jobs not matching their field of study. While the current job vacancy rate of 2.1% does not reflect widespread labour shortages, sectors such as construction, healthcare and ICT face recruitment challenges. This suggests that, while a broader underlying problem of skills mismatch persists, current labour shortages are relatively minor and limited to specific medium-skilled professions, requiring targeted short-term solutions. A further focus on VET, including sustained investment in successful RRF initiatives such as *higher technical institutes* (ITS Academies) and ensuring curricula align with both the technical and transversal skills demanded by the labour market could help respond to labour shortages, particularly in high-demand professions and high-growth sectors, across all supply chain functions, including highly specialised construction workers. Beyond national successful initiatives such as *Fondo Nuove Competenze*, continued and predictable access to investment in adult learning in the future is crucial. Specifically, as in-company training proves highly effective, incentives for employers providing work-based learning, with an emphasis on short-term training and micro credentials, can help to address skills gaps.

Forming and attracting high-skilled talent is key for boosting economic competitiveness. Italy has the second-lowest share of young tertiary graduates in the EU and faces a persistent net brain drain (see Annex 12). While current labour shortages are concentrated in non-tertiary occupations, focusing on high-skilled workers in the medium to long term is essential, as they drive productivity and innovation. A competitive economy demands a high-skilled workforce equipped with transversal skills and higher-order cognitive skills, including critical thinking and continuous learning - competences that are significantly strengthened at tertiary level. Addressing this challenge requires structural improvements to the quality and accessibility of higher education. Beyond RRP investments in scholarships for tertiary education, Italy could expand both the availability and the level of financial support, to match peer countries such as France and Spain. Promoting STEM/ICT programmes, modernising tertiary curricula with a forward-looking approach to skills development and complementing the current theoretical academic model with transversal skills and work-oriented knowledge, are also crucial. Furthermore, Italy's persistent net brain drain further constrains the pool of high-skilled workers. Expanding the *Decreto Flussi* immigration quotas for entrepreneurs, start-up workers and high-skilled workers in strategic sectors, could help to address these gaps. Leveraging the EU Blue Card and simplifying qualification recognition for non-EU nationals would further support efforts to attract high-skilled individuals.

Integrating adult learning strategies and industrial policy is essential for innovation and growth in Italy. Italy's rapidly ageing workforce, characterised by lower digital skills and adaptability levels, hampers productivity growth. In 2024, adult learning was among the lowest in the EU and declining. In this context, strengthening the adult learning system and aligning it with industrial strategy through a forward-looking approach to training is crucial. Building on, the recently developed national portal for job matching (SIISL) and continuing successful initiatives under the RRF such as the Dual System, the GOL employability guarantee, and the Individual Learning Accounts, capitalising on the lessons learnt, could help to counter those trends beyond 2026. Combining incentives for R&D investments with training policies has proven more effective in maximising innovation potential. Linking tax incentives for hiring such as 'Bonus Giovani', 'Bonus ZES', and 'Bonus Donna' to mandatory workplace training and targeting firms in high-growth sectors, (e.g. *Transizione* 4.0 and 5.0) could boost employment and productivity, maximising the multiplier effect of public spending. Strengthening collaboration between government bodies responsible for under Active Labor Market Policies (ALMPs) and those responsible for industrial development and aligning Regional Skills Plans under the RRF with national industrial strategies (e.g. Libro Bianco) could further support this effort.

Addressing labour market segmentation, job quality and care challenges

Labour market segmentation and job quality remain key factors for retaining talent in Italy, while expanding care services would help boost labour supply amid demographic challenges. Stable contracts, together with adequate wages, improve job quality and are key to attracting and retaining workers, and to improving the attractiveness of sectors and professions suffering from labour shortages. This is particularly important in light of the demographic challenge and the intensified outflow of talent, as many young graduates emigrate in search of better career and wage prospects abroad. Meanwhile, an adequate social safety net is crucial to reducing poverty and preserving human capital during career transitions. Finally, to curtail the impact of a declining workforce, it is imperative to harness the full potential of women's labour market participation, which is currently limited by insufficient care services for children and older people.

Despite improvements, including a rise in permanent contracts, atypical contracts remain widespread, reducing job security and work intensity. The use of stable and full-time employment contracts helps to reduce earnings instability, increases work intensity and incentivises companies to invest in workers' skills. The share of fixed-term employees decreased from 16.0% in 2023 to 14.7% in 2024 but remained among the highest in the EU. Fixed-term employment is more common among women, young people and those from a migrant background. While temporary-to-permanent job transitions were more closely in line with the EU average during the recovery from COVID-19, over recent years they have been at significantly lower levels and well below the EU averages (18.2% in 2024). More than 50% of part-time and 10% of temporary contracts were involuntary, reflecting the potential to increase labour supply through stable contracts. Although slowly declining over the last decade, the share of self-employed workers remains high compared to the rest of the EU, and in some cases shows elements of subordination, masking dependent employment relationships ([26]). Together with the high share of self-employed and informal work, these widespread non-standard forms of work contribute to inequality and instability in earnings, while reducing the average number of hours worked. Besides having a negative impact on the development of firm-specific human capital and reducing job security, this decreases the attractiveness and quality of jobs amid demographic change.

Stagnant wage growth paired with low work intensity contributes to high in-work poverty risks and weighs on job quality. Italy's structurally low labour productivity growth constrains wage growth. Together with low work intensity, inadequate wages contribute to high in-work poverty risks and reduce the attractiveness of certain occupations. Against this background, and having declined in the previous year, in-work poverty risks increased again in 2024, to 10.2%. They were particularly high among part-time and fixed-term workers. More than one in three (36.3%) of those who worked between 20-45% of their full-time potential in the previous year were living in poverty. Enhancing collective bargaining, including second-level collective agreements, and strengthening unions' representativeness could contribute to improving pay conditions.

Non-standard employment contributes to *de facto* gaps in social protection, while the new minimum income scheme has a lower poverty-alleviating effect. Among part-time and fixed-term workers, lower protection is due to benefits being directly tied to wages and length of employment. Furthermore, the self-employed are covered by separate systems from employees, which often do not provide equivalent protection, particularly for unemployment and sickness. In 2023, only 11.7% of the self-employed received any social benefits compared to 45.4% among employees in general, and in 2022, most of the (close to) 5 million self-employed were not covered by unemployment (79%) or sickness benefits (69%), as only economically dependent self-employed, i.e. 'para-subordinate workers', are covered for the latter ([27]). At the same time, by targeting specific demographic groups, the new minimum income scheme *Assegno di Inclusione* (AdI) led to significant cost savings. However, coverage dropped by around 40% and the poverty-reducing effect of the AdI is significantly lower than that of the previous system (see Annex 11). Both the diminished poverty-reducing effect of the reform and its incentivising effect on labour market

([26]) 6% of self-employed workers presented at least one element of external control over their activities, and 6.5% also declared to be dependent on only one client.

([27]) See European Commission and Social Protection Committee, Access to social protection for workers and the self-employed, 2024.

participation will require close monitoring. Meanwhile inequality increased again, with the income quintile share ratio rising from 5.3 in 2023 to 5.5 in 2024. Adopting policies to provide for adequate income replacement and improve access to social protection increases financial security and improves job quality.

Further expanding childcare and long-term care (LTC) services could increase women's labour market participation. Women's participation in the labour market remains low, particularly in the South, where the gap in female employment compared to men is nearly twice the national average. The employment gap also reflects important shortages in early childhood education and care (ECEC), as well as LTC services, collectively acting as a significant barrier to women's labour market participation. Expanding LTC is crucial to boosting female participation and meeting rising care demands amid demographic changes. Italy spends less on LTC than the EU average, with most funds going to financial transfers rather than direct care services. Labour shortages in healthcare hinder the expansion of services, and may worsen as many workers approach retirement (see Annex 14). Under the RRF, Italy is delivering on important investments in ECEC and on a reform of services for non-self-sufficient older people. However, given persisting regional disparities, efforts to increase ECEC and LTC should be more targeted at regions with low coverage. Furthermore, emphasising active ageing and work-life balance policies, along with funding the 'Active Ageing' Law 33/2023, could help sustain the LTC system.

Addressing these challenges will help Italy boost upward social convergence. The second-stage analysis in line with the Social Convergence Framework points to challenges for Italy that may affect social convergence in relation to its labour market, education and skills, as well as its social situation [28].

Addressing regional inequalities

Persistent regional inequalities call for policy attention. Although in recent years the RRP, together with Cohesion Funds, have supported southern regions, and economic growth for the whole country in general, municipalities' ability to finance current expenditure, including to operate new infrastructure, places a constraint on capital investment, especially in the South. This partly explains the regional disparities in the provision of ECEC, which is managed at municipal level. For instance, in the South, ECEC coverage is only 16.5%, compared to more than 30% in the Centre-North, showing wide gaps between municipalities in terms of minimum levels of services (LEP). Most southern regions are also significantly underperforming in the implementation of essential levels of assistance (LEAs) in healthcare, which aim to guarantee a range of health services to all citizens across the territory (Svimez, 2023) (see Annex 14). As regards LTC services, provision is highest in the North-East, with 10 beds per 1 000 residents, compared to three beds in the South. The South also experienced a more pronounced decrease in the number of employees of municipalities, compared to the Centre-North (Svimez, 2024).

The implementation of the differentiated autonomy reform is pending further clarification. In December 2024, the Constitutional Court ruled that several aspects of the framework law implementing the reform were unconstitutional, and efforts are ongoing to address the Court's concerns. The implementation of the differentiated autonomy reform might affect the government's ability to steer economic and fiscal policies, while the possible fragmentation of legislative frameworks at regional level could create new bottlenecks for private and public investments.

[28] European Commission, SWD(2025)95. The analysis relies on all the available quantitative and qualitative evidence and the policy response undertaken and planned.

Re-thinking affordable housing

While housing does not seem to be a major issue at macro level, certain social and employment aspects warrant closer attention. While on average, across the different categories of tenure, the housing cost overburden rate is lower than the EU average, it is slightly higher for renters in the free market (21.9% compared to 20.3% in the EU in 2023). Compared to other Member States, for a sizeable proportion of Italian households housing costs are shared between a larger number of people, as also shown by the relatively high housing overcrowding indicator (see Annex 11). Moreover, the severe housing deprivation rate is higher than the EU average, in particular for tenants at market prices (11.5% compared to 6.5% in 2023). Homelessness also remains an issue (see Annex 11). The low housing overburden rate could be seen as a result of delayed family formation, due to weaker and unstable income prospects for young people and more difficult access to mortgages (the share of the population with a mortgage is 13.7% compared to the EU average of 24.9%).

Housing accessibility and affordability issues also constrain labour mobility in some cities. According to Confindustria, in more productive areas such as large urban centres, labour productivity dynamics have not kept up with housing price growth, and hence the average salary is not proportionate to the average dwelling cost (Istat 2022). Large cities such as Milan, and the Centre-North more generally, where labour demand is higher, struggle to attract skilled workers also due to housing costs. The relatively high share of outright homeowners (75.2% compared to the EU average of 62.9%) may also be a potential barrier to labour mobility. This contributes to an inefficient allocation of the labour force. Students who move to larger cities for higher education are negatively impacted as well.

There is room to re-think housing-related policies and well-being where they are most needed, including support for labour mobility. Public spending on housing over the decade 2010-2020 was in line with the EU average (between 0.4% and 0.6% of GDP) [29]. However, it skyrocketed to the highest value in the EU (4.3% of GDP) in 2023 due to the tax credit to support energy-efficiency renovations of residential buildings (Superbonus). Rental subsidies are limited in Italy. Regulated rent only plays a marginal role. Indeed, data show that the share of tenants who rent at reduced market prices in Italy is lower than the EU average (8.1% compared to 10.2% in 2023), even among the poorest (14.0% vs 22.6%). Moreover, the share of the stock of public housing decreased to 2.4% in 2022 (from 4.2% in 2010), due to the budget constraints faced by local administrations and the sale of residential real estate assets owned by social security institutions. By contrast, a large share of homeowners benefits from low taxation of property, as first residences are exempted and cadastral values not aligned with market values. The stock of housing units available for long-term renting is negatively impacted by the high number of short-term rentals, particularly in touristic destinations. Further efforts on sectoral regulation are needed to rebalance this allocation and reduce the pressure on prices for residents. In cities and densely populated municipalities, about 1.8 million homes are unoccupied. The newly presented Italian Housing Plan tackles housing disadvantage and supports public and social housing, including by making use of unused buildings and rehabilitating derelict ones. However, the plan is not yet operational. As a complementary measure, Italy recently adopted a decree (known as *Caivano*) to tackle disadvantage in a number of urban peripheries, in particular where there is a high presence of public housing. Private entities also contribute to the affordable housing stock, through housing cooperatives (87 000 new homes built between 2015 and 2024) (Confcooperative Habitat 2024) and private funds such as the FIA (*Fondo Investimenti per l'Abitare*), with the aim of attracting private and public funds for the creation of 19 000 affordable social housing units (with 11 633 already built) (*Cassa depositi e prestiti*).

[29] COFOG category 'Housing and community amenities'.

KEY FINDINGS

To boost competitiveness, sustainability and social fairness, Italy would benefit from:

- **accelerating the implementation of the RRP,** including the REPowerEU chapter; **swiftly implementing cohesion policy**, taking advantage of the opportunities under the mid-term review; and **making optimal use of EU instruments**, including InvestEU and STEP, to improve competitiveness;

- **simplifying the business environment** by increasing the efficiency of the public administration, by further supporting a strategic management of human resources, increasing the efficiency of the justice system by further reducing the backlog and disposition time, enhancing competition as well as supporting digitalisation, including by speeding-up the roll-out of very high-capacity digital networks;

- **taking targeted actions to support high-growth innovative firms, investment in R&D and access to capital.** Productivity and business dynamism would be boosted by rostering the aggregation of firms, in particular SMEs, focusing incentives on accelerating business R&D spending, promoting innovation procurement and expanding access to non-bank finance, including by attracting institutional investors;

- **improving the efficiency and attractiveness of the university system, to boost its innovative potential.** Regular and predictable national competitive research funding, stronger incentives for the commercialisation of research and more effective technology transfer offices would increase the contribution made by academic research to innovation;

- **implementing innovation-driven industrial policy.** In relation to the Strategic Plan for the Special Economic Zone, this includes the better identification of strategic sectors, taking account of new industrial trends and technologies, to promote better targeting of policy measures and their integration with infrastructural investment. With respect to the new national industrial strategy, a clear and efficient governance will be central to ensure its correct implementation. Moreover, the national industrial strategy should be coordinated with the Strategic Plan for the SEZ and should identify strategic sectors and effective instruments to promote them;

- **tackling the remaining weaknesses in the tax system** by shifting the current high tax burden on labour to other under-used sources of revenue, gearing energy taxation towards the green transition, and further combating tax evasion;

- **mitigate the effects on potential growth and fiscal sustainability.** This includes policies to improve the efficiency and effectiveness of public spending, limiting the use of early retirement schemes, as well as policies to address the demographic challenges, including the attraction and retainment of productive workforce;

- **increasing the share of renewables in electricity generation** through simple and consolidated permitting legislation, investments in the electricity grid (in particular storage and interconnectivity) and demand-response mechanisms to promote non-fossil fuel sources, also with the aim of mitigating energy prices and meeting the Effort Sharing Regulation target;

- **mitigating climate risks and their economic impact**, including by: better coordination among different authorities and bodies, particularly in the management of hydrogeological and water resources; wider use of nature-based solutions, habitat restoration and sustainable soil management to prevent soil loss and degradation; measures to tackle the climate insurance coverage gap;

- **to support upward social convergence, boosting labour market participation,** especially of women, by further expanding the provision of childcare and long-term care services, particularly in the South;

- **reducing labour market segmentation and improving job quality** and stable employment contracts;

- **addressing short-term skills demand, including by strengthening vocational education and training and in-work training**, particularly by expanding the ITS academy and by fostering work-based learning, focusing on the technical and transversal skills currently in demand;

- **enhancing labour productivity and innovation by building, attracting and retaining a high-skilled workforce,** including by aligning the education and training system with investments in high-growth sectors with a focus on strengthening transversal skills – including relevant digital and green skills – and work-oriented knowledge in higher education and improving basic and transversal skills throughout the education cycle.

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FISCAL

ANNEX 1: FISCAL SURVEILLANCE AND DEBT SUSTAINABILITY

This Annex contains a series of tables relevant for the assessment of the fiscal situation in Italy, including how Italy is responding to Council recommendations issued under the reformed Economic Governance Framework.

The reformed framework, which entered into force on 30 April 2024 [30], aims to strengthen debt sustainability and promote sustainable and inclusive growth through growth-enhancing reforms and priority investments. The medium-term fiscal-structural plans (hereinafter, MTPs or plans) constitute the cornerstone of the framework, setting the budgetary commitment of Member States over the medium term. The latter is defined in terms of net expenditure growth, which is the single operational indicator for fiscal surveillance.

Italy submitted its plan on 15 October 2024. The plan covers the period until 2029, and presents an extended fiscal adjustment over seven years, which is underpinned by a set of reforms and investments to which Italy committed with the aim of improving potential growth and fiscal sustainability. On 21 January 2025, the Council adopted the Recommendation endorsing Italy's plan [31]. On 21 January 2025 the Council also adopted a Recommendation under Article 126(7) TFEU to correct the excessive deficit in Italy[32]. The corrective net expenditure path recommended by the Council under the excessive deficit procedure is consistent with the path set out in the plan.

The assessment of the implementation of the Council Recommendations to correct the excessive deficit and endorsing Italy's plan is carried out on the basis of outturn data from Eurostat and the Commission Spring 2025 Forecast, and taking into account the Annual Progress Report (APR), that Italy submitted on 30 April 2025. Furthermore, in the context of the Commission Communication of 19 March 2025[33], on accommodating defence expenditure within the Stability and Growth Pact, the Annex reports the projected increase in defence expenditure based on the Commission Spring 2025 Forecast.

The Annex is organised as follows. First, developments in **government deficit and debt** are presented based on the figures reported in table A1.1. Then, the assessment of the **implementation of the Council Recommendation to correct the excessive deficit and of the Council Recommendation endorsing the plan** follows, based on the relevant figures presented in Tables A1.2 to A1.9, including data on defence expenditure. Further on, the progress made in the **implementation of the set of reforms and investments** underpinning the extension of the fiscal adjustment period [34] is assessed, taking into account the information presented in Table A1.10.

The Annex also provides information on the **cost of ageing** and the **national fiscal framework**. Fiscal sustainability risks are discussed in the Debt Sustainability Monitor 2024 [35].

[30] Regulation (EU) 2024/1263 of the European Parliament and of the Council (EU) on the effective coordination of economic policies and on multilateral budgetary surveillance, together with the amended Regulation (EC) No 1467/97 on the implementation of the excessive deficit procedure, and the amended Council Directive 2011/85/EU on the budgetary frameworks of Member States are the core elements of the reformed EU economic governance framework.

[31] OJ C, C/2025/651, 10.2.2025, ELI: EUR-Lex - 32025H00651 - EN - EUR-Lex.

[32] Council Recommendation with a view to bringing an end to the situation of an excessive deficit in Italy (C/2025/5035).

[33] Communication from the Commission accommodating increased defence expenditure within the Stability and Growth Pact of 19 March 2025, C(2025) 2000 final.

[34] According to the Regulation., the required fiscal adjustment (in particular to put or keep the government debt ratio on a plausible downward path by the end of the adjustment period or keep it at prudent levels below 60% of GDP; and to bring or maintain the deficit below 3% of GDP over the medium term) should be completed in four years but may be extended over a period to up seven years if the Member State commits to a relevant set of reforms and investments. The adjustment period of Italy has been extended to seven years based on the set of reforms and investments laid out in detail in Annex II of the Council recommendation endorsing the plan of Italy.

[35] European Commission (2025) 'Debt Sustainability Monitor 2024,' *European Economy-Institutional Papers* 306.

Developments in government deficit and debt

Italy’s government deficit amounted to 3.4% of GDP in 2024, sharply down from 7.2% in 2023 due to the phase-out of sizeable tax credits for housing renovations and support measures related to the energy crisis, together with buoyant tax revenues, while interest expenditure rose. Based on the Commission Spring 2025 Forecast, it is projected to marginally decrease to 3.3% of GDP in 2025 and 2.9% of GDP in 2026, based on unchanged policies. The government debt-to-GDP ratio amounted to 135.3% at the end of 2024 (it was around 134% just before the pandemic) and, according to the Commission, it is projected to increase to 136.7% at end-2025. This debt increase, in a context of a return to primary surplus, is due to sizeable borrowing needs related to the lagged cash impact of the tax credits for housing renovations that affected previous years’ deficits, while the interest-growth-differential is less favourable than after the pandemic and now weighs on debt developments (‘snow-ball’ effect in Table A1.7).

Table A1.1: **General government balance and debt**

	Variables		2024	2025		2026	
			Outturn	APR	COM	APR	COM
1	General government balance	% GDP	-3.4	-3.3	-3.3	-2.8	-2.9
2	General government gross debt	% GDP	135.3	136.6	136.7	137.6	138.2

Source: Commission Spring 2025 Forecast (COM), Annual Progress Report (APR)

Developments in net expenditure

The net expenditure [36] growth of Italy in 2025 is forecast by the Commission [37] to be below the recommended maximum. Considering 2024 and 2025 together, the cumulative growth rate of net expenditure is also projected to be below the recommended maximum cumulative growth rate.

Table A1.2: **Net expenditure growth**

	Annual			Cumulative*		
	REC	APR	COM	REC	APR	COM
	Growth rates					
2024	n.a.	-2.1%	-2.2%	n.a.	n.a.	n.a.
2025	1.3%	1.3%	1.2%	-0.7%	-0.9%	-1.0%
2026	1.6%	n.a.	1.5%	0.9%	n.a.	0.5%

* The cumulative growth rates are calculated by reference to the base year of 2023.

Source: Council Recommendation to correct the excessive deficit in Italy, Annual Progress Report (APR) and Commission's calculations based on Commission Spring 2025 Forecast (COM).

General government defence expenditure in Italy amounted to 1.4% of GDP in 2021 and 1.2% of GDP in both 2022 and 2023 [38]. According to the Commission 2025 Spring Forecast, expenditure on defence is projected at 1.3% of GDP in 2024 and 2025.

[36] Net expenditure is defined in Article 2(2) of Regulation (EU) 2024/1263 as government expenditure net of (i) interest expenditure, (ii) discretionary revenue measures, (iii) expenditure on programmes of the Union fully matched by revenue from Union funds, (iv) national expenditure on co-financing of programmes funded by the Union, (v) cyclical elements of unemployment benefit expenditure, and (vi) one-off and other temporary measures.

[37] Commission Spring 2025 Forecast, *European Economy-Institutional Paper 318,* May 2025.

Table A1.3: **Net expenditure (outturn and forecast), annual and cumulated deviations vis-à-vis the recommendation**

	Variables		2023	2024	2025	2026
			Outturn	Outturn	COM	COM
1	Total expenditure	bn NAC	1150.0	1108.4	1149.7	1175.6
2	Interest expenditure	bn NAC	77.8	85.2	87.9	92.2
3	Cyclical unemployment expenditure	bn NAC	-2.3	-4.5	-5.9	-5.9
4	Expenditure funded by transfers from the EU	bn NAC	24.6	7.7	18.2	24.2
5	National co-financing of EU programmes	bn NAC	3.1	3.0	5.8	7.7
6	One-off expenditure (levels, excl. EU funded)	bn NAC	0.7	0.7	0.3	0.3
7=1-2-3-4-5-6	**Net nationally financed primary expenditure (before discretionary revenue measures, DRM)**	**bn NAC**	**1046.1**	**1016.4**	**1043.4**	**1057.2**
8	Change in net nationally financed primary expenditure (before DRM)	bn NAC		-29.7	27.1	13.8
9	DRM (excl. one-off revenue, incremental impact)	bn NAC		-6.7	14.6	-2.0
10=8-9	**Change in net nationally financed primary expenditure (after DRM)**	**bn NAC**		**-23.0**	**12.4**	**15.9**
11	Outturn / forecast net expenditure growth	% change		-2.20%	1.2%	1.5%
12	Recommended net expenditure growth*	% change		-1.9%	1.3%	1.6%
13=(11-12) x 7	Annual deviation	bn NAC		-3.1	-0.8	-0.8
14 (cumulated from 13)	Cumulated deviation	bn NAC		-3.1	-3.9	-4.8
15=13/17	**Annual balance**	**% GDP**		**-0.1**	**0.0**	**0.0**
16=14/17	**Cumulated balance**	**% GDP**		**-0.1**	**-0.2**	**-0.2**
17	p.m. Nominal GDP	bn NAC	2131.4	2192.2	2256.1	2316.2

* The growth rate for 2024 is not a recommendation but serves to anchor the base, as the latest year with outturn data when setting the net expenditure path is year 2023.

Source: Commission Spring 2025 Forecast and Commission's calculations

Table A1.4: **Defence expenditure**

			2021	2022	2023	2024	2025	2026
1	Total defence expenditure	% GDP	1.4	1.2	1.2	1.3	1.3	1.3
2	*of which: gross fixed capital formation*	% GDP	0.4	0.3	0.3	0.4	0.4	0.4

Source: Eurostat (COFOG), Commission Spring 2025 Forecast

[38] Eurostat, government expenditure by classification of functions of government (COFOG).

Table A1.5: **Macroeconomic developments and forecasts**

	Variables		2024	2025		2026	
			Outturn	APR	COM	APR	COM
1=7+8+9	**Real GDP**	**% change**	**0.7**	**0.6**	**0.7**	**0.8**	**0.9**
2	Private consumption	% change	0.4	1.0	1.2	1.0	1.1
3	Government consumption expenditure	% change	1.1	1.5	0.9	0.5	0.9
4	Gross fixed capital formation	% change	0.5	0.6	0.8	1.5	1.5
5	Exports of goods and services	% change	0.4	0.1	0.9	2.0	1.7
6	Imports of goods and services	% change	-0.7	1.2	1.7	2.9	2.4
	Contributions to real GDP growth						
7	- Final domestic demand	pps	0.5	0.9	1.0	1.0	1.1
8	- Change in inventories	pps	-0.2	0.0	-0.1	0.1	0.0
9	- Net exports	pps	0.4	-0.3	-0.2	-0.2	-0.2
10	Output gap	% pot GDP	1.0	0.7	0.6	0.6	0.7
11	Employment	% change	1.6	0.6	0.9	0.7	0.3
12	Unemployment rate	%	6.5	6.1	5.9	5.9	5.9
13	Labour productivity	% change	-0.9	0.0	-0.3	0.1	0.6
14	HICP	% change	1.1	2.1	1.8	1.9	1.5
15	GDP deflator	% change	2.1	2.3	2.2	2.2	1.7
16	Compensation of employees per head	% change	3.4	2.5	3.4	2.9	2.5
17	Net lending/borrowing vis-à-vis the rest of the world	% GDP	0.9	n.a.	1.6	n.a.	2.0

Source: Commission Spring 2025 Forecast (COM), Annual Progress Report (APR)

Table A1.6: **General government budgetary position**

	Variables (% GDP)	2024	2025		2026	
		Outturn	APR	COM	APR	COM
1=2+3+4+5	**Revenue**	**47.1**	**47.5**	**47.7**	**n.a.**	**47.9**
	of which:					
2	- Taxes on production and imports	14.1	14.0	14.0	n.a.	13.9
3	- Current taxes on income, wealth, etc.	15.7	15.2	15.2	n.a.	15.1
4	- Social contributions	12.8	13.4	13.5	n.a.	13.5
5	- Other (residual)	4.6	4.9	5.0	n.a.	5.3
8=9+16	**Expenditure**	**50.6**	**50.8**	**51.0**	**n.a.**	**50.8**
	of which:					
9	- Primary expenditure	46.7	46.9	47.1	n.a.	46.8
	of which:					
10	- Compensation of employees	9.0	8.9	8.9	n.a.	8.7
11	- Intermediate consumption	5.8	5.9	5.9	n.a.	6.0
12	- Social payments	22.7	22.8	22.8	n.a.	22.7
13	- Subsidies	1.7	1.5	1.3	n.a.	1.4
14	- Gross fixed capital formation	3.5	3.6	3.8	n.a.	3.9
15	- Other	4.0	4.2	4.4	n.a.	4.0
16	- Interest expenditure	3.9	3.9	3.9	n.a.	4.0
18=1-8	**General government balance**	**-3.4**	**-3.3**	**-3.3**	**-2.8**	**-2.9**
19=1-9	**Primary balance**	**0.4**	**0.7**	**0.6**	**n.a.**	**1.1**
20	Cyclically adjusted balance	-4.0	n.a.	-3.6	n.a.	-3.2
21	One-offs	0.2	0.1	0.1	n.a.	0.1
22=20-21	**Structural balance**	**-4.1**	**-3.8**	**-3.7**	**n.a.**	**-3.4**
23=22+16	Structural primary balance	-0.3	0.2	0.2	n.a.	0.6

Source: Commission Spring 2025 Forecast (COM), Annual Progress Report (APR)

Table A1.7: **Debt developments**

	Variables	2024	2025		2026	
		Outturn	APR	COM	APR	COM
1	**Gross debt ratio* (% of GDP)**	**135.3**	**136.6**	**136.7**	**137.6**	**138.2**
2=3+4+8	Change in the ratio (pps. of GDP)	0.7	1.3	1.3	n.a.	1.5
	Contributions**					
3	**Primary balance**	**-0.4**	**-0.7**	**-0.6**	**n.a.**	**-1.1**
4≈5+6+7	**'Snow-ball' effect**	**0.2**	**0.1**	**0.1**	**n.a.**	**0.4**
	of which:					
5	- Interest expenditure	3.9	3.9	3.9	n.a.	4.0
6	- Real growth effect	-1.0	-0.8	-0.9	n.a.	-1.3
7	- Inflation effect	-2.8	-3.0	-3.0	n.a.	-2.3
8	**'Stock-flow' adjustment**	**1.0**	**1.8**	**1.9**	**n.a.**	**2.2**

* End of period. ** The 'snow-ball' effect captures the impact of interest expenditure on accumulated general government debt, as well as the impact of real GDP growth and inflation on the general government debt-to-GDP ratio (through the denominator). The stock-flow adjustment includes differences in cash and accrual accounting (including leads and lags in Recovery and Resilience Facility grant disbursements), accumulation of financial assets, and valuation and other residual effects.
Source: Commission Spring 2025 Forecast and Commission's calculation (COM), Annual Progress Report (APR)

Table A1.8: **RRF – Grants**

	Revenue from RRF grants (% of GDP)							
		2020	2021	2022	2023	2024	2025	2026
1	RRF grants as included in the revenue projections	n.a.	0.2	0.6	0.8	0.2	0.5	0.9
2	Cash disbursements of RRF grants from EU	n.a.	0.5	1.0	0.6	0.2	0.3	0.8

	Expenditure financed by RRF grants (% of GDP)							
		2020	2021	2022	2023	2024	2025	2026
3	Total current expenditure	0.0	0.0	0.0	0.1	0.1	0.2	0.3
4	Gross fixed capital formation	n.a.	0.0	0.0	0.1	0.1	0.2	0.4
5	Capital transfers	n.a.	0.1	0.6	0.6	0.0	0.1	0.1
6=4+5	Total capital expenditure	n.a.	0.2	0.6	0.7	0.1	0.3	0.6

	Other costs financed by RRF grants (% of GDP)							
		2020	2021	2022	2023	2024	2025	2026
7	Reduction in tax revenue	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	Other costs with impact on revenue	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
9	Financial transactions	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Source: Annual Progress Report

Table A1.9: **RRF - Loans**

	Cash flow from RRF loans projected in the Plan (% of GDP)							
		2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
1	Disbursements of RRF loans from EU	n.a.	0.1	0.2	0.4	0.6	1.3	2.4
2	Repayments of RRF loans to EU	n.a.	0.9	1.1	1.1	0.7	1.0	1.0

	Expenditure financed by RRF loans (% of GDP)							
		2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
3	Total current expenditure	0.0	0.0	0.0	0.0	0.1	0.1	0.2
4	Gross fixed capital formation	0.0	0.1	0.1	0.2	0.4	0.7	1.6
5	Capital transfers	0.0	0.0	0.0	0.1	0.2	0.5	0.5
6=4+5	Total capital expenditure	0.0	0.1	0.1	0.3	0.6	1.1	2.1

	Other costs financed by RRF loans (% of GDP)							
		2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
7	Reduction in tax revenue	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	Other costs with impact on revenue	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
9	Financial transactions	n.a.	n.a.	0.0	0.0	0.0	0.0	0.1

Source: Annual Progress Report

Implementation of the set of reforms and investments underpinning the extension of the adjustment period

Table A1.10 includes information on progress towards implementation of the set of reforms and investments underpinning the extension of the adjustment period that Italy committed to deliver in its medium-term fiscal-structural plan as endorsed by the Council.

Taking into account the information provided by Italy in its Annual Progress Report, the Commission finds that the reforms and investments underpinning an extension that were due by the 30 April have been implemented or are currently under assessment in the context of a payment request under the RRF (for details, see Table A1.10).

The set of reforms and investments underpinning the extension of the adjustment period is composed of several commitments from the RRP, as well as some new reforms and investments. The R&Is underpinning an extension of the adjustment period, in addition to those included in the RRP, include reforms aimed at ensuring the implementation of the insolvency reform and improving the efficiency of the overall justice system. An improvement of the business environment is expected thanks to measures which are aimed at increasing R&D expenditure, rationalising incentives for firms, adopting annual competition laws and strengthening the legal framework for SMEs. The reinforcement of the quality of public spending is expected to be achieved by strengthening the framework for the control of public expenditure for central public administrations. The effectiveness of the public administration at central and local levels is expected to be improved by enhancing human capital management, simplifying administrative procedures and digitalising public services. In the area of childcare, the commitments are aimed at increasing yearly public expenditure to cover for operating costs, improving the availability of childcare places and their affordability. In the area of taxation, measures are aimed at aligning the taxation system with the objectives of supporting family burdens, economic growth, and ecological transition within a multi-year perspective and at reducing the tax burden on low-and middle-income families and support for employment. Concerning tax compliance, commitments are aimed at increasing revenues from prevention and enforcement activities.

All the milestones and targets included in the RRP which were due by 30 April have been implemented. More specifically, legislation entered into force which strengthened the trial offices, including by means of incentives to attract and retain the units of personnel hired, to support less efficient courts in reducing the civil justice backlog and to reward judicial offices that achieve the specific annual objectives of reducing the number of pending cases in the civil justice system. At the end of 2023, the government adopted its annual competition law further liberalizing several sectors, including electricity, antitrust (merger control), retail activities and pharmaceuticals. Italy set up and is implementing a tool for scanning and monitoring administrative capacity gaps at all levels of the government, created a platform for the reskilling of existing civil servants, and streamlined the recruitment process of new ones through standardised job profiles and a single recruitment platform. The spending review framework was revised and the spending review for the year 2023 has been completed. Several provisions for encouraging tax compliance and improving tax audits and controls have been introduced, the number of “compliance letters” together with the corresponding revenues generated have been increased while the number of “false positive” compliance letters has declined, and the operational capacity of the tax administration has been improved. Reforms and investments in new areas compared to the RRP are properly advancing. In the area of taxation, the 2025 budget already introduced some provisions well in advance of the first deadline in Q4 2026. In particular, the 2025 budget made permanent the labour tax wedge cut introduced in 2024. In relation to the review of the scope of tax expenditures, some personal income tax deductions have been revised in a selective manner — by limiting them for high income earners — and tax credits for business investments have been amended. Finally, the government is working on updating property records through the new Integrated Land System (SIT) and has begun identifying and registering previously unlisted buildings, aiming for completion by 2027. It is also preparing to adjust cadastral values for properties that have undergone improvements, especially those subsidised by public funds. In the area of tax compliance, the 2025 budget already introduced some provisions well in advance of the Q4 2026 deadline. Namely, those provisions are related to the mandatory inclusion of property identification codes for tourist rentals, compulsory integration of electronic payments with digital cash registers, and requirements for traceable payments to qualify for certain tax deductions.

Table A1.10:**Implementation of reforms and investment underpinning the extension**

Measure	Key steps	Recommended implementation date	Status (COM's assessment)
Reforms and investment in the area of justice Adding to RRP milestones and targets related to M1C1.R1.4 - Reform of civil justice	RRP milestones and targets related to M1C1.R1.4 - Reform of civil justice*	Q4-2021; Q1-2024; Q4-2024; Q2-2026	Reported as completed – under assessment**
	Take actions to ensure and strengthen the implementation of the insolvency reform	Q2 2027	
	Carry out an impact assessment and adopt corrective actions where needed	Q4 2027	
	Reduction of backlog cases for the Civil Ordinary Courts (first instance)	Q4 2028	
	Reduction of backlog cases for the Civil Court of Appeal (second instance)	Q4 2028	
	Reduction in the length of civil proceedings	Q4 2028	
	Ensure adequate personnel for the office of trial and the technical administrative personnel	Q4-2026; Q4-2027; Q4-2028; Q4-2029	
Reforms and investment in the area of tax administration Adding to RRP milestones and targets related to M1C1.R1.12 - Reform of the tax administration	RRP milestones and targets related to M1C1.R1.12 - Reform of the tax* administration	Q4-2021; Q2-2022; Q4-2022; Q2-2023; Q4-2023; Q2-2024; Q4-2025; Q2-2026	Completed
	Achievement of annual performance targets that progressively ensures a reduction in VAT repayment times	Q4-2025; Q4-2027; Q4-2029	
	Achievement of annual performance targets that progressively ensures higher revenues from prevention and enforcement activities	Q4-2027; Q4-2029.	
	Strengthen the fight against tax evasion resulting from omitted declarations, by (i) in the event of detected tax evasion, removing tax advantages ("compensazione orizzontale", "rimborsi di imposte", "regimi premiali") and, where relevant, suspending the exercise of the public concessions; (ii) integrating national short-term rental codes into the databases for tax risk analyses conducted by the Revenue Agency; (iii) introducing compulsory connections between automatic cash registers and electronic payments for all businesses; (iv) requiring traceable means of payments for the tax deductibility of expenses related to transport, food and accommodation	Q4 2026	
Reforms and investment in the area of business environment Adding to RRP milestones and targets related to M1C2.R2 - Annual Competition Laws	RRP milestones and targets related to M1C2.R2 - Annual Competition Laws*	Q4 2022; Q4 2023; Q4 2024; Q4 2025	Reported as completed – under assessment**
	Increase public R&D spending	Q4 2025; Q4 2026; Q4 2027; Q4 2028; Q4 2029	
	Rationalization and simplification of incentives for firms, following up on reform M1C2-R3 in the RRP	Q2 2028	
	Adoption of Annual Competition Laws	Q4 2026; Q4 2027; Q4 2028; Q4 2029	
	Adoption of a framework law on SMEs on annual basis, based on an impact assessment, and entry into force of the implementing instruments	Q4 2026; Q4 2027; Q4 2028	
Reforms and investment in the area of public administration and childcare Adding to RRP milestones and targets related to M1C1.R1.9 - Reform of the public administration	RRP milestones and targets related to M1C1.R1.9 - Reform of the public administration*	Q2-2021; Q4-2021; Q2-2022; Q4-2022; Q2-2023; Q4-2023; Q2-2024; Q4-2024; Q2-2025; Q2-2026	Reported as completed – under assessment**
	Implementation of vertical mobility	Q4 2026	
	Implementation of horizontal mobility	Q4 2026	
	Valorization of performance-based framework	Q4 2026	
	Ensure adequate financial coverage for operating available childcare facilities	Q4 2027	
	Ensure adequate supply of childcare services in line with the Barcelona Target and the national target for 2027, taking into account regional disparities	Q4 2027	
	Increase the affordability of childcare	Q4 2027	
Reforms and investment in the area of public expenditure Adding to RRP milestones and targets related to M1C1.R1.13 - Reform of the spending review framework	RRP milestones and targets related to M1C1.R1.13 - Reform of the spending review framework*	Q4 2021; Q2 2022; Q4 2022; Q4 2023; Q2 2024; Q2 2025; Q2 2026	Completed
	Implementation of yearly spending reviews based on the national legal framework	Q2 2027; Q2 2028; Q2 2029	
	Strengthened competence of the Ministry of Economy and Finance to conduct inspections on public spending management of all entities receiving public support, including subnational authorities and state-owned enterprises	Q1 2028	
	Reform of the framework for the control of public expenditure for central public administrations, providing for enhanced financial responsibility of administrations for the management of resources as well as strengthened programming and enhanced monitoring and evaluation of policy outputs and impacts	Q1 2026; Q1 2028	
Reforms and investment in the area of taxation	Simplify the tax system through the review of the scope of tax expenditures	Q4 2028	
	Reduction of the labour tax wedge	Q4 2026	
	(a) Mapping properties that are not included in cadastral register; (b) Updating cadastral values for property taxes for buildings that have undergone energy efficiency and/or structural improvement interventions, financed in whole or in part by public funds, since 2019.	Q2 2027; Q2 2028	
Reforms and investment in the area of rationalization of state-owned enterprises	Take actions to ensure and strengthen the implementation of the legal framework on State Owned Enterprises	Q4 2027	

The progress status of each backward-looking key step (i.e. those planned to be achieved by 30 April) can be classified as either 'completed' or 'not completed'. The status of forward-looking key steps can be classified as 'completed', 'on track', or 'delayed'.
* These measures are included in Italy's RRP.
** These key steps correspond to milestones and targets of Italy's RRP. For milestones and targets which were due by Q4 2025 the assessment is still pending in the context of the 7th payment request under the RRF and the table does not prejudge its assessment.
Source: Italy's Annual Progress Report and the Commission's assessment

Cost of ageing

Total age-related spending in Italy is projected to rise from about 27% of GDP in 2024 to around 28% in 2040 but decline to around 25% by 2070 (see Table A1.11). The overall decrease by 2070 is driven by pension and education spending, which together more than offset the expected increase in healthcare and long-term care spending. As a result, total age-related spending, which was about 3 pps of GDP higher than the EU average in 2024, would be similar to the EU average in 2070.

Public pension spending is projected to increase in the medium term but start to decline steadily thereafter. In 2024, Italy had the highest pension expenditure-to-GDP ratio in the EU and this ratio would rise by an additional 1 pp by 2040. In the longer term, spending would fall, though, to below the current level, with a projected decrease of 2.4 pps by 2070 compared to the 2024 level.

Public healthcare ([39]) expenditure is projected at 5.8% of GDP in 2024 (below the EU average of 6.6%) and is expected to increase by 0.5 pps by 2040 and by a further 0.1 pp by 2070. The overall increase is driven by an ageing population but is significantly constrained by a legislated constant nominal growth path for public healthcare expenditure until 2026.

Public expenditure ([40]) on long-term care is projected at 1.5% of GDP in 2024 (slightly below the EU average of 1.7%) and is expected to increase by 0.3 pps of GDP by 2040 and by a further 0.3 pps of GDP by 2070. The projected increase is due to an ageing population and budgetary cost containment measures included in the projections until 2026.

Table A1.11:**Projected change in age-related expenditure in 2024-2040 and 2024-2070**

	age-related expenditure 2024 (% GDP)	change in 2024-2040 (pps GDP) due to:					age-related expenditure 2040 (%GDP)	
		pensions	*healthcare*	*long-term care*	*education*	*total*		
IT	27.1	*1.0*	*0.5*	*0.3*	*-0.6*	***1.1***	28.3	**IT**
EU	24.3	*0.5*	*0.3*	*0.4*	*-0.3*	***0.9***	25.2	EU

	age-related expenditure 2024 (% GDP)	change in 2024-2070 (pps GDP) due to:					age-related expenditure 2070 (%GDP)	
		pensions	*healthcare*	*long-term care*	*education*	*total*		
IT	27.1	*-2.4*	*0.6*	*0.6*	*-0.7*	***-1.9***	25.3	**IT**
EU	24.3	*0.2*	*0.6*	*0.8*	*-0.4*	***1.3***	25.6	EU

Source: 2024 Ageing Report (EC/EPC).

[39] Key performance characteristics, recent reforms and investments are discussed in Annex 11 'Health and health systems'.

[40] The quality and the accessibility of the Italian long-term care system are covered in Annex 9 'Social policies'.

National fiscal framework

The Parliamentary Budget Office (PBO) of Italy is a relatively well-resourced independent fiscal institution (IFI) with a broad mandate. It endorses the macroeconomic forecasts of the government, and the government has to justify publicly any deviations from the fiscal institution's forecasts. In addition, The PBO assesses the budgetary forecasts before the adoption in the Parliament of the budgetary planning documents. However, despite a number of Memoranda of Understanding, the PBO still reports issues with access to information. In contrast to the PBO’s participation in parliamentary hearings, which tend to attract media attention, the policy dialogue with the government often takes place informally, giving no particular media echo. The PBO leadership regularly gives interviews and since 2016, it has a spokesperson, acting as a press officer. It also has a well-organised website with some infographics.

Table A1.12:**Fiscal Governance Database Indicators**

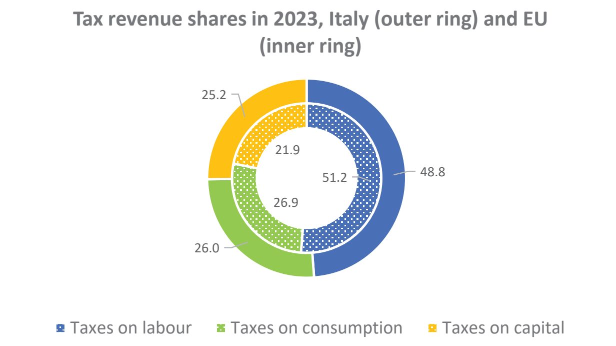
2023	**Italy**	**EU Average**
Country Fiscal Rule Strength Index (C-FRSI)	19.41	14.52
Medium-Term Budgetary Framework Index (MTBFI)	0.78	0.73

The Country Fiscal Rule Strength Index (C-FRSI) shows the strength of national fiscal rules aggregated at the country level based on i) the legal base, ii) how binding the rule is, iii) monitoring bodies, iv) correction mechanisms, and v) resilience to shocks. The Medium-Term Budgetary Framework Index (MTBFI) shows the strength of the national MTBF based on i) coverage of the targets/ceilings included in the national medium-term fiscal plans; ii) connectedness between these targets/ceilings and the annual budgets; iii) involvement of the national parliament in the preparation of the plans; iv) involvement of independent fiscal institutions in their preparation; and v) their level of detail. A higher score is associated with higher rule and MTBF strength.
Source: Fiscal Governance Database

This annex provides an indicator-based overview of Italy's tax system. It includes information on: (I) the tax mix; (ii) competitiveness and fairness aspects of the tax system; and (iii) tax collection and compliance.

Italy's tax revenues as a percentage of GDP are relatively high, with the largest contribution coming from labour taxation. Table A2.1 shows that Italy's tax revenues as a percentage of GDP were above the EU average in 2023 and have been at a stable level in recent years. Labour taxes expressed as a percentage of GDP were also slightly above the EU average. However, revenues from consumption taxes as a share of GDP were close to the EU aggregate in 2023, despite relatively low VAT revenues in Italy due to the widespread use of reduced VAT rates and VAT exemptions. Expressed as a percentage of GDP, Italy's revenues from recurrent taxes on property, which are among the taxes least detrimental to growth, were above the EU aggregate. However, first residences are exempt for almost all property taxation and the values used for property taxation have not been systematically updated, so to bring them closer to market values. Environmental tax revenues slightly increased between 2022 and 2023 (from 2.3% of GDP to 2.5%). Furthermore, pollution and resources taxes only accounted for 1.1% of environmental taxes in 2023, even though pollution and resources taxes are key for the application of the 'polluter pays' principle. Italy is implementing environmental taxes, and already applies taxes on NOx and SO2 emissions, aircraft noise, waste landfilling and incineration. Italy applies fees for food safety, wastewater, and water extraction rather than environmental taxes stricto sensu. The tax on the single use plastics has been delayed until July 2026. There remains scope to implement taxes on fertilisers and pesticides. The Italian government estimates that the level of environmentally harmful subsidies (EHS) in Italy reached EUR 24.2 billion in 2022, of which EUR 17.1 billion were fossil-fuel subsidies [41]. The reduction of these subsidies is one of the reforms in Italy's recovery and resilience plan, which aims to reduce their value by at least EUR 2 billion in 2026 and by a further EUR 3.5 billion at least by 2030. The 2025 budget law addresses two EHSs: the reduced VAT rate on waste disposal and the taxation of company car fringe benefits. The total economic value of these removed subsidies is estimated at EUR 1.34 billion. The 2025 budget law provides for the gradual phase out of the differential tax treatment between diesel and gasoline, which is set to be enacted by an implementing decree.

Graph A2.1: **Tax revenue shares in 2023**



Source: Taxation Trends Data, DG TAXUD

Corporate-tax revenues as a share of GDP have increased in the last 20 years, despite a decline in the corporate-tax rate over this period. Italy's top statutory corporate-income-tax (CIT) rate of 24% (+3.9% of IRAP)[42] is among the highest in the EU (where the average CIT rate is around 21%). Italy's forward-looking effective average tax rate (EATR) (23.9%) is also above the EU average of around 19%. A tax benefit temporarily introduced for 2024 in December 2023 has now been extended for the period 2025-2027 with the 2025 Budget Law. This benefit includes a greater tax deduction for the cost of 'dependent' workers, ranging from 120% to 130% depending on the category of newly hired employees (e.g. women, young workers, former beneficiaries of the citizenship income benefit). Additionally, a reduction in the CIT rate from 24% to 20% is applicable to CIT taxpayers that meet two specific conditions. The first condition is that at least 80% of profits registered for 2024 must

[41] MASE, Relazione alle Camere e al CITE - Esiti dell'aggiornamento del Catalogo e le proposte per la progressiva eliminazione dei sussidi ambientalmente dannosi e per la promozione dei sussidi ambientalmente favorevoli, 2024 https://www.mase.gov.it/sites/default/files/archivio/allegati/sviluppo_sostenibile/CSA6_Relazione.pdf), p.22.

[42] Italian corporate entities are subject to a corporate income tax (24%) and to a regional productive activities tax, known as *imposta regionale sulle attività produttive* or IRAP (3.9%), where the regions have the right to increase the rate, up to a maximum of 0.92%, also differentiating it by sectors of activity or categories of taxpayers.

Table A2.1: **Taxation Indicators**

		Italy					EU-27				
		2010	**2021**	**2022**	**2023**	**2024**	**2010**	**2021**	**2022**	**2023**	**2024**
Tax structure	Total taxes (including compulsory actual social contributions) (% of GDP)	41,2	42,2	41,7	41,4		37,8	40,2	39,7	39,0	
By tax base	Taxes on labour (% of GDP)	21,4	21,3	20,3	20,2		19,8	20,5	20,1	20,0	
	of which, social security contributions (SSC, % of GDP)	12,9	13,1	12,8	12,4		12,9	13,0	12,7	12,7	
	Taxes on consumption (% of GDP)	10,7	11,2	11,0	10,8		10,9	11,2	10,9	10,5	
	of which, value added taxes (VAT, % of GDP)	6,0	6,6	6,9	6,6		6,8	7,3	7,4	7,1	
	Taxes on capital (% of GDP)	9,2	9,7	10,4	10,4		7,1	8,5	8,7	8,5	
Some tax types	Personal income taxes (PIT, % of GDP)	11,2	12,1	11,3	11,8		8,6	9,6	9,4	9,3	
	Corporate income taxes (CIT, % of GDP)	2,3	1,9	2,7	2,7		2,2	2,9	3,2	3,2	
	Total property taxes (% of GDP)	1,8	2,4	2,3	2,1		1,9	2,2	2,1	1,9	
	Recurrent taxes on immovable property (% of GDP)	0,6	1,4	1,3	1,2		1,1	1,1	1,0	0,9	
	Environmental taxes (% of GDP)	2,9	3,0	2,3	2,5		2,5	2,4	2,1	2,0	
	Effective carbon rate in EUR per tonne of CO_2 equivalents	NA	102,8	NA	100,1		NA	86,0	NA	84,8	
Progressivity & fairness	Tax wedge at 50% of average wage (single person) (*)	40,7	36,2	34,4	33,1	33,0	33,9	31,8	31,5	31,5	31,8
	Tax wedge at 100% of average wage (single person) (*)	47,2	46,0	45,6	45,5	47,1	40,9	39,9	39,9	40,2	40,3
	Corporate income tax - effective average tax rates (1) (*)	27,8	23,9	23,9	23,9		21,3	19,3	19,1	18,9	
	Difference in Gini coefficient before and after taxes and cash social transfers (pensions excluded from social transfers) (2) (*)	5,9	8,0	7,9	7,6		8,6	8,2	7,9	7,7	
Tax administration & compliance	Outstanding tax arrears: total year-end tax debt (including debt considered not collectable) / total revenue (in %) (*)		199,9	181,0				35,5	32,6		
	VAT gap (% of VAT total tax liability, VTTL) (**)		10,9	10,6	14,7			6,6	7,0		

(1) Forward-looking effective tax rate (KPMG)
(2) A higher value indicates a stronger redistributive impact of taxation.
(*) EU-27 simple average.
(**) Forecast value for 2023. For more details on the VAT gap, see European Commission, Directorate-General for taxation and Customs Unions, VAT gap in the EU - 2024 Report, https://op.europa.eu/en/publication-detail/-/publication/298d43e2-bd28-11ef-91ed-01aa75ed71a1/language-en
Forecasts for the VAT gap need careful consideration. In Italy, the National Independent Commission on Tax Evasion's calculations will be reviewed following recent modifications of national accounts by the National Institute of Statistics.
For more data on tax revenues as well as the methodology applied, see the Data on Taxation webpage, https://taxation-customs.ec.europa.eu/taxation/economic-analysis/data-taxation-trends_en
Source: European Commission, OECD

be retained in the firm as reserves. The second condition is that at least 30% of these retained profits, and no less than 24% of the profits registered in 2023, must be used to finance new investments in instrumental goods for productive structures located in Italy. These goods must fall under the categories of 'Transition 4.0 and 5.0', with a minimum investment amount of EUR 20 000.

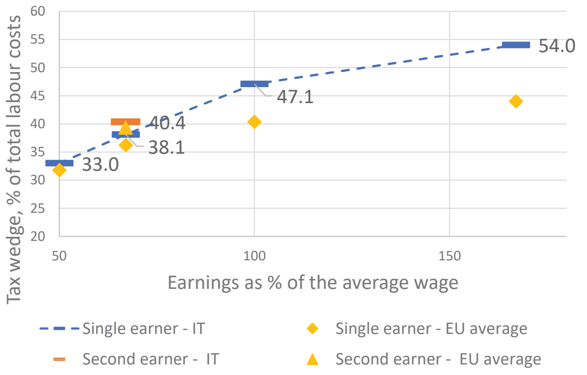
Italy's R&D investment as a share of GDP is much lower than the European average and the gap has been increasing over time. In 2023, Italy's R&D expenditure as a percentage of GDP stood at 1.31% compared with an EU average of 2.22% ([43]). Public funds support business investments in R&D in Italy mainly through tax credits and by facilitating access to credit for micro, small and medium-sized enterprises. However, these types of policies, which have been in place for a long time, appear to have had little effect on growth and innovation, providing some insight into the effectiveness of the public measures.

Italy offers several tax credits to support the green and digital transition. In 2022, Italy released a new 'patent box' relief, making it possible to increase by 110% the deduction of R&D costs incurred in the creation and development of software, patents and designs.

Italy performs below average in venture-capital financing (as a percentage of GDP) within the EU but has experienced strong growth since 2013, especially compared with other large EU economies and the US. In 2023 venture capital financing in Italy was equivalent to 0.026% of GDP, whilst in 2022, it was equivalent to 0.035% of GDP.

([43]) https://ec.europa.eu/eurostat/statistics-explained/index.php?title=R%26D_expenditure

Graph A2.2: **Tax wedge for single and second earners, % of total labour costs, 2024**



The tax wedge for second earners assumes a first earner at 100% of the average wage and no children. For the full methodology, see OECD, 2016, Taxing Wages 2014-2015.
Source: European Commission

The labour-tax burden in Italy remains high despite recent reforms. In 2025, the 2024 reduction of personal-income tax brackets from four to three (23% for the lower-income bracket, 35% for the medium-income bracket, and 43% for the higher-income bracket) was made permanent, and the basic tax allowance for dependent workers was increased to EUR 8 500. Graph 13.2 shows that the labour-tax wedge ([44]) for Italy in 2024 was still higher than the EU average for single persons at different wage levels (50%, 67%, 100% and 167% of the average wage). Second earners at a wage level of 67% of the average wage, whose spouses earn the average wage, also faced a tax wedge higher than the EU average. The tax wedge for second earners was higher than the tax wedge for single persons at the same level, but this difference was less pronounced than for the EU average. According to estimates by the Observatory on the Italian Public Accounts (CPI) of the Catholic University of Milan ([45]), in 2022 fiscal drag (i.e. taxpayers moving into higher tax brackets, because the thresholds for these brackets have not been adjusted upwards to account for inflation) accounted for 0.6% of total personal-income tax revenues (i.e. EUR 360 million). For 2023, the fiscal drag has been estimated to account for EUR 450 million. Overall, Italy's labour tax burden is relatively progressive. In 2023, the reduction of income inequality through the tax-and-benefit system (as measured by the corresponding change in the Gini coefficient) was the same as the EU average.

Tax evasion in Italy remains high, although it has declined in recent years thanks to the many measures the government has taken. Many measures promoting tax compliance were implemented in 2022 as part of the recovery and resilience plan, such as the extension of electronic invoicing, compulsory acceptance of electronic payments, and interlinked datasets for targeting controls. Additional measures have been launched with the 2025 Budget Law in line with Italy's medium-term fiscal-structural plan, such as: (i) the mandatory connection between automatic cash registers and electronic payments for all businesses; and (ii) the use of traceable payment methods for the tax deductibility of expenses related to transport, food and accommodation.

A new scheme allowing small taxpayers to agree their tax liabilities in advance will warrant close monitoring. In 2024, Italy introduced an innovative scheme (the *Concordato Preventivo Biennale*) ([46]) allowing small taxpayers (both individuals and partnerships) to agree with the tax authority their tax liability for the following two years. For each taxpayer, the relevant tax liability is proposed by the tax authority based on a variety of parameters, including sector analysis and economic forecasts, while eligible taxpayers need to comply with several requirements. Overall, the take-up of the scheme appears rather low so far. Although the scheme aims to improve the certainty of tax obligations, incentivise investment, and increase declared income over time, its actual impact on tax evasion will need to be closely monitored ([47]). To promote tax compliance among medium-to-large taxpayers (those with a turnover

[44] The tax wedge is defined as the sum of personal income taxes and employee and employer social-security contributions net of family allowances, expressed as a percentage of total labour costs (the sum of the gross wage and social-security contributions paid by the employer).

[45] Osservatorio Conti Pubblici Italiani 2023. "Gli effetti del Fiscal Drag nell'ultimo biennio".

[46] "CONCORDATO PREVENTIVO BIENNALE" is a system to calculate tax base not only for individual taxpayers and partnerships but also for limited liability companies. Ltds can adhere to CPB if their total revenues are up to € 5.164.569,00.

[47] Participation in the *Concordato Preventivo Biennale* was possible only until 12 December, 2024. According to the preliminary data, out of the 4.5 million taxpayers that expressed interest in the scheme, approximately only 585 000 taxpayers (i.e. those claiming the proportional tax regime and those eligible based on the ISA index) agreed to the tax administration's proposal.

exceeding EUR 750 million in 2024), the government has also introduced a new cooperative tax-compliance scheme based on a certified tax control framework offering greater benefits than the previous scheme. The perception of business regulation and taxation as an investment obstacle, at 34.1%, is among the highest in the EU.

Another indicator of the effectiveness of Italy's tax administration is how it handles dispute resolution. Tax administrations often participate in mutual agreement procedures (MAPs) to resolve disputes. The number of MAPs that take place in a given Member State is typically linked to the size and structure of the economy but may also indicate whether the tax system of the country is administered in an effective way. Italy had one of the highest pending MAP cases in the EU in 2023 (436 cases, which is considerably higher than the EU average). Although the recommended benchmark for closing these cases stands at 24 months, the average time taken in Italy is 53 months which is the longest in the EU.

Italy's research and innovation (R&I) potential remains untapped, despite some improvement in recent years. According to the 2024 European Innovation Scoreboard, Italy is still a 'moderate innovator', whose performance is 89.6% of the EU average [48]. The country's R&D intensity [49] is decreasing and amounted to 1.31% in 2023, far below EU levels (2.24%). Italy recently committed to increasing public R&D intensity by 2029 [50]. Although most small and medium-sized enterprises (SMEs) have at least a basic level of digital intensity [51] and most firms use key technologies like cloud services, contributing to the country's Digital Decade targets, gaps remain in the uptake of artificial intelligence (AI) [52]. Italy's business innovation, underpinned by an economic structure based on small businesses and traditional sectors, still faces challenges to attract investment, notably in the high-tech segments, and needs a stronger talent pool to bridge the innovation gap.

Science and innovative ecosystem

Despite good scientific performance, low public investment in research and development (R&D) and insufficiently attractive research careers hamper Italy's scientific potential. The country's share of scientific publications among the top 10% most cited ones worldwide – an indicator of scientific excellence – is above the EU average (11.2% of total publications of the country vs 9.6% in 2021). However, Italy's scientific potential is not entirely exploited for different reasons. First, public R&D intensity has remained stagnant in the last decade and amounted to 0.52% of GDP in 2023, far below the EU average (0.72%), as shown in Graph A3.1 [53]. Additionally, the number of researchers employed by the public sector per capita is still low (3.7 researchers per thousand of the active population vs EU average of 4.2 in 2023 [54]. Research careers in Italy are less attractive compared to other EU countries due to low remuneration [55] and historically high job insecurity [56], especially in the early stages of careers. The latest data on the Starting Grants awarded by the European Research Council shows that, while Italian grantees were the second best placed among all competitors, grantees from Italian host institutions were only in fifth place [57]. The country's recovery and resilience plan (RRP) includes a measure to reform research careers [58] as well as investments to enhance the pool of human resources in science and technology [59], and its medium-term fiscal-structural plan contains a commitment to increase Italy's public R&D intensity to 0.6% of GDP by 2029. Additional policy interventions on research careers, such as improving job security as well as guaranteeing adequate financial resources to public research, are important to ensure the long-term sustainability of the R&I system beyond the end of RRP support in 2026.

[48] 2024 European Innovation Scoreboard, country profile: Italy ec.europa.eu. The scoreboard provides a comparative analysis of innovation performance in EU countries, including the relative strengths and weaknesses of their national innovation systems (also compared to the EU average).

[49] Defined as gross domestic expenditure on R&D as a percentage of GDP.

[50] Italy's medium-term fiscal-structural plan, 'Italia 2025-2029 – Piano strutturale di bilancio di medio termine', approved in September 2024.

[51] The Digital Intensity Index is a composite indicator, derived from the EU survey on ICT usage and e-commerce in enterprises. The indicator is calculated based on 12 variables.

[52] The Digital Decade policy programme sets out a pathway for the EU's digital transformation, including concrete commitments from Member States to commonly achieve objectives (e.g. competitiveness, resilience, sovereignty) and digital targets by 2030.

[53] This data includes the government and the higher education sector.

[54] Eurostat (2023). Researchers (full-time equivalents) employed by the public sector (government+higher education institutions) per thousand of the active population.

[55] Civera, A., Lehmann, E. E., Meoli, M., & Paleari, S. P. (2023). The Attractiveness of European Higher Education Systems: A Comparative Analysis of Faculty Remuneration and Career Paths, https://escholarship.org/uc/item/08x00432.

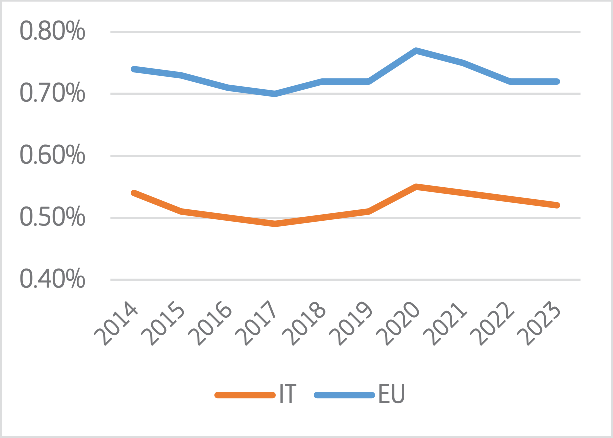
[56] 'Indagine conoscitiva sulla condizione studentesca nelle università e il precariato nella ricerca universitaria', VII Commissione permanente, Senato della Repubblica (2021).

[57] The European Research Council, 'ERC Starting Grants 2024 Statistics', https://erc.europa.eu/sites/default/files/2024-09/erc-2024-stg-statistics.pdf, September 2024.

[58] RRP reform 'Implementation of R&I support measures to promote simplification and mobility'.

[59] Such as the RRP investment on young researchers.

Graph A3.1: **Public R&D intensity 2014-2023**



Source: DG R&I, based on Eurostat, 2014-2023

Business innovation

The low private R&D investment, concentrated in more traditional sectors, showcases the lack of dynamism in Italy's economic structure. Italy has a significant employment share in low productivity micro businesses [60]. Their small size is often a hurdle for companies to adopt new technologies [61]. The economic system's limited innovation is also accentuated by the North-South divide [62]. As a result, business enterprise expenditure on R&D as a percentage of GDP was only half of the EU average in 2023 (0.76% vs 1.49%). Despite accounting for around 12% of the EU economy in 2023 [63], Italian firms represented only 2.3% of the R&D expenditure incurred by the 322 European firms ranking in the top 2 000 R&D investing companies worldwide and only 0.4% of the R&D expenditure incurred by the whole top 2 000 R&D investors, according to the 2024 EU Industrial R&D Investment Scoreboard [64]. Among this group, no Italian company is active in digital industries such as software and computer services or technology hardware and equipment. These sectors represent around 35% of R&D investment made by the top 2 000 industrial investors worldwide. Italian top R&D investors mainly focus on more traditional sectors such as fixed line telecommunications, banking and pharmaceuticals/biotechnology (the last sector has high value-added), as shown in Graph A3.2 [65]. Italian R&D business expenditure in the ICT sector amounted to 15.7% of total R&D expenditure in 2021 [66]. In 2022, Italian SMEs invested less in R&D than their EU counterparts (0.23% of GDP vs EU average 0.40%). Total public sector support for business expenditure in R&D as a percentage of GDP dropped to 0.11% in 2022, well below the EU average (0.20%) and far from its 0.26% peak in 2018. Such a decrease is driven by lower support through R&D tax incentives [67], whose legislative framework has changed multiple times since their introduction in 2015 [68]. The RRP measures aimed at the rationalisation of firms' incentives could be an opportunity to increase the efficiency and effectiveness of public support to companies that perform R&D activities. A total of EUR 17.3 billion is mobilised by cohesion policy funds dedicated to innovative and smart economic transformation in Italy. Out of this, EUR 2.3 billion is dedicated to the development or manufacturing of critical technologies through the Strategic Technologies for Europe Platform.

[60] OECD (2024), OECD Economic Surveys: Italy 2024, OECD Publishing, Paris, https://doi.org/10.1787/78add673-en.

[61] 'Italia 2025-2029 – Piano strutturale di bilancio di medio termine', approved in September 2024.

[62] Regional Innovation Scoreboard 2023 – Regional profiles – Italy.

[63] The share of GDP is an elaboration of Eurostat GDP data at current prices, European Economic Forecast. Autumn 2024.

[64] Elaboration based on the 2024 EU Industrial R&D Investment Scoreboard (data refers to 2023), JRC Publications Repository - The 2024 EU Industrial R&D Investment Scoreboard.

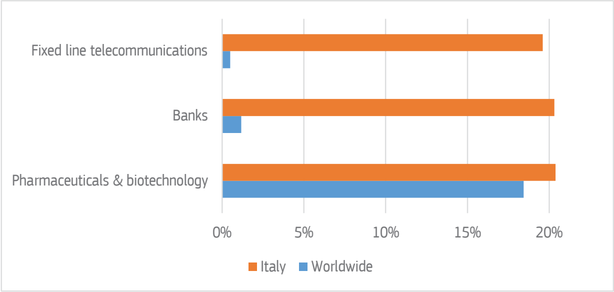
[65] Ibid.

[66] Source: Eurostat.

[67] Foregone government tax revenues as a percentage of GDP.

[68] ISTAT, Gli incentivi alle imprese per la ricerca e lo sviluppo, September 2023. Focus_incentivi_RS_DEFINITIVO.pdf.

Graph A3.2: **Top 3 sectors for R&D investment of Italian companies among top 2 000 global R&D investing companies in 2023 (% share, Italy vs worldwide)**



Source: DG R&I, based on 2024 EU Industrial R&D Investment Scoreboard data

The lack of dynamism in business innovation also has an impact on the number of researchers employed by the private sector. The number of researchers employed in the private sector is far below EU levels (3.0 researchers per thousand of the active population vs EU average of 5.7 in 2023) and amounts to less than half of the researchers employed in France and Germany ([69]). Although researchers employed by firms outnumber those employed by the public sector on average in the EU, it is the opposite in Italy. The Italian RRP includes investments on key enabling technologies and on innovative PhDs to promote the hiring of researchers by firms. This could benefit the R&I system if made more structural.

The uptake of technologies among Italian firms, including SMEs, is in line with the EU average, while the use of AI is still limited. SMEs with basic digital intensity are slightly below EU levels (70.2% vs 72.9%) ([70]). Italian companies also lag behind EU peers in adopting AI (8.2% vs 13.5%), with large companies investing in this technology proportionately more than SMEs ([71]). The share of firms that have taken up cloud services is significantly above the EU average (55.1% vs 38.9%) ([72]). Through the 'Transition 4.0' investment plan, Italy's RRP has provided tax credits to businesses, predominantly used for technologically advanced tangible capital goods and, to a smaller extent, for intangible goods and R&I activities ([73]). Additionally, Italy's AI national strategy 2024-2026 includes a series of measures to help companies adopt AI ([74]). Other initiatives range from increasing the uptake of digital technologies by firms, including via European Digital Innovation Hubs, to the development of digital technology and infrastructure, including in strategic areas like semiconductors and quantum technologies.

Business-science linkages remain weak and hamper the ability to translate scientific excellence into innovation. The number of public-private scientific co-publications continues to increase and is above the EU average. However, public expenditure on R&D financed by the business sector as a percentage of GDP is still around half of the EU average (0.03% vs 0.05% in 2022). The role of technology transfer offices (TTOs) in enabling knowledge valorisation has improved in recent years. The Ministry of Enterprises and Made in Italy (MIMIT) launched a programme on proof of concept in 2019. This initiative was further supported by RRP funding and has helped create a number of spin-offs and, more generally, improve business-science linkages ([75]). Similarly, in 2015 the MIMIT also started a programme aiming to strengthen capacity building in TTOs. Despite such progress, there are still challenges in improving the performance of small and medium TTOs, boosting their staffing numbers as well as improving the specific professional background of technology transfer experts ([76]). In 2024, an OECD study put forward a series of recommendations, such as strengthening the strategic management of knowledge exchange and valorisation in Italian universities and its governance at the different institutional levels, while bolstering the linkages between TTOs and local innovation ecosystems ([77]).

[69] Eurostat (2023). Researchers (full-time equivalents) employed by the business enterprise sector per thousand of the active population.

[70] Source: Eurostat (2024).

[71] Ibid.

[72] Digital Decade 2024: Country reports | Shaping Europe's digital future, Italy country report.

[73] Corte dei conti (2023). Rapporto 2023 sul coordinamento della finanza pubblica (pp. 356-359).

[74] Strategia_italiana_per_l_Intelligenza_artificiale_2024-2026.pdf.

[75] Netval (2023). 'Rapporto di analisi di impatto sul bando Proof of concept', Report_Poc.pdf.

[76] 19º Rapporto Netval – 'Ancora a due velocità', 2024.

[77] European Commission/Ministry of Universities and Research/OECD Technical Support Instrument project

Italy has taken steps to reduce regulatory barriers that hinder innovation and use public procurement to spur innovation. Through the introduction of *Sperimentazione Italia*, a regulatory sandbox, Italy aims to ease the requirements for start-ups to test new technologies [78]. The effects of this measure, along with those of the recent abolition of the professor's privilege [79], need to be further monitored. Despite some progress in innovation procurement such as the funding of the 'Smarter Italy' programme, Italy could further improve its policy framework for innovation procurement, including through sectoral policies and incentives (see Annex 4) [80].

Financing innovation

Venture capital (VC) investment in Italy has increased, but remains far below other players such as the USA, Germany and France. VC expenditure as a percentage of GDP has doubled since 2020, but was still about one-third of the EU average in 2023. Additionally, Italy lags behind other large EU economies in terms of the share of VC invested in deep tech (15% vs 28% in France and 20% in Germany) [81]. The VC market is fragmented, with a prevalence of small operators and an offer that does not fully cover the different stages of the enterprise life cycle. This creates a financing gap for successful start-ups willing to scale up. The weakness of the VC segment stems from Italy's low level of innovation and the limited participation of institutional investors compared to other EU countries [82]. The National Innovation Fund (CDP Venture Capital) is the institutional entity in charge of channelling public resources into VC, which has also managed Italy's RRP investments to finance start-ups. Strengthening the participation of pension funds in the VC segment and other targeted amendments to support start-ups, as envisaged by the Competition Law approved in December 2024, represent a step forward to guarantee more funding to Italy's innovative start-ups (see Annex 5).

Innovative talent

Italy's talent pool in sciences and technology is not adequate to sustain the country's innovation capacity. Italy has one of the lowest tertiary education attainments in the EU [83]. While the number of new graduates in science and engineering has increased and is close to the EU average [84], in 2022 Italy ranked last in terms of graduates in the field of computing, which is one-third of the EU average [85]. Furthermore, according to the Report on the State of the Digital Decade 2024, the share of ICT specialists in employment remains below average, although demand for these skills is surging [86]. In response, Italy's AI national strategy 2024-2026 lays down measures to strengthen training in this field. This includes improving the National PhD Programme in Artificial Intelligence [87].

There is room to improve entrepreneurship education in Italy. While there is no dedicated national strategy, recent policies aim to increase students' entrepreneurship competencies. The development of entrepreneurship education is hampered by the lack of national coordination and

ITA.CON: 'Improving the system of Knowledge Exchange and Collaboration between universities and society in Italy' (2024), [Knowledge exchange and collaboration between universities and society in Italy | OECD].

[78] Relazione Annuale 2023 al Parlamento sullo stato di attuazione delle policy in favore delle startup e PMI innovative, 2024.01.19 - Relazione annuale DEF 2.pdf.

[79] The abolition of the rule giving academics rather than universities ownership over any patents they create was included in the 2023 reform of the Industrial Property Code.

[80] EU Innovation Procurement Observatory (2024). Benchmarking of national policy frameworks for innovation procurement, Italy country profile, country-report-2024-policy-benchm-italy.pdf.

[81] Dealroom, The European Deep Tech Report 2023, The European Deep Tech Report 2023 | Dealroom.co. Data refers to the period 2018-2023.

[82] Banca d'Italia (2024). 2023 Annual Report.

[83] Source: Eurostat (2024). Italy's data: 31.6% of population aged 25-34, vs EU average 44.2%.

[84] Source: Eurostat (2022). Italy's data: 16.5 vs EU average: 17.6 per thousand of the population aged 25-34.

[85] Source: Eurostat (2022). Italy's data: 1.2 vs EU average: 3.6 per thousand of the population aged 25-34.

[86] Report on the state of the Digital Decade 2024 | Shaping Europe's digital future, Annex 3 Italy Executive Summary.

[87] Strategia italiana per l Intelligenza artificiale 2024-2026.pdf.

lack of a dedicated strategy, together with the absence of public agencies entrusted with supporting entrepreneurship education. Additionally, the notion of ‘entrepreneurial competence’ has not yet been established in programme design. However, official guidelines issued in 2018 guide secondary schools in the development of students’ abilities in the areas of risk-taking, idea generation, and planning and managing entrepreneurial projects ([88]).

[88] GEM (2024). ‘L’attivazione imprenditoriale in Italia. Rapporto GEM 2023-2024’ FrancoAngeli Series.

OECD/European Union (2019), *Supporting Entrepreneurship and Innovation in Higher Education in Italy*, OECD Skills Studies, OECD Publishing, Paris, https://doi.org/10.1787/43e88f48-en.

Table A3.1: **Key innovation indicators**

Italy	2012	2017	2020	2021	2022	2023	2024	EU average (1)	USA
Headline indicator									
R&D intensity (gross domestic expenditure on R&D as % of GDP)	1.26	1.36	1.50	1.41	1.37	1.31	:	2.24	3.45
Science and innovative ecosystems									
Public expenditure on R&D as % of GDP	0.54	0.49	0.55	0.54	0.53	0.52	:	0.72	0.64
Scientific publications of the country within the top 10% most cited publications worldwide as % of total publications of the country	10.1	10.3	11.2	11.2	:	:	:	9.6	12.3
Researchers (FTE) employed by public sector (Gov+HEI) per thousand active population	2.7	2.9	3.3	3.4	3.5	3.7	:	4.2	:
International co-publications as % of total number of publications	41.0	47.0	47.6	47.6	48.2	48.5	:	55.9	39.3
R&D investment & researchers employed in businesses									
Business enterprise expenditure on R&D (BERD) as % of GDP	0.68	0.85	0.93	0.85	0.81	0.76	:	1.49	2.70
Business enterprise expenditure on R&D (BERD) performed by SMEs as % of GDP	0.16	0.31	0.29	0.25	0.23	:	:	0.40	0.30
Researchers employed by business per thousand active population	1.6	2.5	3.1	3.0	3.1	3.0	:	5.7	:
Innovation outputs									
Patent applications filed under the Patent Cooperation Treaty per billion GDP (in PPS €)	2.1	2.1	2.3	2.1	1.7	:	:	2.8	:
Employment share of high-growth enterprises measured in employment (%)	9.9	15.3	12.2	:	:	:	:	12.5	:
Digitalisation of businesses									
SMEs with at least a basic level of digital intensity % SMEs (EU Digital Decade target by 2030: 90%)	:	:	:	:	69.9	:	70.2	72.9	:
Data analytics adoption % enterprises (EU Digital Decade target by 2030: 75%)	:	:	:	:	:	26.6	:	33.2	:
Cloud adoption % enterprises (EU Digital Decade target by 2030: 75%)	:	:	:	51.9	:	55.1	:	38.9	:
Artificial intelligence adoption % enterprises (EU Digital Decade target by 2030: 75%)	:	:	:	6.2	:	5.1	8.2	13.5	:
Academia-business collaboration									
Public-private scientific co-publications as % of total number of publications	7.1	7.9	8.1	8.3	8.8	9.0	:	7.7	8.9
Public expenditure on R&D financed by business enterprises (national) as % of GDP	0.014	0.027	0.028	0.029	0.029	:	:	0.050	0.020
Public support for business innovation									
Total public sector support for BERD as % of GDP	0.073	0.250	0.121	0.119	0.110	:	:	0.204	0.251
R&D tax incentives: foregone revenues as % of GDP	0.011	0.182	0.057	0.067	0.060	:	:	0.102	0.141
BERD financed by the public sector (national and abroad) as % of GDP	0.061	0.068	0.063	0.052	0.050	:	:	0.100	0.110
Financing innovation									
Venture capital (market statistics) as % of GDP, total (calculated as a 3-year moving average)	0.006	0.005	0.013	0.018	0.027	0.028	:	0.078	:
Seed stage funding share (% of total venture capital)	7.0	6.0	8.6	11.1	10.9	11.0	:	7.3	:
Start-up stage funding share (% of total venture capital)	71.3	80.5	39.5	45.3	47.4	53.5	:	44.0	:
Later stage funding share (% of total venture capital)	21.6	13.6	51.9	43.6	41.7	35.5	:	48.7	:
Innovative talent									
New graduates in science and engineering per thousand population aged 25-34	11.8	13.1	15.1	16.4	16.5	:	:	17.6	:
Graduates in the field of computing per thousand population aged 25-34	0.6	0.6	1.0	1.1	1.2	:	:	3.6	:

(1) EU average for the last available year or the year with the largest number of country data.
Source: Eurostat, DG JRC, OECD, Science-Metrix (Scopus database), Invest Europe, European Innovation Scoreboard.

Italy's economy is hindered by productivity stagnation. Weak innovation-led growth, regulatory barriers and bureaucracy are a challenge to business competitiveness, especially for small and medium enterprises. Italy's business dynamism is mixed, with competition-related issues in several sectors. A lack of judicial efficiency and perceived corruption affect business development. Efforts are underway to boost foreign investment, and Italy is working to improve its public procurement system with a focus on green and innovative objectives. The swift implementation of the reforms included in the recovery and resilience plan (RRP) (late payments, public procurement, competition law) should increase competition and transparency, while adequately implementing EU regulations.

Economic framework conditions

Stagnation in productivity and low growth rates have characterised the Italian economy in recent years. Weak innovation-led growth reflects an unusually high proportion of employment in low-productivity micro businesses, low research spending, and a below-average level of digitalisation. The productivity gap between Italian and European companies is largely explained by the higher share of smaller firms in Italy that play a significant role in the Italian production structure. Italy shows a higher level of productivity than in major EU economies in the medium-sized enterprise segment (from 50-249 employees), while the figures are in line with German or French counterparts for small (from 10-49 employees) and large companies (more than 250) [89]. However, there is significantly lower productivity in micro-enterprises (less than 10 employees) [90].

Closing the productivity gap would require the integration of digital technologies in the production processes, a more skilled workforce and higher investments in intangible assets. Investment in intellectual property and ICT equipment have been enhanced through the 'Transition 4.0' investment plan, included in Italy's RRP (see Annex 3). Initiatives to promote clustering and collaboration among small firms, such as shared resources or partnerships, could also help them achieve economies of scale. The Annual SME Law is an important opportunity to increase the productivity of the Italian business ecosystem, providing tools for simplification, aggregation of companies and the creation of synergies.

Investment conditions are expected to remain unfavourable as economic activity remains weak in Italy and in most of the euro area, especially in industry [91]. The uncertain outlook for exports due to low growth in important markets like Germany is a contributing factor. The three main obstacles to Italian companies investing are uncertainty about the future (79%, 49% considering it a major obstacle), high energy costs (70%) and labour market regulations (59%) [92]. Those percentages are in line with EU averages.

The share of businesses facing labour supply constraints is however decreasing (6.6% in 2024 against a 9.1% in 2023) and much lower than in the EU (20.2% in 2024). The vacancy rate is slightly below the EU average. Similarly, with the easing of supply chain constraints, the percentage of firms facing material shortages is now back to pre-pandemic levels (3.9% against an EU average of 10%).

Late payments remain an issue for the competitiveness of Italian companies. The payment gap in public administration-to-business transactions (i.e. the difference between the initially agreed payment time and the actual time a firm receives payment from a debtor public administration) was still at 18 days in 2024, above the EU average of 15 days, but a significant improvement on 2022 (see Table A4.1). Those results are broadly corroborated by the data

[89] ISTAT, Rapporto annuale 2024.

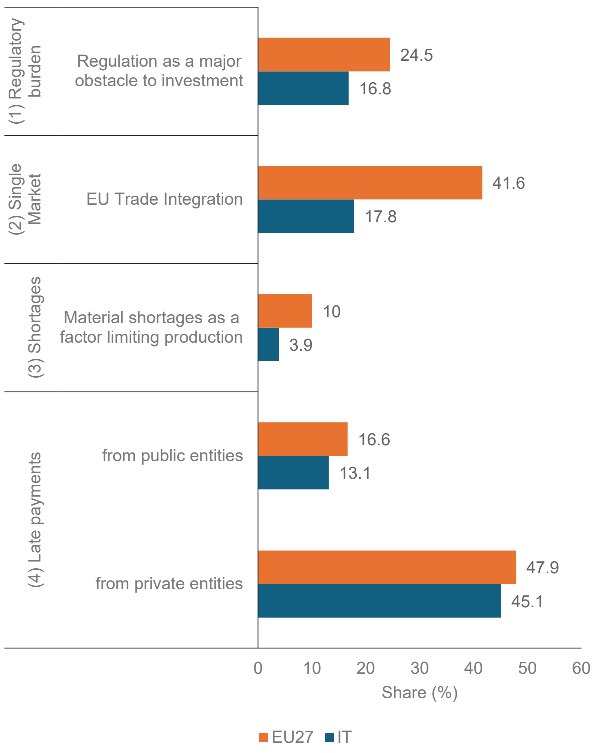
[90] OECD shares the same analysis, estimating that while large Italian businesses are more productive on average than their counterparts in other European countries, Italian micro-enterprises are about 30% less productive than their peers. At the same time, the employment share of micro-businesses is about 15 percentage points larger than in other European countries while the employment share of highly-productive large businesses is about 20 percentage points lower. OECD Economic Surveys, Italy 2024.

[91] Economic Bulletin No.1, 2025, Bank of Italy, 2025.

[92] EIB Investment Survey 2024 Country Overview: Italy, 2025.

collected by the Italian authorities in the context of an ongoing infringement procedure, which indicate that payment times are still above the legal threshold in several sectors and levels of the Italian public authorities. For business-to-business transactions, the payment gap was 17.3 days in 2024, still higher than the EU average of 15.5 days (see Table A4.1). The recovery and resilience plan includes an ambitious reform aimed at strengthening the capacity of Italian administrations to pay within the deadlines set by the Late Payments Directive (Directive 2011/7/EU). The swift implementation of this reform, along with sustained sound payment performance over time, is essential to ensuring predictable cash flows and effective liquidity management for businesses, especially SMEs.

Graph A4.1: **Making Business Easier: selected indicators.**



Share of (1) enterprises, (2) average intra-EU exports and imports in GDP, (3) firms, (4) SMEs.
Sources: (1) EIB IS, (2) Eurostat, (3) ECFIN BCS, (4) SAFE survey.

On digital infrastructure, Italy is making progress in deploying connectivity networks. In 2023, VHCN/FTTP7 coverage stood at 59.6%, an 11% percentage-point increase on 2022 but still below the EU averages (78.8% for VHCN and 64% for FTTP) [93]. However, the urban-rural divide persists, with coverage in rural areas dropping to 37.7% (the EU average is 55.6% for VHCN and 52.7% for FTTP). Italy achieved nationwide 5G coverage in 2022 and recorded a value of 99.5% in 2023. In addition, 88.3% of Italian households are covered by the 3.4-3.8 GHz band (EU average, 50.6%), which enables advanced applications requiring large spectrum bandwidth. The Italian RRP supports key measures to advance the deployment of connectivity networks (notably, 'Italia 1 Giga' and 'Italia 5G').

Cybersecurity awareness in businesses remains broadly stable. The share of firms that experienced ICT security incidents leading to unavailability of ICT services due to external attack (e.g. ransomware attacks, denial of service attacks) remained at 3.1% in 2022 and 2024, still below the EU average (3.4% in 2024). Most businesses (92.9%) had some ICT security measures in place (close to the EU average of 92.8%), and 62.7% of businesses had made their employees aware of their obligations in ICT security related issues, which is above the EU average (60%).

Regulatory and administrative barriers

Italy's business dynamism remains a mixed picture. While the country has demonstrated its resilience, as evidenced by its vibrant network of family-owned businesses and niche-market leaders, the business churn rate [94] was still one of the lowest in EU at 14.6% in 2022, compared to EU average of 19.2%. Enterprise births in the business economy and deaths are both below EU levels (7.9% and 6.7%, against EU values of 10.5% and 8.7% respectively) [95]. In addition, high growth enterprises (growth in employment by

[93] VHCN (very high-capacity network) is defined as the combination of FTTP (fibre to the premises) and DOCSIS 3.1. In the absence of DOCSIS 3.1 in Italy, the indicator on VHCN coverage and the indicator on FTTP coverage coincide.

[94] As defined by Eurostat, the business churn rate is the sum of enterprise birth and death rates.

[95] Recent IMF research finds that the share of zombie firms in Italy remains much higher that the pre-crisis level. IMF Working paper 2023/125 'The Rise of the Walking Dead: Zombie Firms around the World'.

more than 10%) accounted for 7.4% of companies and 8.9% of employees in Italy (below the EU averages of 9.1% and 12.2%).

Competition in Italy is hindered by obstacles to the opening up of markets and restrictions on the exercise of business activity, especially in the service sector ([96]), where productivity growth has been particularly low ([97]). While this is partly explained by specialisation within the services sector, including the significant contribution of tourism, it also reflects remaining barriers to competition, especially in managing infrastructure and local public services. In this sense, the award of concessions through project financing procedures (even considering the reform made in December 2024) and acts extending existing concessions or contracts already concluded, which puts off the opportunity for competition (for example, by extending the range of cases where a public contract can be amended without a new tender procedure beyond those allowed under EU law) could undermine the principles of maximum participation, equal treatment, transparency and proportionality. The swift application of competition laws, key measures in the RRP, is essential for reducing entry barriers in services.

Despite recent improvements, the effectiveness of public administration (especially the justice system) and perceived corruption remain a key barrier for business development (see Annex 6). Judicial efficiency is generally perceived as comparatively low, which is reflected in Italy being seen as one of the countries with the lowest levels of rule of law in peer reviews, mostly due to the comparatively long duration of trials ([98]). While past reforms have reduced the expected duration of trials and the backlog in court cases, the expected duration of civil trials remains the highest in the EU. Moreover, there is some scope to improve the transparency and accountability of lobbying activities. According to the EIB Investment Survey, the share of firms with over 10% of their staff working on regulatory requirements stood at 24%, above the EU average of 17%. Simplifying and digitalising administrative procedures as much as possible could help to reduce red tape as well as any unjustified officials' discretionary room for manoeuvre.

Recent government initiatives have aimed at boosting foreign investment, especially in high value sectors. These efforts came as Italy faced a slowdown in net foreign direct investment (FDI) inflows in 2023, following a strong rebound in 2022 after the pandemic crisis (as for other major European economies). The 2023 Strategic Investment Law aims to attract FDI by simplifying the authorisation and execution process of significant projects. When a project is declared of 'pre-eminent strategic interest', it benefits from a series of bureaucratic and procedural shortcuts. The law enables a project to be assigned a dedicated person in the administration and to undergo a single-authorisation process ([99]).

Italy has one of the most restrictive retail regulatory frameworks in the EU, as evidenced by the OECD's Product Market Regulation Indicator and the Commission Retail Restrictiveness Indicator, which may hamper the functioning of the sector and its development. In addition, the online commerce figures have not improved in the recent years. In 2024, the number of online shoppers was one of the lowest in the EU (53.6% compared to an EU average of 71.8%), just a slight improvement from the 51.5% in 2021 ([100]). Recent legislative changes introduced some simplifications to commercial activities, in particular to clearance sales, promotions and sales below cost. However, there is still the possibility for regional and local authorities to restrict the establishment of certain commercial activities or adopt measures to protect certain types of small shops and artisanal businesses. The involvement of operators' associations in such decisions could potentially go against ensuring objective and transparent procedures and might hinder new players from entering the market.

[96] Relazione annuale sull'attività svolta, Italian Competition Authority (AGCM), 2024

[97] OECD Economic Survey Italy 2024 (2024).

[98] Rule of law index, 2022. OECD Economic Survey Italy 2024 (2024).

[99] The special commissioner is a figure entrusted with specific powers to speed up all the procedural steps the investment implementation requires. The single authorisation is a special permit issued by the special commissioner, which supersedes the patchwork of authorisations typically needed to kick-off a large-scale project.

[100] Eurostat series isoc_ec_ib20, percentage of individuals who made an online purchase in the last 12 months.

Entrepreneurship has a fairly low profile in Italy. In 2023, less than half of the adult population knew someone who had recently started a business, and just one third saw good opportunities to start a business locally, one of the lowest figures of any advanced country [101]. Furthermore, around half of those who did see good opportunities would not start a business for fear it might fail, while just around 10% of those not already starting or running a business were expecting to start one within the next three years, placing Italy at the bottom of the list for entrepreneurship skills.

Single market

Italy is well integrated into the single market and is among the world's leading exporters. Italy boasts a high level of diversification in its exported products, another key factor behind its success. However, performance in the services sector has been relatively weak, with a lack of development of knowledge-intensive and high value-added activities (trade integration in services is among the lowest in the EU, representing only 2.2% of the GDP in 2023, below peer countries like Germany or Spain). The strength of Italian exports lies primarily in around 9 000 medium and large exporting companies, which account for three quarters of the country's manufacturing exports. Expanding the exporting base could help to maintain the resilience and competitiveness of Italian external trade.

Italy's compliance with single market rules is in line with EU averages. Italy performs better than the EU average for transposing single market directives, with the number of non-transposed directives below both the EU average and the European Council's 1% target. Its performance is weaker in correctly transposing directives, mirroring the experience of countries like France and Spain. The number of pending single market infringements is amongst the highest in the EU (24th out of 27 Member States), although there has been a downward trend since 2020 (22%). Within the SOLVIT rights resolution system, Italy solved 84.3% of cases it handled as lead centre in 2024 (EU average, 84.9%).

Entry barriers remain particularly high for regulated professions. The level of restrictiveness is high overall for several professional services (accountants, architects, civil engineers, and real estate agents) [102], although Italy announced actions that, if fully implemented, have the potential to partly improve the current situation. However, 'fair compensation' rules for professional services risk being perceived as minimum tariffs, damaging market entry and price competition. Removing them [103] would open the market to more productive businesses that could set lower rates to increase their market share.

Public procurement

Italy is making significant efforts to improve the efficiency of its public procurement system. Beyond introducing a new Code of Public Contracts in 2023 Italy is proceeding with the ambitious reform of public procurement set out in its recovery and resilience plan [104]. This reform is aimed at simplifying procedures, increasing digitalisation and professionalising public buyers, and is expected to improve the speed, competitiveness and overall efficiency of the Italian public procurement system.

Challenges persist in public procurement areas such as single bid procedures, which still made up 34% of total bids in 2024 (above the EU average of 32%). The share of direct awards is only around 3%, significantly below the EU average (7%). Indicators on SMEs participation in public procurement and duration of the process are also below EU averages [105].

Italy is, however, one of the most advanced countries in the EU for the use of public procurement to achieve green objectives, as

[101] Global Entrepreneurship Monitor 2023/2024 (2024).

[102] OECD Product Market Regulation Indicators, 2024.

[103] OECD Economic Survey 2024.

[104] The Code was revised at the end of 2024 by legislative decree number 209/2024 (*Correttivo*) to further strengthen the effectiveness of its provisions.

[105] While keeping the current focus on speeding up public procurement in the context of accelerating the implementation of the RRP is relevant, it should also be considered that competitive auctions tend to lead to price rebates of 2-4% relative to non-competitive procurement. Bank of Italy (2023), Annual Report.

seen, for example, by its introduction of minimum environmental standards. It has also made some progress in using public procurement as a leverage to spur innovation, through the launch of the ‘Smarter Italy’ programme, the aim of which is stimulating the development of innovative solutions by market operators taking part in procurement bids. On the other hand, the focus on socially responsible public procurement has also recently increased, especially in the fields of inclusivity and gender equality.

Table A4.1: **Making Business Easier: indicators.**

Italy								
POLICY AREA	**INDICATOR NAME**		**2020**	**2021**	**2022**	**2023**	**2024**	**EU-27 average**
Investment climate								
Shortages	Material shortage, firms facing constraints, %[1]		1.0	10.3	18.0	17.1	3.9	10.0
	Labour shortage, firms facing constraints, %[1]		1.2	3.0	6.3	9.1	6.6	20.2
	Vacancy rate, vacant posts as a % of all available ones (vacant + occupied)[2]		0.9	1.8	2.3	2.3	2.1	2.3
Infrastructure	Transport infrastructure as an obstacle to investment, % of firms reporting it as a major obstacle[3]		33.8	30.6	30.7	21.7	18.3	13.4
	VHCN coverage, %[4]		-	44.2	53.7	59.3	-	78.8
	FTTP coverage, %[4]		-	44.2	53.7	59.3	-	64.0
	5G coverage, %[4]		-	99.7	99.7	99.5	-	89.3
Reduction of regulatory and administrative barriers								
Regulatory environment	Impact of regulation on long-term investment, % firms reporting business regulation as a major obstacle[3]		34.9	34.3	34.1	23.6	16.8	24.5
Late payments	Payment gap - corporates B2B, difference in days between offered and actual payment[5]		1.6	10.9	16.2	16.3	17.3	15.6
	Payment gap - public sector, difference in days between offered and actual payment[5]		10.4	11.2	21.8	17.6	17.8	15.1
	Share of SMEs experiencing late payments, %*[6]	from public or private entities in the last 6 months	58.2	46.6	52.4	54.3	-	-
		from private entities in the previous or current quarter	-	-	-	-	45.1	47.9
		from public entities in the previous or current quarter	-	-	-	-	13.1	16.6
Single Market								
Integration	EU trade integration, % (Average intra-EU imports + average intra EU exports)/GDP[2]		14.9	16.9	19.2	18.5	17.8	41.6
	EEA Services Trade Restrictiveness Index[7]		0.055	0.056	0.056	0.056	0.064	0.050
Compliance	Transposition deficit, % of all directives not transposed[8]		0.4	1.2	0.7	0.4	0.5	0.8
	Conformity deficit, % of all directives transposed incorrectly[8]		1.7	1.8	1.5	1.4	1.8	0.9
	SOLVIT, % resolution rate per country[8]		96.3	96.8	98.6	91.0	84.3	84.9
	Number of pending infringement proceedings[8]		50.0	46.0	42.0	43.0	39.0	24.4
Public procurement								
Competition and transparency in public procurement	Single bids, % of total contractors**[8]		31	35	37	37	34	-
	Direct awards, %**[8]		7	7	5	5	3	7.0

*Change in methodology in 2024: reporting late payments from public and private entities separately.

**The 2024 data on single bids is provisional and subject to revision. Please note that approximately 46% of the total data is currently missing, which may impact the accuracy and completeness of the information. Due to missing data, the EU average of direct awards data is calculated without Romania.

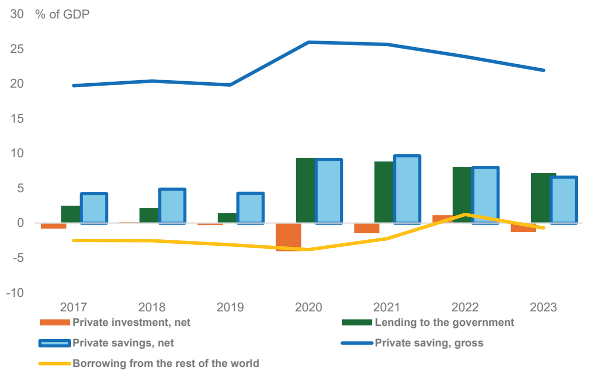
Sources: (1) ECFIN BCS, (2) Eurostat, (3) EIB IS, (4) Digital Decade Country reports, (5) Intrum Payment Report, (6) SAFE survey, (7) OECD, (8) up to 2023: Single Market and Competitiveness Scoreboard, 2024: Public procurement data space (PPDS).

Against the backdrop of comparatively low net private savings that are mostly absorbed by the government's financing needs, Italy's capital markets are insufficiently deep. Banks, which dominate the financial sector, are robust, both in terms of capital and liquidity, and are well prepared to tackle future risks. At the same time, there is scope for the future development of all non-bank financial intermediaries, which are underdeveloped in comparison to their EU peers. Italian firms have only partial access to the above-average wealth of Italian households, who prefer to invest in bonds, rather than shares, and mostly indirectly. At the same time, domestic institutional investors also tilt their investment policies towards bonds. Equity investments, notably by investment funds relate mostly to foreign shares and only marginally to unlisted equity. The minor investments in unlisted equity are a limiting factor for the scale-up of innovative start-ups with no or low profitability. The domestic venture and growth capital market is still small and fragmented. Moreover, the relatively less-developed capital markets reduce the exit options for private equity and venture capital investors, further compounding the lack of funding sources for innovation, which is a key ingredient for improved competitiveness.

Availability and use of domestic savings

The Italian private sector saves comparatively little in net terms, despite a pick-up in pace since 2020, and does not invest enough in the domestic economy. In the last decade, the private savings ratio, net of fixed capital consumption, averaged 5.5% of GDP, albeit with a marked increase since 2020 and particularly in the period 2020-2022 (see Graph A5.1). The net private investment ratio, which measures the net direct contribution of the private sector to capital accumulation in the country, fluctuated around zero and averaged -1.2% of GDP, thereby contributing to a shrinking capital structure of the economy. At the same time, the rather sizeable borrowing by the government, which averaged 4.8% of GDP over the last decade, absorbed the equivalent of almost 90% of the net private savings. The remaining average net positive balance of 1.9% of GDP resulted in regular net lending to foreigners, except in 2022, when the Italian economy borrowed the equivalent of 1.2% of GDP from the rest of the world. Thus, overall, in the last decade the net Italian private savings, i.e. after accounting for the investments that are necessary to maintain the existing capital structure of the economy, were channelled towards government and foreign projects, rather than domestic private investments.

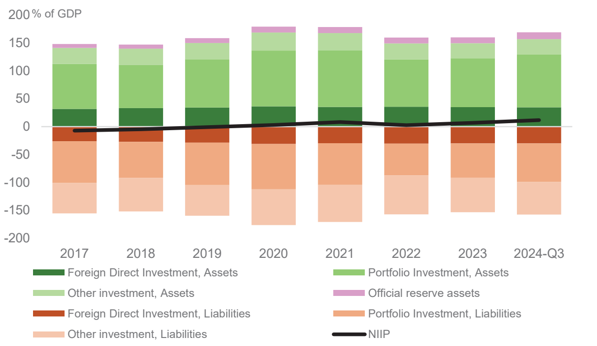
Graph A5.1: **Net savings-investment balance**



Source: AMECO

Consistent with Italy's annual positive lending to the rest of the world, the net international investment position (NIIP) of the country has been increasing. As of Q3 2024, total assets on foreigners reached 169% of GDP, up from 148% at end-2017, while liabilities to foreigners stood at 157% of GDP, resulting in a positive net international investment position (NIIP) equivalent to 12% of GDP (see Graph A5.2). The net stock of foreign direct investment has been broadly stable, declining from 6% of GDP at end-2017 to 4.7% as of Q3 2024. Hence, the increase of the NII was driven primarily by the net stock of portfolio investments, which increased by 20 percentage points of GDP, and by the stock of official foreign exchange reserves, which expanded by 4.9 percentage points of GDP. Meanwhile, the net liability of Italy in terms of other investments increased by 4.8 percentage points of GDP. Thus, the Italian economy appears to be well integrated in international capital flows and has managed lately to marginally strengthen its position as recipient of foreign capital.

Graph A5.2: **Italy's international investment position**



Source: ECB

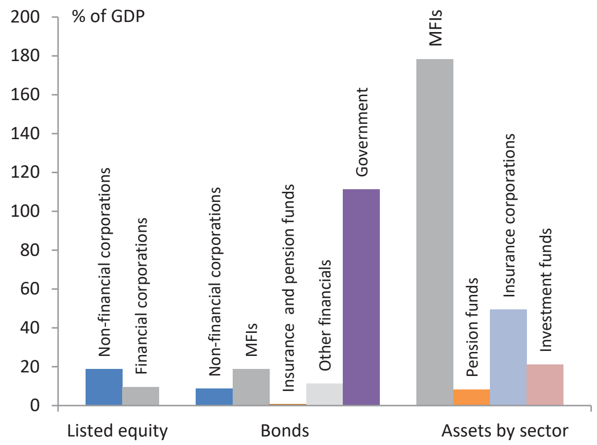
Structure of the capital markets and size of the financial sector

Capital markets in Italy remain underdeveloped and insufficiently deep. The Italian stock exchange (*Borsa Italiana*) forms part of Euronext, a pan-European market infrastructure. Its market capitalisation as a share of GDP is small by EU standards, at 28.5% of GDP vs an EU average of 67% as of end-2023 (see Graph A5.3). It is substantially smaller both as an absolute figure and as a share of GDP than those of the Paris, Amsterdam and Frankfurt stock exchanges. Non-financial corporations accounted for about two thirds of that capitalisation. New listings have been limited in the main market in recent years, but activity has been more vibrant in the SME growth market. The outstanding volume of debt securities reached 151% of GDP at end-2023, which is one of the highest national scores in the EU. However, marketable debt securities issued by non-financial corporations (NFCs) accounted for less than 6% of the total. Indeed, the domestic bond market in Italy is entirely dominated by government securities, which accounted for almost 74% of the total as of end-2023. Financial institutions, whether banks or not, accounted for the remaining 20% of debt securities.

A blueprint for capital market reforms at national level already exists. Building on past progress, the OECD prepared a capital market review for Italy in 2020, under an EU-funded technical support project. This was followed by a green paper on the competitiveness of Italian financial markets in support of growth, published by the Italian Ministry of Economy and Finance in March 2022. These initiatives led to the adoption of the Capital Markets bill (*Decreto Capitali*, Law 21/2024) in February 2024. This Law widens the definition of SMEs and aims to stimulate the Italian IPO market and incentivise investment in companies listed in Italy, while at the same time making changes to the corporate governance framework and promoting financial literacy.

Banks dominate the financial sector in Italy and there is scope for the future development of all non-bank intermediaries. After peaking at 230% of GDP in 2020, the size of the banking sector declined to 178% of GDP in 2023, which remains notably below the EU average of 254%. Foreign presence is limited and accounts for about 9% in terms of assets. Banking concentration appears to be lower than on average in the EU, with the top five banks controlling less than 50% of the sector (EU average of 54%). Insurance companies, with total assets equivalent to 49% of GDP at end-2023, are the most developed non-bank financial intermediaries in Italy, though their size remains below the EU average of 55%. Total assets of investment funds were equivalent to 21% of GDP at end-2023, while pension funds equated to 8% of GDP only.

Graph A5.3: **Capital markets and financial intermediaries**



Source: ECB, EIOPA, AMECO

Resilience of the banking sector

The Italian banking sector improved its resilience in 2024. The capital adequacy ratio for the Italian banking sector stood at 20% as of Q3 2024 (see Table A5.1), which is its highest level and almost in line with the EU average (20.1%). The quality of capital also improved, with a common equity tier 1 ratio of 15.9% compared to 15.5% at end-2023 and 13.9% at end-2019. Growing profitability has improved the internal capital generation, as the banks' annualised return on equity was higher in the first nine months of 2024 than at end-2023 (14.1% vs 12.7%) and above the EU average of 10%. Continued growth in net interest income, rising income from fees and good cost controls were the main drivers. The government's plan to boost budgetary revenues by postponing tax deductions for banks should not affect their profitability materially.

Though asset quality pressures are expected to persist, they remain modest by historical standards. The gross non-performing loan (NPL) ratio continued its downward path in 2023 and only slightly edged upwards in September 2024, to 2.8% (EU average of 1.9%), higher for loans to firms (4.4%) than to households (2.6%). Moreover, Stage 2 loans as a share of performing loans fell to 9.2% in September 2024 from 11.5% in end-2023. Provisioning levels also remain higher than for EU peers, with a coverage ratio of the non-performing loans by provisions of 47.8% as of Q3 2024 (vs 42.1% for the EU). These figures, coupled with the solid capital position of Italian banks and their strong profitability, imply no major credit supply constraints for viable borrowers, providing further signs that credit growth is currently driven by credit demand (see section on sources of business funding).

Banks' liquidity position remains solid. Though declining to 170.7% as of Q3 2024 from 180.7% a year ago, the liquidity coverage ratio of the significant institutions remains comfortable. Their net stable funding ratio, which reached 132% as of Q3 2024, was also satisfactory and rather stable over the same period. This is despite the repayment of Eurosystem funding from the targeted long-term refinancing operations (TLTRO III), which brought central bank liquidity down to 1.5% of banks' total liabilities in August 2024, from 4.8% at end-2023 and from 14% at its peak in mid-2021. The marginal cost of bank funding also went down to 1.9% in September 2024, around 20 basis points less than in March 2024. Yet this level is historically high [106].

Other areas of vulnerability remain, although banks have strengthened their overall position over the last years. The stock of state-guaranteed loans as a share of the loan book is normalising, while banks' exposure to domestic sovereign debt decreased to 9.4% of total assets in December 2024, lower than its peak in December 2020 (10.9%) but still high both historically and compared to other Euro area peers. These exposures are unevenly distributed and concern especially cooperative banks. Banks classify them as held at amortised cost, to limit the impact of short-term market movements on their balance sheets [107]. Moreover, pockets of vulnerability remain among the smaller credit institutions despite progress with more effective supervisory action. In addition, the effectiveness of mechanisms for debt workouts and asset disposals remains important, given the legacy debt which has exited banks' balance sheets but continues to burden the economy.

Resilience of the non-bank financial intermediaries

The insurance sector remains resilient. Italian insurers had a solvency ratio of 260% as of Q3 2024, broadly in line with end-2023 and slightly better than the European Economic Area (EEA) average (247%). Their investment portfolio was heavily tilted towards bonds, particularly government bonds with a clear home bias. As of October 2024, the net unrealized losses on investments fell to EUR 7 billion from EUR 13 billion as of December 2023. A limited number of Italian insurers, which account for around 5% of the sector's assets, decided to temporarily suspend the effects of unrealised investment losses on the profitability for the first half of 2024, as permitted by law in turbulent market situations. Italy has one of the highest insurance protection gaps in Europe for natural hazards, particularly earthquakes. This led the Italian authorities to adopt in December 2023 a mandatory requirement for firms to get insurance against natural hazards, with partial reinsurance by SACE, a state-owned entity (see Annex 7).

[106] See Figure 2.9 in Bank of Italy Financial Stability Report November 2024.

[107] This protection would not extend to a potential forced sale of such holdings, which is however an unlikely scenario given the solid liquidity position of Italian banks.

Insurers' profitability improved as premiums recovered and the rise in claims moderated. Return-on-equity of life insurers was still negative in the first half of 2024 (-9%) due to capital losses but better than a year before, while the non-life segment had a return-on-equity of 8%, again better than the same period last year [108]. This improved performance was due to a recovery in premium income coupled with a more moderate growth in claims and other expenses relative to 2023. The rise in premiums also progressively lowered the ratio of surrenders to premium income in life insurance, from 94% in October 2023 to 81% in October 2024. At the same time, the liquid asset ratio of Italian insurers remains high and was broadly stable in June 2024 compared to December 2023, with a median value of 62%. As a result, liquidity risks have been reduced although they continue to be material as the ratio of surrenders remains high [109].

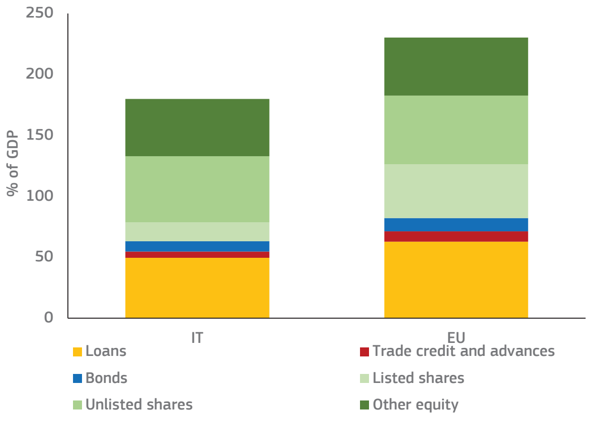
The pension funds sector continued its consolidation and has recovered from losses incurred in 2022. According to, the supervisory authority for pension funds, the number of pension funds at the end of 2023 fell to 302 from 332 in 2022 (and 387 in 2020). In 2023, there were positive returns on all types of investment lines, particularly where there was a higher exposure to equity, recovering losses incurred in 2022. The total contributions collected by the Italian pension funds in 2023 amounted to EUR 19.2 billion, whereas the outflows stood at EUR 11.6 billion.

Risks to financial stability from Italian investment funds are limited and stable. Borrowing from banks and other financial intermediaries by Italian open-end investment funds is moderate and available credit lines stable. The margins paid for the use of derivatives are also low compared with available liquidity, while the liquidity risk stemming from particularly high redemption requests was stable between January and August 2024 for non-equity segments. Risks to financial stability from Italian Alternative Investment Funds (AIFs), which represented close to 12% of Italian investment fund assets as of June 2024, are considered low due to a broadly stable leverage of 108% (well below the euro-area average of 122%) and to the fact that in Italy funds investing more than 20% of their portfolio in illiquid assets must be set up as closed-end funds, same as real-estate funds. As for open-end AIFs, asset liquidity and the redemption profile of their short-term liabilities are aligned.

Sources of business funding and the role of banks

Italian companies rely less on capital markets and more on own profitability as a source of funding than their EU peers, with bank lending being the other main financing source. As a source of finance for Italian NFCs, loans were equivalent to 49% of GDP as of end-2023, slightly below the EU average of 51% (see Graph A5.4). Nevertheless, expressed as a percentage of overall NFCs financing, loans accounted for a slightly larger share of all financing sources (27.6% vs 27.2% in the EU). Similarly, Italian NFCs' use of listed shares and bonds was also lower than the EU average, both expressed as a percentage of GDP (23.9% vs 54.8%) and as a percentage of overall NFC financing (13.3% vs 23.8%). This is largely due to the small proportion of listed shares in the funding mix (8.6% of funding sources vs 19.1% for the EU). This suggests that own profitability plays a somewhat larger role as a source of funding for Italian firms relative to their EU peers.

Graph A5.4: **Composition of NFC funding as a % of GDP**



(1) Reference period 2023
Source: Eurostat

However, the role of internal funding is not excessive, and firms do not appear to suffer

[108] See p.35-36 of Bank of Italy Financial Stability Report, November 2024.

[109] See p. 33 Bank of Italy Financial Stability Report, November 2024.

from a broader lack of funding. According to the 2024 EIB Investment Survey, 62% of Italian firms responded that their investment needs are covered by internal funding, close to the EU average of 66%. Moreover, 92% of Italian firms believe that their investment activities over the last three years were about the right amount, higher than the EU average (80%), suggesting that there is no material financing gap relative to investment demand. However, this may not be the case for firms with no or limited capacity for internal funding, such as innovative start-up firms (see further below). Overall, Italy's business sector invests less as a share of GDP (11.4%) than the EU average (13%).

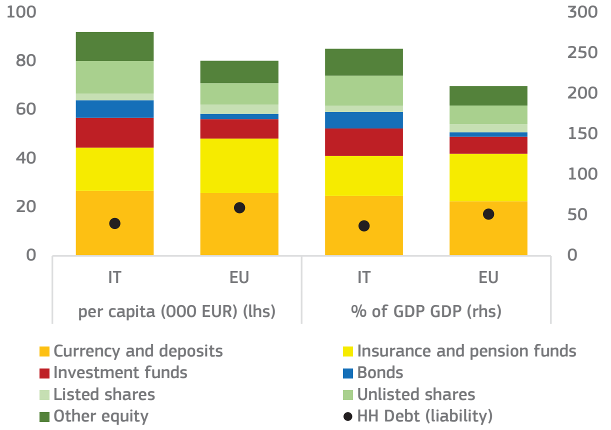
Bank lending to households and corporates has continued to contract. Credit growth has been on a general downward path since September 2022 and turned negative at the start of 2023 for corporates and in July 2023 for households, due to a slump in credit demand. This trend continued throughout 2024, with only timid signs of recovery (mostly for households), as the year-on-year credit growth rate slightly improved from -1.4% for households and -3.9% for NFCs in March 2024 to -0.4% and -2.4% respectively in September 2024.

The outlook is better on the back of easing monetary policy, particularly for households. This is also confirmed by the January 2025 bank lending survey conducted by the Bank of Italy, which confirmed for a second consecutive quarter a sharp rise in households' demand for mortgages, reflecting the falling cost of borrowing [110]. Firms' demand for loans also showed signs of recovery, rising in the fourth quarter of 2024 for the first time since the third quarter of 2022, reflecting higher financing needs for fixed investment, inventories and working capital, as well as a lower level of interest rates.

Retail investment in capital markets

Italian households tend to invest their above-average wealth in a similar way to their EU peers. Italian households have a higher amount of financial assets than the EU average both in per capita terms and as a share of GDP (see Graph A5.5). The share of households' financial assets held in pension and investment funds or directly in financial investment instruments is only slightly below the EU average (43.4% vs 45.3% as of end-2023).

Graph A5.5: **Composition of households' financial assets per capita and as a % of GDP**



(1) Reference period 2023
Source: Eurostat

However, Italian households appear to be risk-averse when it comes to direct exposure to shares. Compared to the EU average, Italian households have a higher share of financial assets invested in bonds (7.9% vs 2.7%) and investment funds (13.3% vs 10%) and a lower share of financial assets invested in listed shares (2.9% vs 4.8%) and insurance and pension funds (19.3% vs 27.8%). Domestic government debt in particular is a popular investment for Italian households, which hold 13% of the total outstanding general government debt of Italy in the first half of 2024.

Further measures to boost retail participation in capital markets are underway. The take-up of past initiatives to boost the level of retail participation, such as the creation of individual savings plans (PIR), has waned since 2019 [111]. However, a comprehensive reform of financial legislation planned for the first

[110] According to the Bank of Italy, in the first nine months of 2024, interest rates on new fixed-rate and adjustable-rate mortgages fell by about 80 basis points (to 3.2%) and 50 basis points (to 4.5%) respectively.

[111] PIRs offer tax incentives to invest savings into Italian or EEA companies permanently established in Italy. As of end-2023, only 1.6% of the assets under management of open-ended and closed-ended funds in Italy were in the form of original PIRs and only 0.2% in alternative PIRs. See PIR Observatory, May 2024, Assogestioni.

half of 2025 may include: i) using the option under EU legislation ([112]) for a registration system (instead of authorisation) for alternative investment funds, and ii) allowing retail investors to invest in registered alternative funds, thus facilitating investment in private equity and venture capital funds.

The role of domestic institutional investors

The Italian asset management industry is quite developed with a balanced investment profile. As of Q3 2024, the assets under the management of investments funds run by Italian management companies or groups amounted to EUR 629 billion ([113]). If we add the assets of investment funds distributed in Italy and managed by foreign groups, the total assets under management amounted to EUR 1 322 billion, of which EUR 1 254 billion (95%) were open-ended funds ([114]). Of the open-ended funds, 31.7% were equity funds, 35.1% bond funds, 24.7% balanced or flexible funds and 8.5% other types of funds. According to the European Fund and Asset Management Association (EFAMA), investment funds managed by Italian groups tend to have a much higher share of their bond holdings invested in domestic bonds (42% in 2023 vs an EU average of 36.8%) compared to their equity holdings (10% vs an EU average of 21.4%) ([115]).

Investment funds play a particularly important role in the Italian bond market, especially for corporates. In the first half of 2024, the overall exposure of Italian and euro area funds to the Italian bond markets increased. Investment by these funds plays an important role, especially for NFCs. These funds hold about one third of outstanding bonds in this segment, while their share in the market for government securities is around one tenth ([116]).

The investment portfolio of insurers is heavily tilted towards bonds. As of Q3 2024, the investment portfolio of Italian insurance companies was EUR 1 029 billion. It was invested primarily in government bonds (35.6% vs an EU average of 19.5%), with a clear home bias ([117]), in corporate bonds (14.7%), mainly issued by foreign NFCs, in equity (11.1%), and in investment funds (33.2%) ([118]), with another 2.4% held in cash and deposits.

Supplementary pension schemes also have a conservative investment profile, with modest exposure to equity. As of end-2023, the resources accumulated by Italy's supplementary pension schemes stood at EUR 224.4 billion (around 10.8% of GDP) ([119]). Negotiating funds held 30.2% of total resources, pre-existing funds 29.9%, open funds 14.5% and personal pension plans (PIPs) 25.3%. Pension fund assets were invested as follows: 14.1% in Italian government bonds, 24.6% in other government bonds, 17.3% in other debt securities, 21.4% in equity securities, 15.8% in mutual funds, 5% in deposits and 1.8% in real estate investment ([120]). This suggests that there is material room to increase equity investment by the pension system. Encouraging the build-up of universal funded supplementary pension schemes would positively contribute to: (i) the sustainability and adequacy of pension benefits; (ii) investment in equity; (iii) access to finance; (iv) growth; and (v) innovation.

Italian institutional investors still have a wide margin to increase their contribution to start-up funding. A 2024 paper by the Centre for European Policy Studies showed that, on average, Italian pension funds accounted for 10% of private equity and venture capital funds raised annually

[112] Directive 2011/61/EU (AIFMD).

[113] See Bank of Italy, Financial Stability Report November 2024.

[114] See Assogestioni, Mappa trimestrale del Risparmio Gestito, 3rd Quarter 2024.

[115] See Exhibits 4.4 and 4.5 in EFAMA Asset Management in Europe, facts and figures December 2024.

[116] See Bank of Italy Financial Stability Report November 2024.

[117] According to the Bank of Italy (Financial Stability Report November 2024), based on June 2024 data, two thirds of the government bond exposure of Italian insurers is in domestic government bonds.

[118] See EIOPA insurance statistics, Q3 2024. The investment fund holdings of Italian insurers were mainly split between equity (34.2%) and debt funds (34.1%) but only 1.7% was in private equity funds.

[119] See COVIP - Supplementary Pension Funds in Italy at end 2023 – Main data. This figure differs from the one reported in the ECB portal and included in Table A3.1 below, pointing to a wider perimeter of pension funds included.

[120] See COVIP - Supplementary Pension Funds in Italy at end 2023 – Main data. The less granular data reported in the ECB portal also point to a similar allocation of investments.

between 2007-2023, below the EU average and substantially short of the 19% for the Baltic states and 20+% shares for Nordic Member States ([121]). Although inflows in Italian private equity funds in the first half of 2024 came primarily from Italian insurers and pension funds, only around 0.5% of the overall investment portfolio of Italian insurers and pension funds is invested in unlisted equity.

The new annual competition law has provided new incentives for some types of pension funds to invest in venture capital. The adoption of Law No 193 of 16 December 2024 introduced a venture capital investment constraint ([122]) for existing private pension schemes of freelance professionals (*Casse di Previdenza*), in order to take advantage of the tax exemption under Law 232/2016 on capital gains from qualified investments in shares and units of collective investment vehicles. This is a first step towards promoting pension fund investment in venture capital, but further measures are needed to make insurers and pension funds more familiar with this investment category through cost-effective and risk-controlled structures.

The depth of venture and growth capital

The venture and growth capital ecosystem is growing. According to a private market report ([123]), Italian venture capital funds injected EUR 8 billion into start-ups from 2013 to 2023, growing at a faster pace than the EU average. The Italian start-up ecosystem is valued at around EUR 67 billion (enterprise value), having grown twenty-five-fold in the past 10 years. As of June 2024, the assets managed by non-real-estate alternative investment funds (AIFs) exceeded EUR 50 billion, driven by growth in private equity funds, which account for almost half of the assets.

At the same time, the venture and growth capital ecosystem is still fragmented and does not fully meet the financing needs of start-ups. With a prevalence of small operators, the Italian venture capital offer does not sufficiently cover all stages of the enterprise life cycle, particularly regarding late-stage investments. This creates a financing gap for successful start-ups that want to scale up. Italy's employee stock ownership framework, a key element to attract and retain talent, also scores rather modestly relative to EU and international peers ([124]), suggesting room for improvement.

Targeted amendments to the legal framework supporting start-ups were recently adopted. As envisaged by the recovery and resilience plan (RRP), the latest annual competition law has made targeted amendments to the comprehensive legislative framework in place since 2012 (Start-up Act), aimed at facilitating the creation and growth of start-ups. These amendments include: i) reviewing the definition of start-ups and incubators, ii) the possibility of extending the validity period of some benefits for start-ups, iii) a tax credit for registered incubators and accelerators on direct or indirect investment in start-up equity, iv) favourable visa requirements for foreigners investing in innovative start-ups or venture capital funds in Italy, and v) extending the scope of the SME guarantee fund to provide guarantees also to venture capital investments in start-ups.

These actions are complemented by state-led initiatives to provide start-up funding. The state-owned CDP Venture Capital plays a central role in the Italian venture capital market, with EUR 3.35 billion of assets under management and 13 operational direct or indirect venture capital funds. According to its 2024-2028 business plan, it intends to invest EUR 2.2 billion in 50-70 new venture capital funds. CDP Venture Capital will also manage two public funds envisaged under the RRP, i.e. the digital transition fund (EUR 400 million) and the green transition fund (EUR 250 million), which will provide equity or quasi equity support to start-ups, directly or indirectly.

[121] See Closing the gaping hole in the capital market for EU start-ups – the role of pension funds – CEPS.

[122] The pension scheme will be able to benefit from tax relief if venture capital investment is at least equal to 5% from 2025, and 10% from 2026, of the basket of qualified investments in the previous year.

[123] See State of Italian VC: the report realised by P101 and Dealroom - scaleupitaly.

[124] According to rankings provided by the Not Optional campaign, Italy's employee stock option framework scores lower than countries such as the Baltic states, UK, France.

Table A5.1: **Financial indicators**

		2017	2018	2019	2020	2021	2022	2023	2024-Q3	EU
Banking sector	**Total assets of MFIs (% of GDP)**	213.0	206.4	206.3	230.4	216.2	198.7	178.4	177.2	248.4
	Common Equity Tier 1 ratio	13.4	12.9	13.9	15.5	15.1	15.2	15.5	15.9	16.6
	Total capital adequacy ratio	16.8	16.1	17.2	19.3	18.8	19.2	19.4	20.0	20.1
	Overall NPL ratio (% of all loans)	11.2	8.4	6.7	4.5	3.5	2.9	2.7	2.8	1.9
	NPL (% loans to NFC-Non financial corporations)	18.9	14.2	11.7	7.8	5.7	4.5	4.3	4.4	3.5
	NPL (% loans to HH-Households)	9.2	6.5	5.1	4.0	3.6	2.8	2.6	2.6	2.2
	NPL-Non performing loans coverage ratio	50.5	53.0	52.2	51.3	52.2	50.0	49.6	47.8	42.1
	Return on equity[1]	7.1	5.8	4.9	1.0	5.7	9.1	12.7	14.1	10.0
	Loans to NFCs (% of GDP)	45.3	44.5	41.8	47.8	43.3	33.9	30.6	28.9	30.0
	Loans to HHs (% of GDP)	37.7	37.6	37.7	41.4	38.7	34.6	32.1	31.2	44.5
	NFC credit annual % growth	0.2	1.5	-1.8	8.5	1.7	-0.2	-3.7	-2.4	0.8
	HH credit annual % growth	2.8	2.8	2.6	2.4	3.7	3.3	-1.3	-0.4	0.7
Non-banks sector	**Stock market capitalisation (% of GDP)**	31.9	26.6	30.8	31.1	33.6	25.5	28.5	31.5	69.3
	Initial public offerings (% of GDP)	0.12	0.13	0.17	0.05	0.30	0.20	0.23	-	0.05
	Market funding ratio	31.7	34.2	35.2	35.2	37.5	39.1	38.9	-	49.6
	Private equity (% of GDP)	0.23	0.39	0.39	0.33	0.42	0.63	0.32	-	0.41
	Venture capital (% of GDP)	0.01	0.01	0.01	0.02	0.02	0.04	0.03	-	0.05
	Financial literacy (composite)	-	-	-	-	-	-	43.5	-	45.5
	Bonds (as % of HH financial assets)	7.4	7.3	6.3	5.5	4.5	5.2	7.9	-	2.7
	Listed shares (as % of HH financial assets)	2.4	2.1	2.3	2.5	2.8	2.5	2.9	-	4.8
	Investment funds (as % of HH financial assets)	15.7	14.4	14.6	14.4	14.8	13.4	13.3	-	10.0
	Insurance/pension funds (as % of HH financial assets)	21.9	22.9	23.4	23.6	22.0	19.8	19.3	-	27.8
	Total assets of all insurers (% of GDP)	52.8	51.3	56.5	65.2	60.9	48.7	49.4	49.8	54.8
	Pension funds assets (% of GDP)	-	-	8.4	9.7	9.3	8.2	8.3	8.9	23.4

1-3	4-10	11-17	18-24	25-27	Colours indicate performance ranking among 27 EU Member States.

(1) Annualised data
Credit growth and pension funds EU data refer to EA average.
Source: ECB, ESTAT, EIOPA, DG FISMA CMU dashboard, AMECO.

Financing the green transition

Green bonds represent a growing but still small share of total outstanding bonds. The face value of green, social and sustainable bonds outstanding in Italy at the end of 2023 amounted to around EUR 90 billion, most of which were green and sustainable bonds with a face value of EUR 80.7 billion, significantly up from EUR 54 billion the year before but still only corresponding to 2.5% of all bonds outstanding, below the euro area average of 4%. More recently, in 2024 green bonds were issued for more than EUR 10.3 billion. This trend continued into the early months of 2025, with the issuance of a new green bond with a maturity of 20 years and the reopening via auction of an already outstanding bond (with a maturity of 2031) for a total of almost EUR 7 billion. Government-issued bonds account for 45% of the total outstanding stock; as for private bonds, the largest issuers are in the financial (33%) and public utilities sectors (15%).

Financial literacy

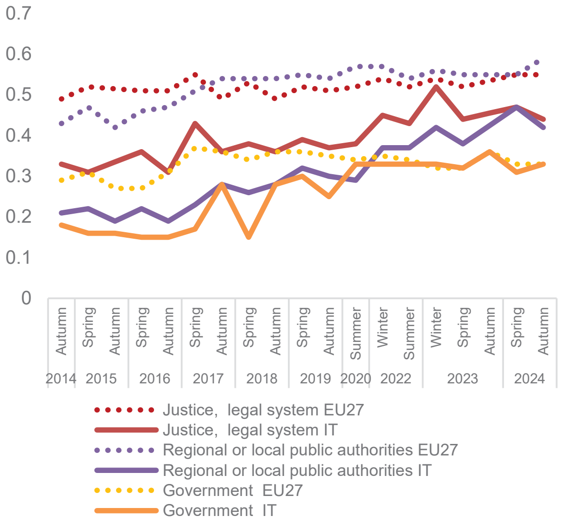
The recent introduction of financial education as a school subject may promote further financial literacy in Italy. Financial literacy is crucial to promote retail-investor participation in capital markets but also to familiarise SMEs with alternatives to bank financing. Italy has had a national strategy for financial literacy in place since 2017 and the recently adopted capital markets bill introduced financial education into the school curriculum. The Bank of Italy and CONSOB offer extracurricular activities on financial literacy in schools, including training for teachers. The level of financial literacy in Italy is in line with the EU average. The 2023 Eurobarometer survey [125] shows that 18% of Italians have a high level of financial literacy, 64% a medium level, and the remaining 19% a low level, practically in line with the EU average.

[125] Source: Monitoring the level of financial literacy in the EU - July 2023 - Eurobarometer survey.

Italy’s institutional framework influences its competitiveness. Efforts are being made by Italy to strengthen the effectiveness of its institutional framework. Italy is focusing heavily on improving digital public services in line with its Digital Decade targets. The continued roll-out of such services is crucial. Despite progress, the justice system still faces some challenges regarding its efficiency.

Public perceptions

Graph A6.1: **Trust in justice, regional / local authorities and in government**



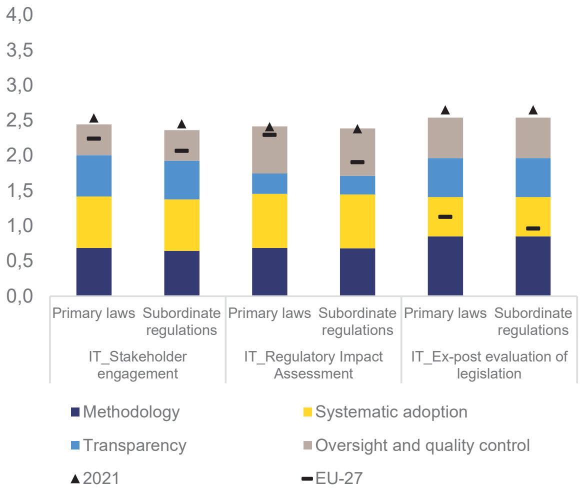
(1) EU27 from 2019; EU28 before
Source: Standard Eurobarometer surveys

Public trust in the government has increased and is in line with the EU average (Graph A6.1). However, it is less trusted than the justice system, and regional and local authorities. While the perceived quality of public administration has shown a general improvement across the country, regional disparities persist ([126]). When asked about ways to boost trust in Italy's public administration, 61% of citizens suggested reducing bureaucracy (EU average: 52%) and 49% called for better-skilled civil servants wanted simpler interactions with administration (EU average: 30%) ([127]). The Italian recovery and resilience plan (RRP) has helped to advance administrative reforms. Many measures required good cooperation between central and local administration.

Quality of legislation and regulatory simplification

Performance in developing and evaluating legislation is above the EU average. However, it has slightly deteriorated since 2021. Overall, there is scope for strengthening the requirements governing the transparency of regulatory impact assessments for both primary and secondary legislation (Graph A6.2). There is also room for further strengthening the mechanisms for simplifying regulations. For example, when evaluating primary legislation, there is no requirement to compare the impact of the existing regulation to alternative options (Table A6.1).

Graph A6.2: **Indicators of Regulatory Policy and Governance (iREG)**



Source: OECD (2025), Regulatory Policy Outlook 2025 and Better Regulation across the European Union 2025 (forthcoming).

Reforms under the RRP are intended to simplify at least 600 administrative procedures by June 2026 concerning citizen and business interactions with the public administration. The procedures relate to services in areas such as the environment, construction, production, employment, tourism, agri-food, as well as areas of more direct interest to citizens, such as registration services, disability support and access to digital services.

[126] Inforegio - European Quality of Government Index

[127] Understanding Europeans’ views on reform needs - April 2023 - - Eurobarometer survey, Country Fact Sheet.

Table A6.1: **Italy. Indicators on administrative burden reduction and simplification**

	Ex ante impact assessment of legislation		**Ex post evaluation of legislation**	
When developing new legislation, regulators are required to …	Identify and assess the impacts of the baseline or 'do nothing' option.	◑	Is required to consider the consistency of regulations and address areas of duplication.	◕
	Identify and assess the impacts of alternative non-regulatory options.	◕	Is required to contain an assessment of administrative burdens.	●
	Quantify administrative burdens of new regulations.	◑	Is required to contain an assessment of substantive compliance costs.	◕
	Quantify substantial costs of compliance of new regulations.	◕	Compares the impact of the existing regulation to alternative options.	●
	Assess macroeconomic costs of new regulations.	◕	Periodic ex post evaluation of existing regulations is mandatory.	●
	Assess the level of compliance.	○	Government uses stock-flow linkage rules when introducing new regulations (e.g., one-in one-out).	○
	Identify and assess potential enforcement mechanisms.	●	A standing body has published an in-depth review of specific regulatory areas in the last 3 years.	●
			In the last 5 years, public stocktakes have invited businesses and citizens to assess the effectiveness, efficiency, and burdens of legislation.	○

● Yes / For all primary laws ◕ For major primary laws ◑ For some primary laws ○ No / Never

(1) This table presents a subset of iREG indicators focusing on regulatory costs. The indicators refer to primary legislation.
Source: OECD (2025), Regulatory Policy Outlook 2025 [https://doi.org/10.1787/56b60e39-en] and Better Regulation across the European Union 2025 (forthcoming).

Decree-Laws, which are adopted by the Government and may be converted into law by the Parliament within 60 days, still account for over 50% of Italy's legislative output, diminishing parliament's lawmaking role. This reflects a trend for governments to use decree-laws, which has surged in the last few years.

Social dialogue

Despite the existence of formal consultation mechanisms in Italy, social partners' influence on policymaking remains limited. Consultations occur through informal talks before legislative acts are adopted and through formal involvement during parliamentary committee hearings. Social partners also have representation in the National Council for Economics and Labour (CNEL), an advisory body established by the Constitution. Despite these mechanisms, their involvement is low and largely influenced by the political climate. CNEL's public debate and legislative impact are minimal. The National Programme Youth Women Work 2021-2027 supports social dialogue by strengthening the capacity of social partners and civil society organisations through specialised training. Although official density figures may be overestimated, trade unions represent a significant workforce share. Nevertheless, there have been delays in renewing collective agreements [128].

Efficiency of selected administrative procedures

Proceedings handled by Italy's public administration often take a long time to complete. For example, the OECD product market regulation indicators show that Italy's licensing system is aligned with most, but not all, best practices. Although the government keeps an up-to-date online inventory of business permits and licences, there is no requirement for it to regularly review the inventory to determine if the permits and licences are still required (see Annex 4).

[128] For an analysis of the involvement of Italy's social partners at national level in the European Semester and the Recovery and Resilience Facility, see Eurofound (2025), National-level social governance of the European Semester and the Recovery and Resilience Facility.

Table A6.2: **Key Digital Decade targets monitored through the Digital Economy and Society Index**

		Italy			**EU-27**	**Digital Decade target by 2030**
		2022	**2023**	**2024**	**2024**	**EU-27**
Digitalisation of public services						
1	**Digital public services for citizens**	**67**	**68**	**68**	**79**	**100**
	Score (0 to 100)	2021	2022	2023	2023	2030
2	**Digital public services for businesses**	**79**	**75**	**76**	**85**	**100**
	Score (0 to 100)	2021	2022	2023	2023	2030
3	**Access to e-health records**	**na**	**71**	**83**	**79**	**100**
	Score (0 to 100)	2021	2022	2023	2023	2030

Source: State of the Digital Decade report 2024

Additionally, according to a report monitoring the implementation of the Commission recommendation and guidance on speeding up permit-granting procedures for renewable energy and related infrastructure projects [129] there is scope to accelerate national procedures for the licensing of renewable energy projects. Moreover, the average time for a decision by a contracting authority, i.e. from the deadline for submission of offers until the date of the contract award, is 176 days in Italy, compared to an EU average of 99 days. This causes uncertainty for companies. Increasing the speed in the award procedures for public contracts is one of the objectives of the RRP reform of public procurement.

Digital public services

Italy is making progress in offering citizens and businesses online access to key digital public services, although there is still room for improvement (Table A4.2). In 2023, Italy scored 68.3 for the availability of digital public services for citizens, compared to an EU average of 79.4. For the availability of digital public services for businesses, it scored 76.3 in 2023, which was also below the EU average (85.4). Efforts undertaken through the RRP are expected to increase the overall performance, while access to e-health records is a particular strength for Italy, which achieved an overall score of 83 out of 100 in 2023 (EU average of 79).

Use of eID is relatively common in Italy. In 2023 some 39% of individuals reported having used their eID to access online public services in Italy, while 47% had used their eID to access online services for private purposes. Both figures are above the EU average (36% and 41%, respectively) [130]. Italy has two certified digital ID schemes (SPID and CIE) which are widely used in the country. It has already begun to deploy its national IT wallet, part of the EU Digital Identity Wallet, which will allow people to safely request, store and share important digital documents and electronically sign or seal documents [131].

Italy is now closer to being ready for seamless, automated exchange of authentic documents and data across the EU. It has completed its first transactions using the Once-Only Technical System [132], part of the EU Single Digital Gateway, and is ready to roll out services to citizens and business. However, Italy has not yet set up and notified eID schemes for legal persons under the eIDAS Regulation [133]. This means that Italian businesses cannot authenticate themselves to access public services provided by other

[129] European Commission: Directorate-General for Energy, *Monitoring the implementation of the Commission recommendation and guidance on speeding up permit-granting procedures for renewable energy and related infrastructure projects – Final report*, Publications Office of the European Union, 2025, link.

[130] European Commission. Digital Decade 2024: Country reports

[131] EU Digital Identity Wallet Home - EU Digital Identity Wallet

[132] European Commission, Once-Only Technical System Acceleratormeter

[133] European Commission, eIDAS Dashboard

Member States, including those enabled by the Once-Only Technical System [134].

Further improving digital services for citizens is a priority for Italy. The authorities have rolled out several initiatives to improve the digital experience of citizens. These include the advancement of the 'Public Digital Identity System' (SPID) and the 'Electronic Identity Card' (CIE), the adoption of a European wallet for digital identity, which will be preceded by an Italian version known as the 'IT Wallet'. Additionally, digital payment systems such as 'PagoPA' and 'AppIO' are being adopted, alongside the implementation of the 'National Registry of Resident Population' (ANPR). Furthermore, there was significant progress in developing platforms for the digital notification of administrative acts (SEND), the digitalisation of public notices and innovative advancement in the public transport sector through 'Mobility as a Service' (MaaS) platforms. These measures simplify access to services and aim to make interaction with the PA more immediate and secure.

Civil service

Italy has the oldest public administration workforces in the EU, with almost 53% of the civil servants older than 49 years [135]. This was caused in part by a decade-long hiring freeze, which has also resulted in understaffing of the public administration. The proportion of women in senior civil service posts was 38.8%, well below the EU-27 average of 46.5% [136].

Efforts are ongoing to address capacity shortages. In 2021, as part of RRP, Italy launched the inPA national recruitment portal to streamline and enhance the transparency of the public sector recruitment. These efforts helped resume recruitment also, leading to a significant +12.6% annual increase in public sector hiring in 2023 compared to 2022[137]. Italy is professionalising its civil service through a combination of investment and reform. In January 2025, the Minister for Public Administration adopted a decree on training and enhancing human capital to support the development of public sector personnel. This will bolster the range of training offered by the Department of Public Administration, the National School of Administration (SNA), and Formez PA (the training platform 'Syllabus.gov.it' created as part of the RRP). Four local training hubs of the SNA have been established in four Italian regions to deliver advanced training to local public administrations on relevant and strategic topics. Approximately EUR 20 million have been allocated directly to administrations to support professional training programmes.

Integrity

A far higher percentage of companies than the EU average consider corruption to be widespread and a problem when doing business. In Italy, 83% of companies consider that corruption is widespread (EU average 64%), while 50% consider that corruption is a problem when doing business (EU average 36%) [138]. However, 32% of companies believe that people and businesses caught for bribing a senior official are appropriately punished, in line with the EU average (31%) [139]. Furthermore, public procurement continues to be seen by many stakeholders as a sector prone to high risk of corruption [140]. 83% of companies (EU average 27%) think that corruption has prevented them from winning a public tender or a public procurement contract in the last three years [141]. The digitalisation, as of 1 January 2024, of the entire lifecycle of all procurement or concession contracts under the new Public Procurement Code

[134] European Commission, The Once Only Principle System: A breakthrough for the EU's Digital Single Market

[135] Eurostat, 2025, European Union Labour Force Survey.

[136] European Institute for Gender Equality (EIGE), link.

[137] https://servizi2.inps.it/servizi/osservatoristatistici/api/getAllegato/?idAllegato=1048

[138] Flash Eurobarometer 543 on businesses' attitudes towards corruption in the EU (2024).

[139] Ibid.

[140] 2024 Rule of Law Report, country chapter on the rule of law situation in Italy, p. 22.

[141] Flash Eurobarometer 543 on businesses' attitudes towards corruption in the EU (2024).

should ensure more transparency of public contracts ([142]).

There are no comprehensive lobbying rules for members of parliament. As with most Member States, Italy has put in place rules on lobbying. However, there is no precise definition of a lobbyist or rules covering relations and contacts between parliamentarians and lobbyists ([143]). This could help ensure a level playing field for companies' access to policymakers. No parliamentary debates took place on any of the draft lobbying laws tabled in either of the two chambers. In addition, the draft law on conflicts of interest is pending in parliament ([144]).

Justice

Despite progress, the efficiency of the justice system continues to face challenges, in particular regarding the duration of judicial proceedings. The disposition time in civil and commercial cases at first instance courts has further decreased (from 540 days in 2022 to 511 days in 2023) but is still very long. The disposition time in administrative cases at first instance increased slightly (from 574 days in 2022 to 595 days in 2023), reversing the downward trend. The quality of the justice system is considered to be good overall. The level of digitalisation is generally advanced, but there is room for improvement regarding the digitalisation of criminal courts and prosecutor services. As regards judicial independence, no systemic deficiencies have been reported ([145]).

[142] 2024 Rule of Law Report, country chapter on the rule of law situation in Italy, p. 22.

[143] Ibid., pp. 19-20.

[144] Ibid., pp. 18-20.

[145] For more detailed analysis of the performance of the justice system in Italy, see the upcoming 2025 EU Justice Scoreboard and the 2024 Rule of Law Report.

Italy faces significant challenges regarding its clean industry transition and climate mitigation. Although Italy is a leader in clean technologies, its transition to electric vehicles trails EU averages, and it relies heavily on imported critical raw materials, leaving it vulnerable to supply chain disruptions. The country's energy-related greenhouse gas emissions in manufacturing are higher than the EU average, highlighting a need for more effective decarbonisation measures. While progress is noted in circular economy practices, regional disparities in waste management persist, and more investment is needed to bolster Italy's circularity transition. This annex reviews the areas in need of urgent attention in Italy’s clean industry transition and climate mitigation, looking at different dimensions.

Strategic autonomy and technology for the green transition

Net zero industry

Italy is one of the leading European countries in clean technologies, with a significant number of solar PV and wind manufacturing facilities [146]. In addition, it participates extensively in the Important Projects of Common European Interest (IPCEIs) launched for batteries and hydrogen. Italy’s manufacturing capacity amounts to between 2.7 and 2.8 GW/y (14% of EU capacity) for solar PV, with capacity equally distributed in modules (1.2-1.3 GW) and cells (1.5GW); between 3.5 and 3.8 GW/y (4% of EU capacity) for wind power. This includes the capacity of approximately 1–1.1 GW for towers and 2.5-2.7 GW for blades; between 310 and 325 MW/y (5-6% of EU capacity) for electrolysers, and between 200 and 350 MWh/y (a negligible share of total EU capacity) for battery and storage technologies. Italy is also home to at least 50 factories that specialise in the manufacturing heat pumps, further diversifying its manufacturing portfolio. It is also an EU and global leader in the production of cables and systems for power transmission and distribution – owing, in large part, to the presence of the Prysmian Group in the country.

Italy is also investing in sustainable gas production and uptake. The National Hydrogen Strategy Preliminary Guidelines emphasises the need for increased electrolyser production. The RRP supports significant investment in hydrogen in brownfield sites (hydrogen valleys).

Italy's recovery and resilience plan is supporting the development of net-zero technologies. For instance, it allocates EUR 3.5 billion to support investment necessary to promote the transition to a net-zero economy - namely companies producing batteries, solar panels, wind turbines, heat pumps, electrolysers, equipment for carbon capture usage and storage, as well as key components designed and primarily used as direct input. Italy has moreover introduced a government aid scheme to support investment in storage systems.

Italy also benefits from a conducive policy framework to scale net zero manufacturing. A one one-stop shop at municipal level dedicated to industrial permitting has been set up. Lastly, the New Skills Fund provides for upskilling and reskilling in net zero technologies. A smaller fund scheme also targets the production of electrolysers and sustainable investment in SME. Additionally, legislative measures support biogas and biomethane production and regulate the permanent geological storage of CO2.

Transforming the car industry

Despite its significant economic importance, Italy's automotive industry has faced a decrease in production volumes. The auto industry accounts for 4.3% of manufacturing jobs in Italy (below the EU average of 8.1% in 2022), employing directly around 165 000 people. Some 871 000 vehicles were made in Italy in 2023 (around two thirds of them cars) in 24 different plants (eight of them dedicated to battery electric

[146] European Commission: Directorate-General for Energy, The net-zero manufacturing industry landscape across the Member 2025, Link.

vehicles) [147] – far below 2018 when units produced exceeded one million.

The sector is currently navigating significant transformations, particularly the shift towards electric vehicles. 40% of the more than 2 000 companies in the sector specialise mainly in producing parts for internal combustion engines [148]. Furthermore, Italian suppliers are, on average, small (they employ 46 employees on average, compared to over 100 for Czech, Polish and German companies), suffering from greater difficulty in putting in place the huge investment needed for product innovation or industrial conversion [149]. Finally, the Italian automotive system is exposed to the choices of a few large companies [150] in sales to German and, to a lesser extent, French manufacturers, in a context of production and sales contraction in Europe and high electricity prices.

Italy's transition to e-vehicles is lagging behind EU averages. Italy's motorisation rate (the number of passenger cars per thousand inhabitants) is 694, the highest in the EU in 2023 (EU average is 570). However, the percentage of new zero-emission cars sold in 2023 is still 4.2%, well below the EU average of 14.5% in 2023.

Critical raw materials

Italy's mining sector has seen a significant decline, [151] increasing the country's dependence on minerals from other parts of the world, notably China, Africa, India and South America. However, Italy's sources are well-diversified, as measured by the index of strategic dependencies on raw materials in 2023 – one of the lowest levels in the EU [152].

Italian manufacturing depends heavily on imports of critical raw materials needed for the green and digital transitions, such as lithium, cobalt, and rare earths, which are essential for producing high-tech products, including electric vehicles, wind turbines and electronics. This creates significant challenges for sustainability and resilience, such as supply chain risks, environmental degradation and social concerns. With 48% of material inputs in manufacturing production stemming from imports in 2022 (EU average: 22%), Italy is particularly vulnerable to supply chain disruptions [153].

Italian authorities are making positive steps towards increasing strategic autonomy. In June 2024, the Italian government approved a decree that aims to ensure a secure supply of critical raw materials, in line with the EU's Critical Raw Materials (CRM) Act. The new legislation includes simpler permitting procedures for the release of mining concessions and seeks to attract private investment into the sector [154].

Italy is implementing policies to strengthen supply chains and the uptake of circular solutions for critical raw materials. Following the adoption of the EU CRM Act, the main Italian regulatory framework related to CRMs is the legislative decree 84/2024, which governs the secure and sustainable supply of strategic raw materials. Furthermore, Law n. 206 of 27 December 2023 sets up a 'National Made in Italy Fund' to invest in national strategic supply chains, including those related to the supply, recycling and re-use of strategic raw materials. The fund had an initial allocation of EUR 700 million for 2023 and the same for 2024. Finally, the RRP supports the URBES project (URBan mining and Extractive

[147] European Automobile Manufacturers' Association (ACEA), 2024, *The Automobile Industry Pocket Guide 2024/2025*.

[148] Associazione Nazionale Filiera Industria Automobilistica (ANFIA), Observatory on components, 2023, Link.

[149] Eurostat, Structural Business Statistics, referring to 2022.

[150] For example, the orders of Stellantis, the only manufacturer operating in Italy, that accounts for over 50% of turnover for a third of suppliers.

[151] Italy's minerals production was reported to be 12.9 million metric tons in 2022, i.e. 5.6% more than in 2021 but less than half the all-time high of 26 million metric tons in 2009 (source: World Mining Data, 2024).

[152] Single Market Scoreboard 2024. The significant concentration measures how much a country relies on a limited number of sources for a basket of critical raw materials.

[153] National circular economy network, 2025, 7th report on circular economy in Italy, Link, p.20.

[154] For new mining projects involving the processing of critical raw materials, holders of mining concessions will have to pay the state a product royalty of between 5% and 7%. These funds will be allocated to the National Made in Italy Fund to support investment in the supply chain for critical raw materials.

Waste Information System), which aims to map and characterise all potential secondary sources in terms of CRM, starting with abandoned extractive waste.

The recycling rate for e-waste, a key source of critical raw materials, is above the EU average, with 88.9% in 2021. The reuse and recycling rate for end-of-life vehicles is slightly below the EU average (86% vs 89% in 2022). This points to the need to avoid the leakage of critical raw materials, notably as the car industry shifts to battery-electric vehicles.

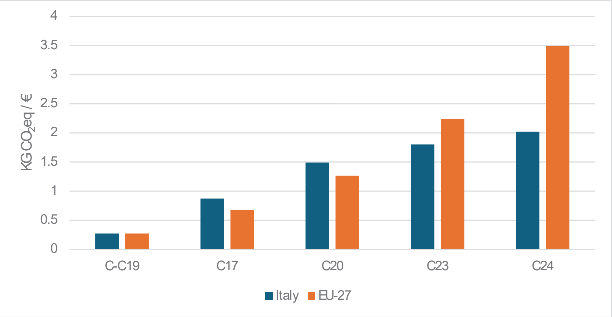
Climate mitigation

Industry decarbonisation

Italy's manufacturing sector has a similar level of greenhouse emissions intensity as the EU overall, but its share of energy-related emissions is significantly higher. Around 22% of Italy's total greenhouse gas emissions come from the manufacturing sector, like in the EU overall [155]. In 2022, industrial production in Italy emitted 270 g CO2eq of greenhouse gases per euro of gross value added (GVA), in line with the EU average. Since 2017, the greenhouse gas intensity of Italy's manufacturing industry declined by only 4%, well below the EU average (20%). With more than two thirds in 2023, Italy's share of energy-related greenhouse emissions in industry emissions (as contrasted with emissions related to industrial processes and product use) is the highest in the EU, where this share is at 57% overall.

Italy's manufacturing sector is less process- and product use-related emissions intensive than the EU's overall [156]. Between 2017 and 2022, the intensity of energy-related GHG emissions in Italy's manufacturing declined by 13%, to 135 g CO2eq per euro of GVA, similar to the EU average. In the same period, the intensity of process and product use- related emissions declined by 23% (like in the EU overall), to 62 g per euro of GVA, just 62% of the EU total. In that period, at around 41%, the share of electricity and renewables in final energy consumption in manufacturing was broadly stable. So was the energy intensity of Italian manufacturing, decreasing by about 5% to 1 GWh per euro of gross value added.

Graph A7.1: **GHG intensity of manufacturing and energy-intensive sectors, 2022**



Source: Eurostat.

Italy's energy-intensive industries face challenges but have maintained stable output. Energy-intensive industries [157] accounted for 12% of Italy's manufacturing gross value added in 2022. With the exception of paper and paper products, greenhouse emission intensities in these industries are at moderate levels, by EU standards. These industries are particularly exposed to energy prices; electricity prices for

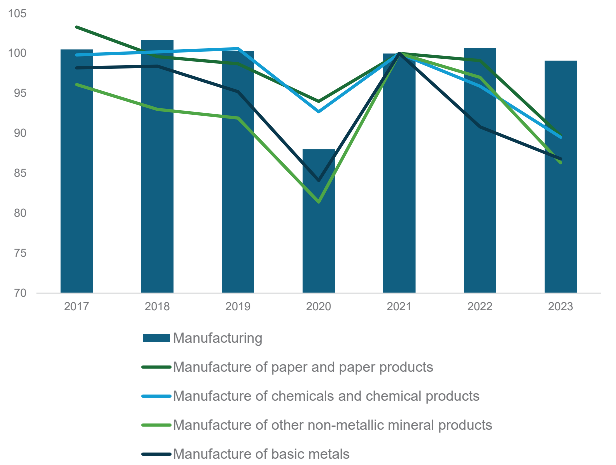
[155] In 2023. Manufacturing includes all divisions of the "C" section of the NACE Rev. 2 statistical classification of economic activities. In the remainder of this section, unless indicated otherwise, data on manufacturing refer to the divisions of the NACE section C excluding division C19 (manufacture of coke and refined petroleum products), and the year 2022. The source of all data in this section is Eurostat; data following the UNFCCC Common Reporting Framework (CRF) are from the European Environment Agency (EEA), republished by Eurostat.

[156] For the GHG emissions intensity of GVA related to energy use and industrial processes and product use respectively, GHG emissions are from inventory data in line with the UNFCCC Common Reporting Format (CRF), notably referring to the source sectors CRF.1.A.2 – fuel combustion in manufacturing industries and construction and CRF.2 – industrial processes and product use. The CRF.1.A.2 data broadly correspond to the NACE C and E sectors, excluding C-19. GVA data (in the denominator for both intensities) are aligned with this sectoral coverage. Therefore, they are not fully consistent with the data referred to in other part of this section.

[157] Notably, the manufacture of paper and paper products (NACE division C17), of chemicals and chemical products (C20), "other" non-metallic mineral products (C23; this division includes manufacturing activities related to a single substance of mineral origin, such as glass, ceramic products, tiles, and cement and plaster), and basic metals (C24). To date, these industries are energy-intensive – i.e. consuming much energy both on site and/or in the form of purchased electricity – and greenhouse gas emissions intensive, in various combinations.

industry have increased significantly in Italy in the past years ([158]). For the least innovative establishments, such as the ageing former Ilva steel mill in Taranto and non-ferrous metal processing and other plants in Sardinia (areas that benefited from the Just Transition Fund), insufficient deployment of innovative technologies (Direct Reduction of Iron at the former Ilva site) and renewable energy sources is rendering the production sites economically unsustainable. Still, the energy-intensive sectors as a whole maintained their output over the last year.

Graph A7.2: **Manufacturing industry production: total and selected sectors, index (2021 = 100), 2017-2023**



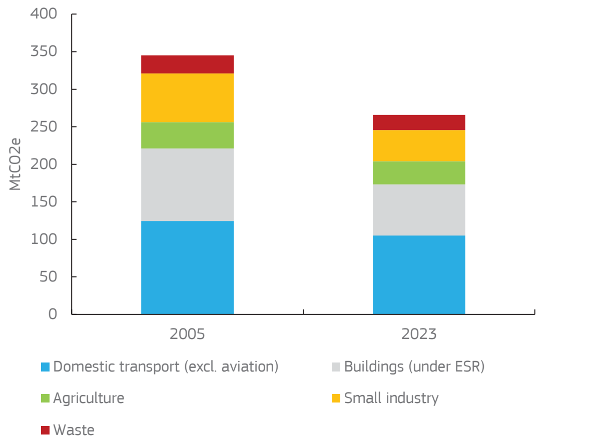
Source: Eurostat

Italy has started complementing its energy efficiency incentives with support for industry decarbonisation, but more is needed. Italy has set up some schemes for power purchase agreements, including large agrisolar plants as suppliers of renewable electricity. Some interesting projects on medium- to long-term energy storage, including heat, can significantly contribute to lowering the cost of industrial decarbonisation, curbing peak-hour electricity tariffs. Further efforts are needed, however, to address the high cost of electricity and promote the electrification of industry. For example, an incentive framework for self-production and storage of renewable energy would be helpful.

Reduction of emissions in the effort sharing sectors

To attain its 2030 effort sharing target, Italy needs to swiftly specify and implement further climate mitigation policies ([159]). In 2023, GHG emissions from Italy's effort sharing sectors are expected to have been 22.3% below those of 2005. By 2030, current policies are projected to reduce them by 29.3% relative to 2005 levels. Additional policies considered in Italy's final updated NECP are projected to entail reductions by a further 11.3 percentage points. This results in a 3.1 percentage point shortfall regarding Italy's effort sharing target of -43.7% ([160]). Given the large distance between current and additional measures, swift and steady adoption will be critical for the implementation of the full set of measures. While Italy could use domestic flexibilities available under the effort sharing regulation, this would not be sufficient to close the gap to target.

Graph A7.3: **Greenhouse gas emissions from the effort sharing sectors, 2005 and 2023**



Source: European Environment Agency

[158] For a detailed analysis of energy prices, see Annex 8 on the affordable energy transition.

[159] The national greenhouse gas emission reduction target is set out in Regulation (EU) 2023/857 (the Effort Sharing Regulation). It applies jointly to buildings (heating and cooling); road transport, agriculture; waste; and small industry (known as the effort sharing sectors).

[160] The effort sharing emissions for 2023 are based on approximated inventory data. The final data will be established in 2027 after a comprehensive review. Projections on the impact of current policies ("with existing measures", WEM) and additional policies ("with additional measures", WAM) as per Italy's final updated NECP.

Sustainable industry

Circular economy transition

Italy is still on track to achieve the EU Circular Economy Action Plan goals, thanks to high recycling and material reuse rates. The rate of circular use of materials was 20.8% in 2023 (EU average 11.8%), which puts it among the top EU countries. However, after a steady increase since 2013, the rate has been stable since 2020. With EUR 4.18 generated per kg of material consumed in 2023, resource productivity in Italy is well above the EU average of EUR 2.74 per kg and one of the highest in the EU. This helps minimise negative environmental impacts and reduce dependence on volatile raw material markets. Furthermore, the material footprint is below the EU-27 average at 10.5 tonnes per person in 2023.

The 2022 national circular economy strategy ([161]) provides a roadmap and defines new administrative and fiscal instruments to strengthen the market for secondary raw materials. The goal is to contribute to progress towards climate neutrality objectives and implement a roadmap of measurable actions and targets by 2035 ([162]). Many of the actions are in the national recovery and resilience plan (RRP) ([163]). On 2 March 2024, the government presented a decree-law on financial incentives for companies investing in sustainability, including circular economy ([164]). However, despite making strides at national level, the 6th report from the national circular economy network shows a higher degree of best practices in circular economy implemented in northern and central regions compared to southern regions ([165]). Another 2024 national report indicates that 42% of Italian companies have adopted at least one circular economy practice, with recycling being the most widespread ([166]).

Italy has seen a significant improvement in waste management. The landfill rate decreased from 46% in 2010 to 18% in 2022. The incineration rate has remained relatively stable and is at 19% in 2022. The Italian government's waste policy intends to increase recycling capacity, which, in turn, should reduce the demand for new incineration plants. Italy has a tax on waste incineration of municipal solid waste without energy recovery of EUR 5.16/tonne, which is the lowest among the 10 EU countries applying waste incineration taxes ([167]).

Italy is on target to meet all EU recycling targets for 2025 apart from the one for electrical and electronic waste. The municipal waste recycling rate stood at 53.3% in 2022, with a steady increase since 2017. Italy is also on track to achieve the EU landfilling target of a maximum of 10% by 2035. On the other hand, generation of total waste increased between 2018 and 2022 (from 2.9 kg per capita to 3.2 kg per capita) (see Annex 15, SDG 12). There are still large regional differences in waste management performance, as well as in waste infrastructure, and the north is generally more advanced than the centre-south. Separate collection rates for municipal waste in 2023 ranged from 77.7% in Veneto to 54.8% in Calabria ([168]). Quantity--based pricing is becoming more widespread especially in northern regions ([169]) but is notably lacking in the centre-south. Italy is still paying fines for European Court judgments on illegal landfills and waste management in Campania. A tax on single-use plastics goods, which was supposed to enter into force in 2021, has been delayed until at least 2026.

Current investment in the circularity transition should be increased. Italy is estimated to need total additional investment worth at least EUR 3.3 billion a year for the circular economy transition, including waste

[161] Ministry for Environment and Energy Security (MASE), 2022, *National Circular Economy Strategy*, Link.

[162] A related timetable addendum (cronoprogramma) contains targets to be achieved by 2027.

[163] Recovery and resilience plan, 2021 Link.

[164] Ministry of Enterprise and Made in Italy Link.

[165] National circular economy network, 2024, 6th report on circular economy in Italy, Link, p.91.

[166] Politecnico di Milano, *Circular Economy Report 2024*, Link.

[167] EEA, *Early warning assessment related to the 2025 targets for municipal waste and packaging waste – country profile Italy*, Link.

[168] Institute for Environmental Protection and Research (ISPRA), *Municipal Waste Report 2024*, Link, p.49.

[169] ISPRA, ibid., pp.262-3.

management, representing 0.15% of its GDP. Of this gap, EUR 745 million relates to recent initiatives, such as the eco-design for sustainable products, packaging and packaging waste, labelling and digital tools, critical raw materials recycling and measures proposed under the amendment of the Waste Framework Directive. EUR 2.1 billion represent the further investment needed to unlock Italy's circular economy potential ([170]).

Zero pollution industry

Italy has been making considerable progress in reducing air pollution, which is now decoupled from GDP growth. Under the National Air Pollution Control Programme (NAPCP), Italy has made substantial progress, as the latest reported data show that the 2020-2029 emission reduction commitments have been met and that the 2030 onwards emission reduction commitments are projected to be reached. The health benefits of implementing the NAPCP are estimated to be EUR 29.7 billion by 2030 (using a 2010 baseline) or 1.84% of 2010 GDP, reaching 3.4% of regional GDP in Lombardy in the Po river basin ([171]). In 2023, exceedances above the limit values set by the Ambient Air Quality (AAQ) Directive were registered for NO_2 in 10 air quality zones; for PM_{10} in 19 air quality zones and for $PM_{2.5}$ in 1 air quality zone. Indeed, the European Court has delivered two judgements confirming non-compliance with Directive 2008/50/EC, in 2020 for exceedances of PM_{10} limit values (C-644/18) and in 2022 for exceedances of NO_2 limit values (C-573/19). The aim is that appropriate measures are put in place to bring all air quality zones into compliance.

Italy's industry is still releasing large amounts of air and water pollutants. Although Italy has the fourth highest damage in the EU, it ranks 19th for emissions intensity, below the EU average of 27.5 EUR/thousand EUR GVA. The main contributors of emissions to air are the energy and mineral industries for NO_X and SO_2 emissions, and the metals sector and waste management for dust emissions and heavy metals. Italy has the highest amount of emissions of heavy metals to water (weighted by human toxicity factor) in the EU and ranks third for emission intensity (well above the EU average intensity of 0.864 kg / billion EUR GVA). The main contributors to emissions to water in Italy are 'other manufacturing' (mainly surface treatment of metals and plastics) for heavy metals, the chemical industry and waste management for nitrogen, phosphorous and total organic carbon.

The costs of pollution remain far higher than the investment in pollution prevention and control. In 2022, about 994 years of life lost per 100 000 inhabitants were attributed to fine particulate matter ($PM_{2.5}$) pollution in Italy well above France with 500 years of life lost; despite being relatively high, there has been a marked improvement in Italy since 2005 ([172]). To meet its objectives for pollution prevention and control and address the health and economic costs of pollution, Italy needs an additional EUR 1.8 billion per year (below 0.1% of GDP), mostly related to air pollution and noise ([173]).

[170] European Commission, DG Environment, *Environmental investment needs & gaps assessment programme*, 2025 update. Expressed in 2022 prices.

[171] Piersanti A, D'Elia I, Gualtieri M, Briganti G, Cappelletti A, Zanini G and Ciancarella.L., *The Italian NAPCP: Air Quality, Health Impact and Cost Assessment*, Atmosphere 2021, 12, 196, table 11, Link.

[172] EEA, 2024, *Harm to human health from air pollution in Europe: burden of disease status, 2024*, Link.

[173] European Commission, DG Environment, *Environmental investment needs & gaps assessment programme*, 2025 update. Expressed in 2022 prices.

Table A7.1: **Key clean industry and climate mitigation indicators: Italy**

Strategic autonomy and technology for the green transition				Italy					EU-27	
Net zero industry										
Operational manufacturing capacity 2023										
- Solar PV (c: cell, w: wafer, m: module), MW	1200-1300 (c), 1500 (m)			- Electrolyzer, MW			310-325			
- Wind (b: blade, t: turbine, n: nacelle), MW	2500-2700 (b), 1000-1100 (t)			- battery, MWh			200-350			
Automotive industry transformation	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**		**2018**	**2021**
Motorisation rate (passenger cars per 1000 inhabitants), %	643	652	663	671	675	682	694	↗	539	561
New zero-emission vehicles, electricity motor, %	0.11	0.27	0.54	2.15	4.55	3.67	4.16	↗	1.03	8.96
Critical raw materials	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**		**2018**	**2021**
Material import dependency, %		50.6	48.9	46.5	47.3	49.0	48.0	↘	24.2	22.6
Climate mitigation				Italy				Trend	EU-27	
Industry decarbonisation	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**		**2017**	**2022**
GHG emissions intensity of manufacturing production, kg/€	0.28	0.28	0.27	0.28	0.28	0.27		↘	0.34	0.27
Share of energy-related emissions in industrial GHG emissions	34.4	34.5	34.5	35.4	34.6	31.4	31.5	↘	44.8	42.5
Energy-related GHG emissions intensity of manufacturing and construction, kg/€	154.2	155.8	142.6	149.0	153.7	134.7	-	↘	158.4	132.9
Share of electricity and renewables in final energy consumption in manufacturing, %	41.6	42.2	43.0	44.1	40.5	41.3	41.8	↘	43.3	44.2
Energy intensity of manufacturing, GWh/€	1.03	1.01	1.01	1.12	1.07	0.98	0.93	↘	1.29	1.09
Share of energy-intensive industries in manufacturing production						11.9				7.3
GHG emissions intensity of production in sector [...], kg/€										
- paper and paper products (NACE C-17)	0.85	0.85	0.80	0.84	0.87	0.87	-	-	0.73	0.68
- chemicals and chemical products (NACE C20)	1.24	1.27	1.07	1.09	1.12	1.49	-	-	1.25	1.26
- other non-metallic mineral products (NACE C23)	2.29	2.23	2.16	2.28	1.85	1.80	-	-	2.53	2.24
- basic metals (NACE C24)	1.37	1.73	1.68	1.55	2.20	2.02	-	-	2.79	3.49
Reduction of effort sharing emissions		**2018**	**2019**	**2020**	**2021**	**2022**	**2023**		**2018**	**2023**
GHG emission reductions relative to base year, %					-18.4	-20.9	-22.3			
- domestic road transport		-18.1	-17.2	-32.0	-19.6	-14.8	-15.7	↗	1.4	5.2
- buildings		-13.7	-16.2	-17.8	-13.5	-23.4	-29.2	↘	21.4	32.9
	2005				**2021**	**2022**	**2023**	**Target**	**WEM**	**WAM**
Effort sharing: GHG emissions, Mt; target, gap, %	343.1				279.9	271.5	266.6	-43.7	-14.4	-3.1
Sustainable industry				Italy				Trend	EU-27	
Circular economy transition		**2018**	**2019**	**2020**	**2021**	**2022**	**2023**		**2018**	**2021**
Material footprint, tonnes per person		10.3	10.2	9.4	10.8	10.7	10.5	↘	14.7	15.0
Circular material use rate, %		18.8	18.8	20.6	19.7	20.6	20.8	↗	11.6	11.1
Resource productivity, €/kg		3.6	3.6	3.6	3.6	3.8	4.2	↘	2.1	2.3
Zero pollution industry										
Years of life lost due to PM2.5, per 100,000 inhabitants		778	695	764	703	994	-	↗	702	571
Air pollution damage cost intensity, per thousand € of GVA					17.9					27.5
Water pollution intensity, kg weighted by human factors per bn € GVA						1.9				0.9

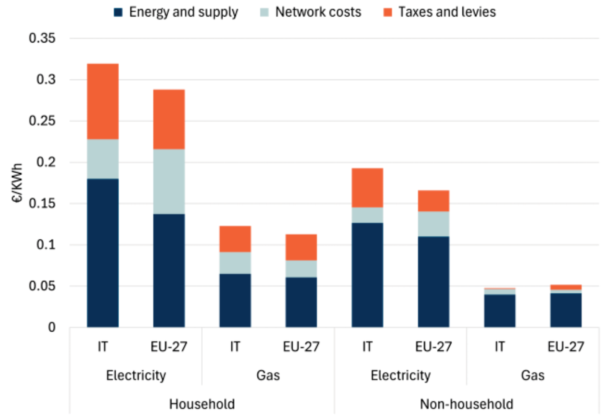
Source: **Net zero industry:** European Commission: The net-zero manufacturing industry landscape across Member States: final report, 2025. **Automotive industry transformation:** Eurostat. **Critical raw materials:** Eurostat. **Climate mitigation:** See footnotes in the "climate mitigation" section; reduction of effort sharing emissions: EEA greenhouse gases data viewer; European Commission, Climate Action Progress Report, 2024. **Sustainable industry:** Years of life lost due to PM2.5: Eurostat and EEA, Harm to human health from air pollution in Europe: burden of disease status, 2024. Air pollution damage: EEA, EU large industry air pollution damage costs intensity, 2024. Emissions covered: As, benzene, Cd, Cr, Hg, NH3, Ni, NMVOC, NOX, Pb, dioxins, PM10, PAH, SOX. Water pollution intensity: EEA, EU large industry water pollution intensity, 2024. Releases into water covered from cadmium, lead, mercury, nickel. Other indicators: Eurostat.

This annex outlines the progress made and the ongoing challenges faced in enhancing energy competitiveness and affordability, while advancing the transition to net zero. It examines the measures and targets proposed in the final updates to the national energy and climate plans (NECPs) for 2030.

Italy put a lot of effort in changing its energy system, accelerating the deployment of renewables, strengthening the electricity grid and fostering cross-border interconnections, together with promoting energy efficient behaviours. Space for improvement remains if we consider the countertrend of increasing fossil fuels imports over the past year.

Energy prices and costs

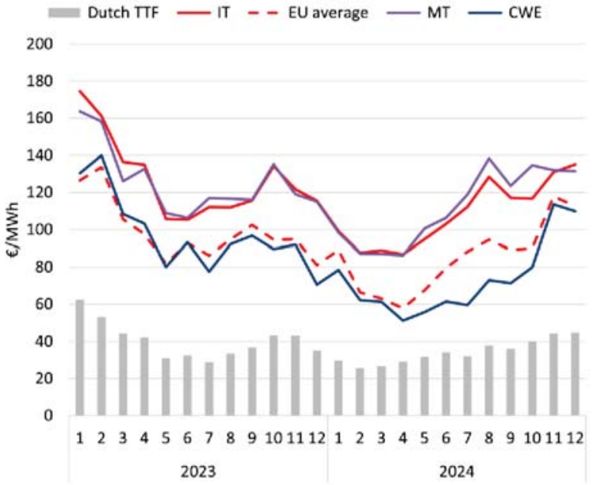
Graph A8.1: **Retail energy price components for household and non-household consumers, 2024**



(i) For household consumers, consumption band is DC for electricity and D2 for gas. Taxes and levies are shown including VAT.
(ii) For non-household consumers, consumption band is ID for electricity and I4 for gas. Taxes and levies are shown excluding VAT and recoverable charges, as these are typically recovered by businesses.
Source: Eurostat

Italy's retail electricity prices for both household and non-household consumers decreased in 2024 but remained above EU average, ranking seventh and eighth most expensive respectively. Regarding retail gas prices, there was an increase for households of around 17%, reaching levels above EU average, while for non-household consumers, prices remained below EU average for a second consecutive year. The share of retail energy price components broadly follows EU trends, with the exception of lower network costs and higher taxes and levies in electricity for both household and non-household consumers. When it comes to gas prices for non-households, the network cost component is higher than the EU average but taxes and levies are around five times lower than the EU average.

Graph A8.2: **Monthly average day-ahead wholesale electricity prices and European benchmark natural gas prices (Dutch TTF)**



(i) the Title Transfer Facility (TTF) is a virtual trading point for natural gas in the Netherlands. It serves as the primary benchmark for European natural gas prices.
(ii) CWE gives average prices in the central-western European market (Belgium, France, Germany, Luxembourg, the Netherlands and Austria).
Source: S&P Platts and ENTSO-E

With an average of 108 EUR/MWh in 2024 ([174]) **(EU average of 84.7 EUR/MWh), Italy had the EU's second-highest wholesale electricity prices – and while prices declined early in the year along with falling natural gas prices, they picked up in the spring/summer and surged in the autumn** ([175])**, diverging acutely from the broader Core** ([176]) **region.** These price spikes were mainly due to an overreliance on costly natural gas for electricity generation, with

[174] Fraunhofer (ENTSO-E data).
[175] A similar price spike was observed in the same period in 2023.
[176] Core is the capacity calculation region which covers central European countries namely Austria, Belgium, Czechia, Germany, France, Italy, Croatia, Hungary, the Netherlands, Poland, Romania, Slovenia, Slovakia and, once connected, Ireland.

Italy holding the third largest share in the EU, accounting for 44% of its electricity mix in 2024. Prolonged and more intense heatwaves, as well as a colder autumn, led to higher consumption from April to December (+1% vs the same period in 2023), while lower coal output (-60%), lower wind power generation (-13%) due to meteorological conditions, a strained net import position [177], and limited non-fossil flexibility further tightened the supply-demand balance. Though the gap was partially covered by increased hydropower production (+21%)[178] and growing solar (+19%), natural gas-fired generation was ramped up to cover the remaining needs to an even greater extent than the previous year (+1%), especially during peak demand hours. Consequently, even more so than in 2023, these conditions drove concentrated price spikes in the evening hours (18h-21h), when solar output declined and demand remained high, especially during the summer. Despite these trends, Italy's average electricity price over the year still decreased compared to 2023 (127 EUR/MWh), and energy poverty levels are low (see Annex 11).

Flexibility and electricity grids

There are ongoing projects to increase Italy's interconnection capacity. Italy's electricity transmission grid is interconnected with other countries through 26 lines. In 2022, more than 53 GWh were imported into Italy and around 28 GWh exported. Italy is part of the Italy North [179], Core and Greece-Italy capacity calculation regions (CCRs). Member States should ensure that a minimum of 70% of technical cross-border capacity is available for trading. The use of allocation constraints limits import possibilities into Italy North from neighbouring countries. A derogation enabling a lower level of trades for a limited time, if needed, has been granted to the Italian transmission system operator (TSO), Terna, for operational security reasons. Regarding the Greece-Italy CCR, the impact of exchanges with non-EU countries is limited, as well as the impact of exchanges across other borders within the region.

The significant growth in installed generation capacity [180] due to new solar and wind power expected by 2030 [181] makes it even more challenging for Italy to meet the 15% interconnection target by 2030. Terna's development plan for 2023 maintains the reinforcement of the transmission network to develop interconnection capacity with the electricity systems of neighbouring countries. This is to ensure greater security through the possibility of mutual assistance between interconnected systems. The development plan aims to expand Italy's interconnection capacity with Corsica, Tunisia, Greece, Slovenia, Austria, Switzerland and Malta. The Italy-Tunisia interconnection will help to increase the benefits for the whole European system, particularly in terms of sustainability, market integration and diversification of supply of resources [182]. The Central and South-Eastern Europe Energy Connectivity (CESEC) electricity and renewable energy action plan [183] gives additional emphasis to the importance of the interconnector between the Lienz (AT) - Veneto (IT) region and GRITA2 HVDC Galatina (IT) - Thesprotia (EL) lines. The action plan also includes the 300 MW northern Adriatic Sea offshore wind farm on the first ever CESEC priority list of renewable energy projects with regional impact. The CESEC action plan on gases includes the Italian hydrogen backbone among the priority hydrogen infrastructure projects and three natural gas infrastructure projects that will contribute to achieving the REPowerEU objectives [184].

Decarbonisation targets pose new challenges for grid development and operation. Requests to connect to the national electricity transmission network (RTN) indicate that market participants are concentrating the development of new renewable energy sources (RES) mainly in the south and in the islands. To enable an ambitious growth of RES, it will be crucial to develop new, efficient infrastructure that can connect the areas with increased renewable energy production with consumption centres, mainly located in the north

[177] Net cross-border electricity trading decreased by -4%.

[178] ENTSO-E.

[179] France, Italy, Austria and Slovenia are part of the Italy North CCR. A CCR is a group of countries which calculate cross-border electricity flows together.

[180] Doubling the current trading capacity between market areas from around 16 GW at present to over 30 GW.

[181] +74 GW In the policy scenario, maintaining fossil capacity with an integration, flexibility and reserve function.

[182] NECP, pp. 159-160.

[183] Endorsed at the 29 October 2024 CESEC ministerial meeting.

[184] The reinforcement of the Adriatica and Matagiola-Massafra internal pipelines, the expansion of the trans-Adriatic pipeline and the upgrade of the Poggio Renatico compressor station and reverse flow on the Malborghetto compressor station.

of the country. The Italian recovery and resilience plan (RRP) includes significant investments in the grid, such as the ‘Tyrrhenian link’ and the SA.CO.I.3, both of which aim to extend the electricity transmission infrastructure, as well as cross-border electricity interconnection projects between Italy and neighbouring countries, in particular Austria and Slovenia.

Italy has taken steps to support non-fossil flexibility. The current operational Italian power-storage capacity is around 8 806 MW (mainly pumped hydro) and the main barrier identified was the lack of information on ancillary services to develop a storage business plan that is not based on the energy market alone. Italy plans policies and measures that enhance flexibility. These include introducing an energy storage capacity procurement mechanism (MACSE), which seeks to support the installation of the power-storage capacity necessary to achieve the country’s renewable energy target by 2030. The Italian NECP also mentions the entry into force of the new regulatory framework on dispatching from 2025, including new rules for the participation of demand response in the provision of ancillary services. Aggregators cannot participate in the balancing markets and services. The participation of distributed energy resources in the Italian MACSE, while remaining limited, has been steadily increasing over time.

The role of the consumer is changing from passive to active. The development of widespread self-production can be expressed through various individual and collective configurations, industrial/commercial or as an expression of citizens’ initiatives, including for social and environmental purposes. The uptake of self-consumption, including through public energy pricing policies within the various possible self-consumption configurations, including renewable energy communities[185], will of course be fostered by technological developments[186]. On the one hand, Italy has 100% of smart meter roll-out and consumers have access to both fixed-term and dynamic contracts. The switching rate is relatively high at 15.7% (EU average is 8.7%). Moreover, Italy is one of the few Member States to have a publicly owned price comparison tool (managed by ARERA) that includes dual offers (electricity and gas) with a single supplier. On the other hand, a tool of this kind does make it possible to compare dynamic contracts. Progress in prosumerism is slow: so far, 4.5% of households generate electricity. Moreover, disconnection rates (for unpaid bills) in electricity in Italy in 2023 were among the highest (2.5%) recorded.

The electricity sector will play a key role in achieving the 2050 climate neutrality targets, as electrification of final consumption, hydrogen and e-fuel production in hard-to-abate sectors will require large amounts of electricity. The updated NECP raised the 2030 targets for renewables in final consumption to 39.4% (+9.4 points), as an average combining 63% for electricity, 36% for heating and cooling, and 34% for transport. It also sets a target for renewable hydrogen to account for 42% to 54% of total hydrogen consumption in industry by 2030.

In 2023, electricity accounted for 22.1% of Italy’s final energy consumption[187]**, slightly below the EU average of 22.9%, and this share has remained largely stagnant in the last decade partly due to an unfavourable electricity-to-gas price ratio that disincentivises electrification and cost-effective decarbonisation.** When it comes to households, electricity accounts for 19.8% of final energy consumption, while in industry it represents 39.2% (see Annex 7). For the transport sector, this share remains negligible at 2%. In 2024’s second semester, retail electricity prices in the household sector were among the highest in the EU (7th highest). While the electricity-to-gas price ratio for households was below 2:1 and remained unchanged after taxes and levies, electricity for energy-intensive industries cost 4.2 times more per unit than gas, decreasing to 3.4 before non-recoverable taxes and levies. For this segment, non-recoverable taxes and levies made up a significant portion of the final electricity price

[185] Decree-Law 162/19 (Article 42 a) and its implementing measures, such as Decision 318/2020/R/eel of the ARERA and the Ministerial Decree of 16 September 2020 of the Ministry of Economic Development (MiSE), set out the methods and conditions for activating self-consumption from renewable sources and creating renewable energy communities.

[186] Such as the potential of new smart meters in terms of the functions available to consumers, the deployment of digital technologies together with the internet of things and the increased accessibility of small medium size production and storage systems, with lower costs for users.

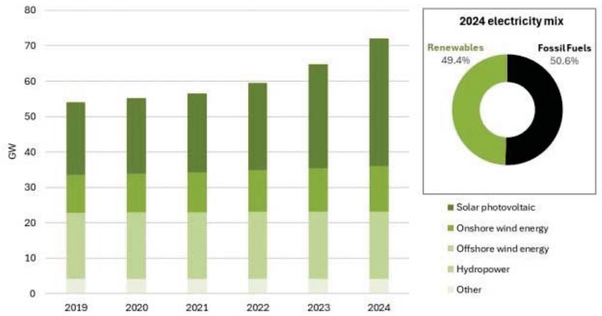
[187] CAGR (compound annual growth rate) of 0.2% between 2013 and 2023 and minimum/maximum share of 21.7% and 23%, respectively.

(24.6%, compared to the EU average of 15.4%), while gas was nearly tax-exempt (2.5% vs the EU average of 11.5%) [188].

Renewables and long-term contracts

Renewable sources in Italy represented 50% of electricity generation in 2024, slightly more than the EU's overall RES share of 47% [189]. Installed RES capacity grew by 11.33% in 2024. The total renewable energy capacity in Italy in 2024 stood at 72 115 MW. As regards the acceleration of solar deployment, the total installed capacity in 2024 was 36 013 MW, almost an 22.7% increase from 2023. Wind capacity increased by 5.6%. The updated NECP envisions 131 GW of renewable capacity in 2030 (including 28 GW of wind and 79 GW of solar PV), with a generation of 228 TWh, including 98 TWh from solar (43%) and 65 TWh from wind (28%). In addition, Terna estimates that Italy should install 8.9 GW (71 GWh) of energy storage (including pumped-storage hydropower) to meet its decarbonisation targets by 2030.

Graph A8.3: **Italy's installed renewable capacity (left) and electricity generation mix (right)**



"Other" includes renewable municipal waste, solid biofuels, liquid biofuels, and biogas.
Source: IRENA, Ember

The REPowerEU chapter of the RRP includes the reform of the 'Single Text' (Testo Unico) aiming to collect, compile and consolidate the existing legislation and provisions regulating RES deployment and superseding all relevant past legislation. The Ministerial Decree of June 2024[190] gives the Italian regions six months to establish RES-suitable areas. However, the identification of suitable areas is experiencing delays, partly as a result of some legal disputes arising with the regions [191]. There is thus room for further improvement to shorten the RES permit-granting procedure, especially taking into consideration the guidance on speeding up permit-granting procedures.

The updated NECP encourages initiatives to promote new investments in renewable generation capacities, decouple electricity price from gas prices, and to help decarbonise the energy consumption of large industrial consumers. These initiatives include power-purchase agreements (PPAs) and contracts for difference. The REPower chapter of the RRP includes a reform aimed at mitigating counterparty risk to facilitate access to PPAs. This reform introduces a centralised guarantee system and designates an entity as the operator of last resort. In 2023, 1.06 GW were contracted through PPAs, which allowed Italy to jump from ninth to third position among EU Member States. However, the total volume is still far behind that of the top EU Member States (Spain and Germany, with 4.67 GW and 3.73 GW respectively). Some 24 deals for PPAs were signed in 2023, which represents a steep increase compared to 10 deals in 2022.

Energy efficiency

Italy's energy efficiency measures continue to deliver energy savings in the residential and industrial sector, in particular, but untapped savings potential remains in key sectors. In 2023, primary energy consumption

[188] Analysis based on Eurostat data for the second semester of 2024. For household consumers, consumption band is DC for electricity and D2 for gas, which refer to medium-sized consumers and provide an insight into affordability. For non-household consumers, consumption band is ID for electricity and I4 for gas, referring to large-sized consumers, providing an insight into international competitiveness (price used for the calculation excludes VAT and other recoverable taxes/levies/fees as non-household consumers are usually able to recover VAT and some other taxes).

[189] Yearly electricity data, Ember.

[190] IT Ministerial Decree – 21 June 2024 implements the provisions of Legislative Decree 199 of 8 November 2021.

[191] A controversy with the Region of Sardinia has been brought before the Administrative Court of First Instance and a judgment is expected to be issued by 5 February 2025. Sardinian Regional Law - 5 of 3 July 2024: Sardinia first issued a regional law establishing a moratorium for RES until the regional law with suitable or non-suitable areas was adopted.

(PEC) decreased by 3.5% to 134.8 Mtoe compared to 2022. Final energy consumption (FEC) decreased by 2.0% to 108.6 Mtoe. Compared to 2022, FEC increased in the transport and services sectors by 3.4% and 3.0% respectively, while it decreased in the industrial and residential sectors by 5.0% and 8.6% respectively. This reflected the impact of energy efficiency efforts and measures, notably in the residential sector. According to the recast Energy Efficiency Directive (Directive (EU) 2023/1791), Italy should reach 112.2 Mtoe in PEC and 93.05 in FEC by 2030, as proposed in the updated final NECP.

Italy has some under-exploited potential to further roll out an efficient district heating and cooling network and modernise the existing district heating and cooling network. *Gestore Servizi Energetici* (GSE) ([192]) estimated the economically viable potential to increase the annually delivered energy from district heating at around 20.9 TWh , for an extension of the district heating and cooling network at national level of approximately 3 700 km. Italy has not notified the Commission of its comprehensive heating and cooling assessment identifying potential for the application of high-efficiency cogeneration and efficient district heating and cooling in line with Article 25(1) of the Energy Efficiency Directive. There is no estimate available as to when this will be done.

Regarding energy consumption in buildings, Italy reduced the (climate corrected) FEC of its residential sector by 5.5% between 2018 and 2022. This is in line with the national long-term renovation strategy, which envisages a 12% reduction of energy consumption by buildings by 2030, compared to 2020.

In 2022, heating and cooling represented 80% of the country's residential final energy consumption. Approximately 378 000 heat pumps were sold in 2023, a decrease of 26% compared to the previous year. Electricity in Italy was 3.4 times more expensive than gas in 2023, meaning that end users save energy but pay more if they chose a heat pump for heating. As of January 2025, Italy has phased out financial incentives related to the installation of fossil fuel boilers.

Italy continues to deploy a national financing framework for energy efficiency mainly based on subsidies via tax credits, while the use of financial instruments remains underdeveloped. In the course of 2024, Italy continued to implement tax credits on building renovations and thermal heating replacement – 'Superbonus' and 'Conto termico 2.0'. While the financial support from the 'Superbonus' was reduced to 70%, no parallel financial instruments or innovative financing tools were developed to mobilise further private capitals in energy efficiency investments. Financial instruments to activate energy efficiency investments in buildings, industry and services remain under-exploited in Italy, hampering the development of a thriving market for energy efficiency investments and energy-services companies, and further mobilisation of private capitals. The existing Kyoto Fund and the National Energy Efficiency Fund suffer from chronical under-execution and their future development is unclear. Italy has still to deploy an announced but deferred overhaul of its national financing framework for energy efficiency.

Security of supply and diversification

Italy's reliance on Russian gas significantly decreased in 2023 but imports slightly increased again in 2024. A key component of this strategy is the planned phase-out of Russian gas by 2025, which will be achieved through increased imports from other countries, such as Algeria, Azerbaijan and Qatar, as well as a boost in domestic production, expected to rise by 1.4 bcm annually by 2025. To support this diversification effort, Italy has commissioned two new floating storage and regasification units (FSRUs), one in Piombino, which is already operational, and another in Ravenna, which is to become operational in April 2025, with a combined capacity of 10 bcm/y. The country has successfully navigated the end of Russian gas transit via Ukraine, which ceased on 1 January 2025. Additionally, Italy reduced its gas demand by 17% between August 2022 and November 2024.

[192] The company identified by the State to pursue and achieve environmental sustainability through the two pillars of renewable sources and energy efficiency.

In 2023, fossil fuels accounted for almost 80% of the total energy supply in Italy. Among fossil fuels, natural gas and oil both accounted for roughly 38% of the energy mix. On the contrary, renewables accounted for less than 20% of the total energy mix of Italy.

Fossil fuel subsidies

In 2023, environmentally harmful ([193]) fossil fuel subsidies without a planned phase-out before 2030 represented 0.17% ([194]) of Italy's GDP ([195]), below the EU weighted average of 0.49%. Tax measures accounted for 94.3% of this volume, while the remaining share were income/price support measures. Additionally, Italy's 2023 Effective Carbon Rate ([196]) averaged EUR 100.05 per tonne of CO_2, above the EU weighted mean of EUR 84.80 ([197]).

[193] Direct fossil fuel subsidies that incentivise maintaining or increasing in the availability of fossil fuels and/or use of fossil fuels.

[194] Numerator is based on volumes cross-checked with the Italian authorities via the 2025 NECPR reporting. For all Member States, it includes public R&D expenditures for fossil fuels as reported by the IEA (Energy Technology RD&D Budgets) and excludes, for methodological consistency, excise tax exemption on kerosene consumed in intra-EU27 air traffic.

[195] 2023 Gross Domestic Product at market prices, Eurostat.

[196] The Effective Carbon Rate is the sum of carbon taxes, ETS permit prices and fuel excise taxes, representing the aggregate effective carbon rate paid on emissions.

[197] OECD (2024), Pricing Greenhouse Gas Emissions 2024.

Table A8.1: **Key Energy Indicators**

	Italy				EU			
	2021	**2022**	**2023**	**2024**	**2021**	**2022**	**2023**	**2024**
Household consumer - Electricity retail price (EUR/KWh)	**0,2307**	**0,3371**	**0,3571**	**0,3193**	**0,2314**	**0,2649**	**0,2877**	**0,2879**
Energy & supply [%]	48,9%	68,1%	66,1%	56,4%	36,6%	54,3%	55,6%	47,8%
Network costs	20,0%	17,1%	13,8%	15,0%	26,7%	25,3%	24,8%	27,2%
Taxes and levies including VAT	31,2%	14,8%	20,2%	28,6%	36,7%	20,3%	19,6%	25,0%
VAT	9,1%	8,6%	8,7%	9,3%	14,5%	13,4%	13,8%	14,6%
Household consumer - Gas retail price	**0,0774**	**0,1040**	**0,1053**	**0,1230**	**0,0684**	**0,0948**	**0,1121**	**0,1128**
Energy & supply	43,0%	67,4%	78,7%	52,8%	43,7%	61,0%	64,5%	53,9%
Network costs	20,2%	17,5%	22,4%	21,3%	22,5%	17,3%	17,1%	18,3%
Taxes and levies including VAT	36,8%	15,1%	-1,1%	25,9%	33,8%	21,7%	18,4%	27,8%
VAT	13,3%	4,8%	4,7%	11,9%	15,5%	11,6%	10,2%	13,6%
Non-household consumer - Electricity retail price	**0,1478**	**0,2760**	**0,2238**	**0,1928**	**0,1242**	**0,1895**	**0,1971**	**0,1661**
Energy & supply	55,5%	77,4%	66,4%	58,3%	43,0%	66,5%	63,0%	55,8%
Network costs	10,1%	7,0%	6,8%	8,6%	15,8%	10,7%	11,9%	15,5%
Taxes and levies excluding VAT	26,5%	5,0%	18,2%	24,6%	30,4%	9,9%	11,2%	15,4%
Non-household consumer - Gas retail price	**0,0303**	**0,0865**	**0,0669**	**0,0478**	**0,0328**	**0,0722**	**0,0672**	**0,0517**
Energy & supply	79,9%	89,6%	84,9%	78,1%	66,2%	77,3%	77,3%	68,7%
Network costs	6,4%	3,5%	9,7%	12,9%	7,7%	3,8%	5,3%	7,1%
Taxes and levies excluding VAT	6,3%	2,1%	1,0%	2,5%	12,5%	6,1%	7,3%	11,6%
Wholesale electrity price (EUR/MWh)	125,5	304,0	127,2	108,5	111,0	233,2	99,1	84,7
Dutch TTF (EUR/MWh)	*n/a*	*n/a*	*n/a*	*n/a*	46,9	123,1	40,5	34,4

	2017	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Gross Electricity Production (GWh)	**295.830**	**289.708**	**293.853**	**280.531**	**289.070**	**283.961**	**264.716**	-
Combustible Fuels	208.824	192.129	195.084	180.805	189.132	198.515	161.974	-
Nuclear	-	-	-	-	-	-	-	-
Hydro	38.025	50.503	48.154	49.495	47.478	30.291	42.068	-
Wind	17.742	17.716	20.202	18.762	20.927	20.494	23.640	-
Solar	24.378	22.654	23.689	24.942	25.039	28.121	30.711	-
Geothermal	6.201	6.105	6.075	6.026	5.914	5.837	5.692	-
Other Sources	661	601	650	501	579	703	630	
Gross Electricity Production [%]								
Combustible Fuels	70,6%	66,3%	66,4%	64,5%	65,4%	69,9%	61,2%	-
Nuclear	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	-
Hydro	12,9%	17,4%	16,4%	17,6%	16,4%	10,7%	15,9%	-
Wind	6,0%	6,1%	6,9%	6,7%	7,2%	7,2%	8,9%	-
Solar	8,2%	7,8%	8,1%	8,9%	8,7%	9,9%	11,6%	-
Geothermal	2,1%	2,1%	2,1%	2,1%	2,0%	2,1%	2,2%	-
Other Sources	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	-
Net Imports of Electricity (GWh)	**37.761**	**43.899**	**38.141**	**32.200**	**42.790**	**42.987**	**51.252**	-
As a % of electricity available for final consumption	12,5%	14,5%	12,6%	11,3%	14,2%	14,5%	17,8%	-
Electricity Interconnection [%]	**8,2%**	**#REF!**	**8,7%**	**8,8%**	**3,8%**	**4,0%**	**4,6%**	**5,0%**
Share of renewable energy consumption - by sector [%]								
Electricity	34,1%	33,9%	35,0%	38,1%	36,0%	37,1%	38,1%	-
Heating and cooling	20,1%	19,3%	19,7%	19,9%	19,3%	20,6%	21,7%	-
Transport	6,5%	7,7%	9,0%	10,7%	9,9%	10,0%	10,3%	-
Overall	18,3%	17,8%	18,2%	20,4%	18,9%	19,1%	19,6%	-

	2020	**2021**	**2022**	**2023**	**2020**	**2021**	**2022**	**2023**
Import Dependency [%]	**73,5%**	**73,3%**	**79,2%**	**74,8%**	**57,5%**	**55,5%**	**62,5%**	**58,3%**
of Solid fossil fuels	93,0%	97,0%	102,4%	96,4%	35,8%	37,2%	45,9%	40,8%
of Oil and petroleum products	88,7%	84,3%	92,9%	89,1%	96,8%	91,7%	97,8%	94,5%
of Natural Gas	92,8%	93,7%	99,2%	96,3%	83,6%	83,6%	97,6%	90,0%
Dependency from Russian Fossil Fuels [%]								
of Natural Gas	43,3%	40,0%	19,3%	4,7%	41,0%	40,9%	20,7%	9,3%
of Crude Oil	11,1%	10,1%	19,3%	0,0%	25,7%	25,2%	18,4%	3,0%
of Hard Coal	55,8%	62,1%	33,2%	0,1%	49,1%	47,4%	21,5%	1,0%

	2017	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Gas Consumption (in bcm)	**75,2**	**72,7**	**74,5**	**71,3**	**76,4**	**68,7**	**61,7**
Gas Consumption year-on-year change [%]	6,0%	-3,3%	2,4%	-4,3%	7,2%	-10,0%	-10,2%
Gas Imports - by type (in bcm)	**69,7**	**67,9**	**71,1**	**66,4**	**73,0**	**72,6**	**61,8**
Gas imports - pipeline	61,8	59,1	57,3	54,0	63,1	58,2	45,3
Gas imports - LNG	7,9	8,7	13,8	12,3	9,9	14,4	16,6
Gas Imports - by main source supplier [%]							
Algeria	28,0%	26,5%	18,8%	22,8%	30,8%	35,8%	41,6%
Azerbaijan	0,0%	0,0%	0,0%	0,0%	9,9%	14,2%	16,2%
Qatar	9,7%	9,6%	9,2%	10,5%	9,4%	10,0%	11,1%
Russia	47,5%	48,4%	47,1%	43,3%	40,0%	19,3%	4,7%

Source: Key Energy Indicators

Italy is one of the EU Member States that is the most exposed to climate risks, and therefore urgent action to build resilience is merited. Sustainable water management remains a major environmental issue, in particular in terms of governance, surface water body rehabilitation and water efficiency. The state of ecosystems and soils continues to deteriorate, creating significant risks to the country's economy and competitiveness. Italy has substantial sustainable agriculture practices, but its agri-food system continues to create significant pressure, warranting additional measures.

Climate adaptation and preparedness

Italy is strongly exposed to extreme events. The country is highly vulnerable in hydrogeological terms and most areas are at risk of floods, droughts and heatwaves. Italy is in two out of three macro-regions identified as hotspots of climate risks most affected by climate change – southern Europe and low-lying coastal regions [198]. In 2023, around 4.1% of the population lived in zones at high risk from flooding and 2.2% in zones at risk from landslides [199]. The specific impacts at regional level are shown in Annex 17. Between 1980 and 2023, Italy recorded 21 822 fatalities and almost EUR 134 billion in economic losses caused by weather and climate-related extreme events (see Annex 15, SDG 13). However, only 4% of economic damages over this period were insured, compared to 62% in Denmark [200]. The annual costs of climate change for infrastructure in Italy are estimated to be around EUR 2 billion in 2030 [201]. Projections suggest a cumulative negative impact on GDP per capita of 3.7% in 2050 and 8.5% in 2080 [202]. Provisions introduced in the 2024 budget law on mandatory company insurance for extreme events and natural disasters have not yet fully entered into force [203]. Agricultural activities have been covered since 2022 [204], but housing insurance is not mandatory. In 2023, only 3.4% of microenterprises and 28.2% of small enterprises had an insurance against flooding compared to two-thirds of medium sized enterprises and almost total coverage for large companies [205]. This lack of coverage not only exposes microenterprises and SMEs to significant financial risks in the event of a disaster, but also reflects a widespread underestimation of risk and a low propensity to take out insurance.

Climate change is having substantial impacts on housing and manufacturing. The value of housing potentially exposed to floods is around EUR 1 trillion, about a quarter of the total housing stock, and the expected annual loss is estimated at around EUR 3 billion. The area at highest risk is the Po Valley, and the greatest losses are expected in Emilia-Romagna [206]. About 35% of manufacturing companies are potentially exposed to floods or landslides. The most significant risk is flooding, to which 29% of manufacturing employees are subject, with the highest risk in Emilia-Romagna and Tuscany [207]. There is no available study showing the climate insurance gaps by region.

Climate change is having substantial impacts on agriculture. In 2023, the agricultural value added was close to EUR 37.5 billion, an increase in current terms (+7.9%), but a decline in volume (-2.5%) compared to 2022 [208]. In fact, 2023 was characterised by adverse weather and extreme weather events, which caused extensive damage to crops and livestock. On average over the last three years, the damage suffered by farms due to exceptional weather events has exceeded EUR 1.5 billion per year. In the first year of implementing the common agricultural policy (CAP) strategic plan, the highest level of spending was on risk management tools to manage losses in the event of adverse weather conditions and natural

[198] EEA, 2024, *European Climate Risk Assessment*, Link.

[199] ISPRA, Link (flooding), Link (landslides).

[200] EEA, 2024, *Economic losses from weather- and climate-related extremes in Europe*, Link.

[201] MIMS 2022, *Cambiamenti climatici, infrastrutture e mobilita*, p.17, Link.

[202] Ronchi, E. 2019, ed., *Relazione sullo stato della green economy*, p.30, Link.

[203] Italian government, 2024 Budget Law, Articles 101-111, Link.; Decree-law 39 31.3.2025, Link, for large companies obligatory from 1.4.2025, for medium sized companies from 1.10.2025, for small and micro enterprises from 1.1.2026.

[204] *Fondo mutualistico nazionale per la copertura dei danni catastrofali meteoclimatici alle produzioni agricole causati da alluvione, gelo-brina e siccità* (2022 Budget Law).

[205] *Associazione Nazionale fra le Imprese Assicuratrici*, Link .

[206] Bank of Italy, 2023, *L'impatto del rischio di alluvione sulla ricchezza immobiliare in Italia*, Occasional Paper 768, p. 18 & p. 20, Link.

[207] Bank of Italy, 2024, *The exposure of Italian manufacturing firms to hydrogeological risk*, Occasional Paper 899, p. 16, Link.

[208] CREA, 2023, *Annual yearbook 2023*, Link.

disasters. At regional level, spending on agriculture also illustrates the focus on climate change: natural disaster spending increased from 4% in 2019 to 9% in 2022 [209]. It is estimated that in 2024 there were over 300 extreme weather events for the third year running, up from 60 in 2015 [210]. Four extreme floods have taken place in the Po Valley over the last 18 months. This area was also strongly affected in 2022 by prolonged drought, which affected hydropower and agricultural output. In 2024, Sicily suffered an extreme drought. From 2010 to 2023, spending due to damage from hydrogeological events in Italy tripled to EUR 3.3 billion per year [211]. Italian SMEs affected by extreme events face a bankruptcy risk 4.8% times higher than other enterprises with all enterprises seeing a decline of revenues and employment by 4.2% and 1.9%, respectively, over the following three years [212].

National statistics show that in 2023, 20 hectares per day of soil was converted to artificial land cover (land take). The estimated total costs of the loss of ecosystem services' flows range from EUR 8.22 to EUR 10.06 billion annually due to land take between 2006 and 2023. The highest losses are associated with the 'hydrological regime regulation service', i.e. the increase in surface runoff produced by land take, for which flow loss values for 2006-2023 range from EUR 7.6 billion to EUR 8.9 billion per year [213]. Despite the huge loss due to soil sealing, a draft law on monitoring soil consumption has been pending in Parliament since 2012 [214]. Italy would benefit from taking proper corrective action, along with transposition of the forthcoming Directive on Soil Monitoring and Resilience. In addition, the EU Nature Restoration Law sets the target for 2031 to have no net loss in the total national area of urban green space and urban tree canopy cover in urban ecosystem areas compared to 2024 [215]. A positive step is the decree setting aside EUR 160 million for managing soil degradation in urban and peri-urban areas [216].

Italy has one of the highest rates of soil erosion by water in the EU [217] **and one of the lowest shares of conservation tillage practices in tillable areas** [218]. Soil erosion decreases agricultural productivity, increases the risk of drought, degrades ecosystem functions, amplifies hydrogeological risks such as landslides or floods, and it causes damage to infrastructure [219][220][221]. At EU level, Italy suffers the highest level of agricultural productivity loss due to soil erosion, with an estimated crop productivity loss of EUR 619 million in 2010 [222]. The key investment priorities for Italy are: i) soil regeneration, to increase the poor level of organic carbon and the soil sponge-effect; ii) restoration of water bodies including soil de-sealing in their basins; iii) reforestation and greening of urban and peri-urban areas; iv) scaling-up the adoption of agricultural practices that increase soil resilience, reducing hydrogeological risks and maintaining productivity.

National policy measures related to adaptation and preparedness have improved in recent years, but additional efforts are still required. Italy adopted its national climate change adaptation strategy (NAS) [223] in 2015 and subsequently, in 2023, its national adaptation plan (NAP) [224]. The NAS has not been revised since its adoption. Italy highlights specific challenges in its NAP, including insufficient coordination, disparities in subnational adaptation planning and delays in the planning process.

The observatory on climate change adaptation planned in the NAP has never

[209] CREA, 2023, *Annual yearbook 2023*, p. 12 Link.

[210] Legambiente, *Bilancio 2024: Italia sotto scacco della crisi climatica*, Link. In the methodology, an extreme weather event is counted as damage caused in a specific location.

[211] Italian Alliance for Sustainable Development (ASviS), 2023, *Rischio idrogeologico in Italia, senza prevenzione costi triplicati in 13 anni*, Link.

[212] Bank of Italy, 2022, *Gli effetti del cambiamento climatico sull'economia italiana. Un progetto di ricerca della Banca d'Italia*, Occasional Paper 728, p. 50, Link.

[213] ISPRA, 2024, *Consumo di suolo, dinamiche territoriali e servizi ecosistemici*. Edizione 2024, pp.199-200 & p. 343, Link.

[214] Italian Chamber of Deputies, 2023, Link.

[215] Nature Restoration Law, Article 8, Link.

[216] Ministry of Environment and Energy Security (MASE), *Draft soil decree*, Link.

[217] Eurostat, *Agri-environment indicator - soil erosion*, Link., see Annex 15, SDG 15.

[218] Eurostat, *Agri-environment indicator - tillage practices*, Link.

[219] FAO, Global Symposium on Soil Erosion.Link.

[220] Accademia dei Georgofili, *Siccità, alluvioni ed erosione del suolo*, Link.

[221] FAO, *Soils store and filter water*, Link.

[222] Panagos P. et al. Cost of agricultural productivity loss due to soil erosion in the European Union, 2018, Table 6, Link.

[223] MASE, *Strategia nazionale di adattamento ai cambiamenti climatici*, Link.

[224] The NAP was adopted on 21 December 2023 by a ministerial decree, Link.

been set up. The observatory should set the priorities, identify the interested parties and the sources of financing, as well as the measures to remove the obstacles to adaptation ([225]).

Italy has several regional adaptation strategies (Emilia-Romagna, Sardinia, Valle d'Aosta, Liguria, Lombardy and Molise) and two regional adaptation plans (Lombardy and Marche). The Technical Support Instrument was used by the City of Rome to develop an action plan to tackle its heat island effect and by the *Cassa Depositi e Prestiti* to provide a draft strategy and action plan for its climate adaptation facility. In 2023, 78% of the population was covered by the EU Covenant of Mayors for Climate and Energy, well above the EU average (44% in 2021).

Water resilience

Large areas of Italy are subject to water stress, in particular due to demand for water from agriculture, manufacturing and electricity cooling. These sectors are heavily dependent on the water supply and irrigation is crucial in many rural areas. The Water Exploitation Index+ arrived to 15.6 in 2022, with a value of 30.9 in summer 2022 (EU average 4.6 in 2021) ([226]). Italy's water productivity is considerably lower than in other EU Member States, at EUR 40 per m^3 of abstracted water in 2022 and on a downward trend over the past five years. Around 20% of Italian GDP depends on water resources ([227]).

Seasonal data show that in summer months, the country's total water consumption exceeds its renewable freshwater resources. Agriculture is the main consumer of water, with a steady uptake of 10 929 million m^3, i.e. 57% of total consumption in 2022, posing a significant strain on the country's water resources ([228]). The government has implemented measures to reduce water consumption in agriculture, such as improving irrigation efficiency and promoting the use of drought-resistant crops under the recovery and resilience plan and the national rural development programme. The challenges remain significant, particularly in regions with high levels of water stress.

Water leakage remains a significant problem. In 2022, around 9.1 billion m^3 of withdrawals were made, 81% of this volume measured. However, only 8 billion m^3 of water is fed into the network each year, and of these only 4.6 billion m^3/year is distributed to authorised users ([229]). Water losses are greater in central and southern regions (see Annex 17). Campania and Apulia import the highest volume of water from other regions ([230]). In addition to investments under the RRP, the national plan for infrastructure and security in the water sector (PNISSI) ([231]) can help alleviate the problem, as can nature-based solutions ([232]). ARERA has taken environment resource costs and climate change into account in their tariffs ([233]).

Concerns remain on the quality of surface water. Italy's third river basin management plan (2022-2027) under the Water Framework Directive shows that the ecological status and potential of surface water bodies has improved only slightly since the second plan. Just over 44% of surface water bodies are reported as having good ecological status/potential. Nutrient pollution from diffuse agricultural and urban wastewater point sources and hydro-morphological alterations are the main reasons for the deterioration in ecological status. Water abstraction is also a problem. The chemical status remains stable, as 75% of surface water bodies are classified as having good chemical status. The quantitative status of groundwater bodies has significantly improved since the second plan, with 79% reported in good quantitative status. Their chemical status has also improved with at least 70% reported as having good chemical status.

Wastewater treatment is a persistent cause for concern. In Italy, the overall compliance rate with the Urban Wastewater Treatment Directive was only 56% in 2020 ([234]). Four infringement proceedings are currently open for failure to

[225] The Italian authorities indicate that "administrative activity to establish the Observatory is under way" (April 2025).

[226] EEA, 2025, link.

[227] Ambrosetti House, Libro Bianco 2025, p.6, Link.

[228] MASE, European Semester mission, Rome, 5 February 2025. About 80% of this volume is measured, the rest is estimated.

[229] MASE, European Semester mission, Rome, 5 February 2025.

[230] Confindustria, 2024, *Dall'emergenza all'efficienza idrica*, pp.19-20, Link.

[231] Ministry of Infrastructure and Transport, *PNISSI*, Link.; the 2025 budget law increases *PNISSI* resources, Link, p.197.

[232] For example, the Horizon 2020 Oristano project, Link.

[233] *Autorità di Regolazione per Energia Reti e Ambiente*, Link.

[234] European Commission, Link.

comply with the requirements of the EU Directive, covering at present more than 850 agglomerations, the majority of which are in Sicily, Calabria, Campania and Lombardy. Two infringements have led to EU Court of Justice rulings and fines (C-251/17 & C-515/23).

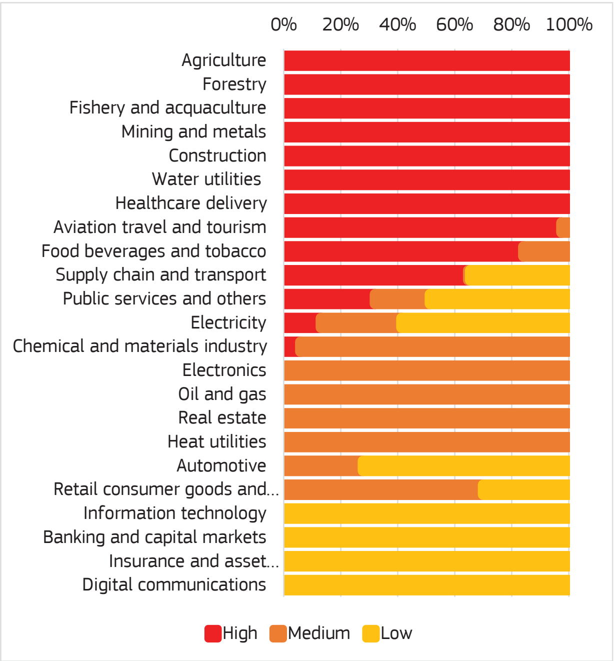
The investment needs for water protection and water management are substantial, with a gap of EUR 2.2 billion per year by 2027 (Graph A9.2)([235]). Roughly 35% of the gap can be attributed to unmet financing needs in wastewater management. Increasing investments will be needed to comply with the Directive as strengthened in 2024 ([236]). Of the total financing, 4% is provided by the EU multiannual financial framework (mostly cohesion policy), with a further 14.6% from the Recovery and Resilience Facility, reaching a combined 18.6%. Financing by the European Investment Bank is around 4.9% of the total, with the rest from national sources (76.6%).

Biodiversity and ecosystems

The state of nature and ecosystems continues to degrade, reducing Italy's climate resilience. Italy hosts 132 habitat types and 340 species covered by the Habitats Directive ([237]). According to the latest available data, only 9.9% of the country's habitats are classified as having good status (EU average: 14.7%).

Nature degradation creates significant risks to the country's economy and competitiveness. Italy has a high supply chain dependency on ecosystem services of 21% of its gross value added (EU average: 22%). Overall, 41% of Italy's economy is highly dependent on ecosystem services to produce its gross value added (EU average: 44%). Several sectors such as agriculture, forestry and healthcare (Graph A9.1) have 100% of their gross value added directly dependent on ecosystem services.

Graph A9.1: **Direct dependency(1) on ecosystem services(2) of the gross value added generated by economic sector in 2022**



(1) Dependency based on the sector's own operations, excluding value chain operations within countries and across international value chains. A high dependency indicates a high potential exposure to nature-related shocks or deteriorating trends, meaning the disruption of an ecosystem service could cause production failure and severe financial loss.
(2) Ecosystem services are the contributions of ecosystems to the benefits that are used in economic and other human activity, including provisioning services (e.g. biomass provisioning or water supply), regulating and maintenance services (e.g. soil quality regulation or pollination), and cultural services (e.g. recreational activities).
Source: Hirschbuehl *et al*, 2025, *The EU economy's dependency on nature*, Link.

Action on nature protection and restoration is needed to meet Italy's nature restoration targets. Including both Natura 2000 and other nationally designated protected areas, Italy legally protects 21.4% of its land (EU average: 26%) and about 9.7% of marine areas (EU average: 12.1%). Italy still needs to restore up to 67 333 km^2 of the land habitats listed in Annex I to the Habitats Directive, corresponding to up to 22.3% of its land ([238]). The investment gap to preserve biodiversity is around EUR 0.9 billion per year (see Graph A9.2).

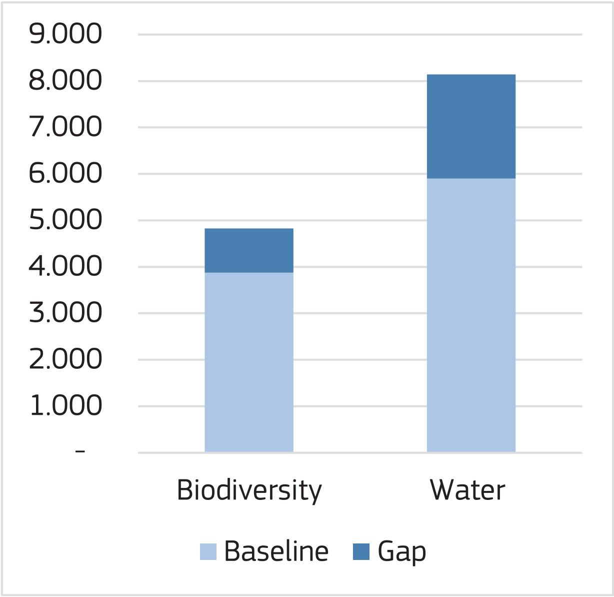
[235] N.B. a 2025 study by the Study Centre of the Chamber of Deputies reveals a gap of up to EUR 2 billion/year, p.56, Link.

[236] Directive 2024/3019, of 27 November 2024. The deadline for transposition is 31 July 2027, Link.

[237] EEA, 2019, *Number of habitats and species per Member State*, Link.

[238] European Commission, 2022, *Impact assessment accompanying the proposal for a Regulation on nature restoration*, Link.

Graph A9.2: **Investment needs and gaps in EUR million, in 2022 constant prices**



Source: European Commission, DG Environment, Environmental investment needs & gaps assessment programme, 2025 update.

Sustainable agriculture and land use

Italy's carbon removals fall short of its 2030 target for land use, land-use change and forestry (LULUCF). Italy faces significant challenges in boosting the carbon-absorbing capacity of its land-use sector, as carbon removals have declined at a worrying speed in recent years. To meet its 2030 LULUCF target, additional carbon removals of -3.2 million tonnes of CO_2 equivalent (CO_2eq) are needed ([239]). The projections submitted in the NECP show a significant gap to target for 2030 ([240]); thus additional measures are needed to reach the 2030 target.

Italian agriculture is a major source of greenhouse gas emissions and continues to have significant impacts on air, water and soils. Agriculture generated 30.8 million tonnes of CO_2eq in 2022, accounting for around 7.5% of the country's total emissions (excluding LULUCF). This includes 21 million tonnes of CO_2eq from livestock.

The utilised agricultural area (UAA) in Italy increased from 12 909 thousand hectares in 2018 to 13 078 in 2023. There has been some improvement in the overall nitrogen balance, with a drop from 58.2 kg of nitrogen per hectare of UAA in 2018 to 56.2 kg in 2021. Nevertheless, an infringement of the Nitrates Directive remains open as the situation in several Italian regions is not improving sufficiently. The livestock density index in Italy was 0.81 in 2020, above the EU average of 0.75. Ammonia emissions fell by 13% between 2018 and 2022 despite being still above the EU average (see Annex 15, SDG 2). However, in 2021, the level of pesticides in surface water was 34%, above the EU average (29%).

Italy is transitioning to a sustainable food system by implementing policies to reduce the environmental impact of agriculture. In 2022, 8% of its agricultural land had landscape features such as woods and non-productive grasslands, above the EU average of 5.6% ([241]). Organic farming, which reduces the use of synthetic fertilisers and pesticides, made up 18.1% of Italy's agricultural land, above the EU average. Under its CAP strategic plan, Italy allocates approximately EUR 2 billion to organic farming and aims to increase the area under organic farming to reach 25% of UAA by 2027. To mitigate the environmental impacts of agriculture, the government has implemented measures to reduce pollution, for example by promoting integrated farming systems on almost 500 000 hectares and improving the methods of distributing fertilisers and manure to the soil. Over EUR 10 billion of the plan's budget is earmarked for measures to support the climate and the environment. To this end, Italy has designed 34 voluntary schemes that compensate farmers for the additional costs and income loss deriving from the adoption of more environmental and climate-friendly practices. These include reduced use of fertilisers and pesticides, farming techniques that protect biodiversity, as well as soil conservation practices. The bioeconomy contributed EUR 98.2 billion of added value to the country's GDP in 2021. The national action plan on bioeconomy was updated in December 2024 ([242]).

[239] National LULUCF targets of the Member States in line with Regulation (EU) 2023/839, Link.

[240] European Commission, 2024, *Climate Action Progress Report*, COM/2024/498, Link. Updated projections taking into account methodological adjustments have been submitted by Italy in its most recent NECP Reporting in March 2025.

[241] European Commission, Land Use/Land Cover Area Frame Survey, Link; *Landscape features in agricultural land: what is the extent?*, p. 34, Figure 14 (map), Link.

[242] MASE, updated bioeconomy action plan, Link.

Table A9.1: **Key indicators tracking progress on climate adaptation, resilience and environment**

Climate adaptation and preparedness:	Italy						EU-27	
	2018	2019	2020	2021	2022	2023	2018	2021
Drought impact on ecosystems *[area impacted by drought as % of total]*	0.81	0.58	1.59	3.77	18.17	1.83	6.77	2.76
Forest fires burned area (1) *[ha, annual average 2006-2023]*	56 673	56 673	56 673	56 673	56 673	56 673		
Economic losses from extreme events *[EUR million at constant 2022 prices]*	5 708	5 273	2 720	686	17 626	15 741	24 142	62 981
Insurance protection gap (2) *[composite score between 0 and 4]*	-	-	-	-	1.75	1.75		
Heat-related mortality (3) *[number of deaths per 100 000 inhabitants in 2013-2022]*	159	159	159	159	159			
Sub-national climate adaptation action *[% of population covered by the EU Covenant of Mayors for Climate & Energy]*	71	73	74	75	76	78	41	44

Water resilience:	Italy						EU-27	
	2018	2019	2020	2021	2022	2023	2018	2021
Water Exploitation Index Plus, WEI+ (4) *[total water consumption as % of renewable freshwater resources]*	8.1	7.6	11.1	11.0	15.6	-	4.5	4.6
Water consumption *[million m^3]*	13 750	13 708	18 353	19 411	19 335	-		
Ecological/quantitative status of water bodies (5) *[% of water bodies failing to achieve good status]*								
Surface water bodies	-	-	-	47%	-	-	-	59%
Groundwater bodies	-	-	-	19%	-	-	-	93%

Biodiversity and ecosystems:	Italy						EU-27	
	2018	2019	2020	2021	2022	2023	2018	2021
Conservation status of habitats (6) *[% of habitats having a good conservation status]*	9.9	-	-	-	-	-	14.7	-
Common farmland bird index *2000=100*	72.2	73.8	71.6	72.3	69.4	-	72.2	74.4
Protected areas *[% of terrestrial protected areas]*	-	-	-	21	21	-	-	26

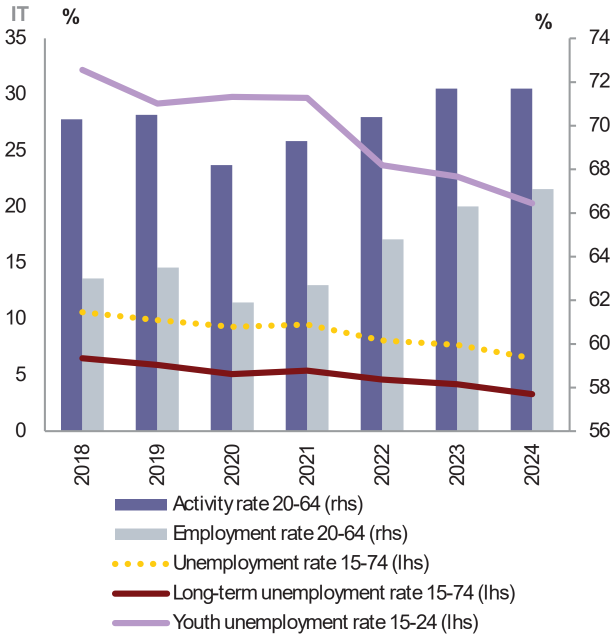
Sustainable agriculture and land use:	Italy						EU-27	
	2018	2019	2020	2021	2022	2023	2018	2021
Bioeconomy's added value (7) *[EUR million]*	91 538	94 213	88 755	98 215			634 378	716 124
Landscape features *[% of agricultural land covered with landscape features]*	-	-	-	-	8	-		
Food waste *[kg per capita]*	-	-	136	140	139	-		
Area under organic farming *[% of total UAA]*	15.2	15.2	16.0	16.8	18.1		7.99	-
Nitrogen balance *[kg of nitrogen per ha of UAA]*	58.2	57.2	56.1	56.2	-	-		
Nitrates in groundwater (8) *[mgNO$_3$/l]*	19.0	18.6	18.2	17.8	-	-		
Net greenhouse gas removals from LULUCF (9) *[Kt CO$_2$-eq]*	- 41 900	- 37 702	- 27 499	- 24 787	- 21 199	-	- 256 077	- 240 984

(1) The data show the average for the timespan 2006-2023 based on EFFIS - European Forest Fire Information System.
(2) Scale: 0 (no protection gap) – 4 (very high gap). EIOPA, 2024, Dashboard on insurance protection gap for natural catastrophes.
(3) van Daalen, K. R. et al., 2024, The 2024 Europe report of the Lancet Countdown on health and climate change: unprecedented warming demands unprecedented action. The Lancet Public Health.
(4) This indicator measures total water consumption as a percentage of the renewable freshwater resources available for a given territory and period. Values above 20% are generally considered to be a sign of water scarcity, while values equal or greater than 40% indicate situations of severe water scarcity.
(5) European Commission, 2024, 7th Implementation Report from the Commission to the Council and the European Parliament on the implementation of the Water Framework Directive (2000/60/EC) and the Floods Directive (2007/60/EC) (Third River Basin Management Plans and Second Flood Risk Management Plans).
(6) For this indicator, the EU average includes figures for the UK under the previous configuration, EU-28.
(7) European Commission, 2023, EU Bioeconomy Monitoring System dashboards.
(8) Nitrates can persist in groundwater for a long time and accumulate at a high level through inputs from anthropogenic sources (mainly agriculture). The EU drinking water standard sets a limit of 50 mg NO_3/L to avoid threats to human health.
(9) Net removals are expressed in negative figures, net emissions in positive figures. Reported data are from the 2024 greenhouse gas inventory submission. 2030 value of net greenhouse gas removals as in Regulation (EU) 2023/839 – Annex IIa.
Source: Eurostat, EEA.

ANNEX 10: LABOUR MARKET

Italy's labour market has demonstrated resilience and incremental progress in recent years, marked by improving labour market outcomes, although the country still faces structural challenges. In particular, Italy's competitiveness and potential economic growth is negatively impacted by persistently low productivity growth, stark regional imbalances, demographic decline coupled with the migration of talent; and the underrepresentation of some groups, particularly women, older workers and young people, in the labour market. As Italy works towards reaching its 2030 employment rate target, better using the potential of underrepresented groups through a more effective active labour market policy system, addressing skills mismatches and labour shortages, and improving job quality will be key challenges to overcome for a more robust and inclusive labour market and a thriving economy.

Graph A10.1: **Key labour market indicators**



Source: Eurostat, LFS [lfsi_emp_a, une_rt_a, une_ltu_a, lfsi_neet_a].

Italy's labour market has continued to improve, but structural challenges persist. In 2024, the employment rate rose to a historically high level, reaching 67.1%, and the activity rate remained stable at 66.6%. However, both rates remain well below the EU averages (75.8% and 75.4%, respectively). At 73%, the country's 2030 employment rate target remains substantially above current levels (by 5.9 percentage points (pps)), calling for continued efforts. The unemployment rate fell significantly to 6.5% in 2024, with its youth and long-term components decreasing to 20.3% and 3.3%, respectively, marking significant progress. Though this is still above the EU averages of 5.9%, 14.9% and 1.9%, respectively, the rates are increasingly converging. Regional disparities are particularly pronounced, with a gap of 22.5 pps between the employment rate in the North-East and that in the South. Similar patterns are also observed for the activity and unemployment rates (see Annex 16). These regional disparities result from structural weaknesses in southern regions and a prevalence of smaller, less competitive and less innovative firms offering fewer job opportunities ([243]). Looking ahead, after employment growth decelerated to 1.6% in 2024, still rising labour market participation in 2025-2026 is expected to more than offset the projected decline in the working-age population.

Low labour market participation of women highlights significant gender disparities, tied to insufficient childcare and long-term care services and institutional barriers. Italy's female employment rate, at 57.4% in 2024, while increasing, is among the lowest in the EU (70.8%) and characterised by regional disparities. The gender employment gap is nearly twice the EU average (19.4 pps vs 10 pps) and has shown only marginal improvements since 2015. Recent estimates show that an increase in the participation rate for women to the EU average would add 10% to Italy's total labour force and could lead to increases in GDP of a similar magnitude in the long term ([244]). These disparities are, among other things, linked to a significant impact of parenthood, stemming from women's predominant role in caregiving and domestic work, challenges in the availability and access to high-quality long-term care and childcare (see Annex 11), and insufficient work-life balance opportunities. As a result, a high share of women exits the labour market upon childbirth, and those who remain employed often significantly reduce their working hours. Remote work adoption, while

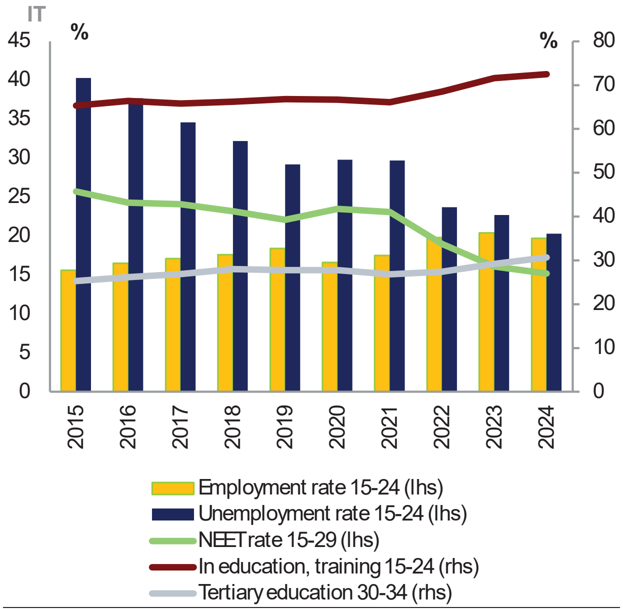
[243] Banca d'Italia, Lo sviluppo del Mezzogiorno: una priorità nazionale, 2019.

[244] Banca d'Italia, Women, labour markets and economic growth, 2023.

higher than pre-pandemic levels, remains significantly below the EU average, including among parents of young children. In addition, the tax and benefit system continues to disincentivise women's employment [245]. Three measures supported by the Recovery and Resilience Facility go in the right direction: i) Italy's plan for nurseries and preschools aims to create at least 150 480 new childcare places by 2026, promoting work-life balance and female employment; ii) the Gender Equality Certification System to increase participation of women in the labour market and reduce the gender pay gap; and iii) investments for the creation of women's enterprises to foster women's self-employment and entrepreneurship. Italy's medium-term fiscal structural plan commits to making further progress on covering unmet demand for childcare. Further actions could be explored to increase flexible working conditions to support women and parents. Balanced parental leave policies, such as extending paternity leave beyond the current 10 days, could help redistribute care responsibilities and narrow the gender employment gap.

High marginal effective tax rates and some characteristics of the tax-transfer system discourage second earners (predominantly women) from increasing their working hours. At 43.5%, the country's implicit tax rate on labour, an approximation of the average effective tax burden on labour income, is among the highest in the EU (37.8%). In 2024, Italy merged the two lowest tax brackets, applying a unified tax rate of 23% to alleviate the tax burden on middle incomes. The effective tax rate for low-wage earners decreased significantly to 38.1% in 2024. Nonetheless, the proportion of gross earnings taxed away when transitioning to employment is still high at 78.4% in 2024(EU: 74.4%). In addition, while the effective taxation of income gains when moving to a higher wage has declined, second earners, most of whom are women, face higher disincentives than single individuals (see Annex 2). Moreover, some aspects of the tax-transfer system, such as means-based benefits and tax credits based upon overall family income as well as tax allowances for dependent spouses might discourage a higher level of labour market participation by second earners [246]. These dynamics undermine incentives for dual-income households and contribute to the low level of labour market participation by women.

Graph A10.2: **Labour market outcomes of young people**



Source: Eurostat, LFS [une_rt_a, lfsi_neet_a, lfsi_emp_a, edat_lfse_18, lfsi_act_a, edat_lfse_20]

Young people continue to face significant labour market challenges, but Italy has made substantial progress on most youth employment indicators. In 2024, only 40.3% of young Italians (15-29) participated in the labour market, significantly trailing their peers across the EU (55.9%) and decreasing by 1.3 pps compared to 2023. Among those aged 15-24 participating, 20.3% were unemployed, well above the EU average of 14.9%, though this constitutes an historical low for Italy and an improvement by 2.4 pps compared to the previous year. Employment rates also lagged, with only around a third of people in this age group employed against about half in the EU. The difficulties faced by young people in transitioning to high-quality, stable employment are further underscored by the decreasing yet nonetheless high share of young people neither in employment nor in education and training (NEETs) (15.2% vs 11% in the EU), despite this being its lowest level on record, and the high prevalence of temporary employment. In 2024, 25% of young people born outside the EU and 38.9% of young women in this group were NEETs. Moreover, 39.4% of young people (aged 15-29) in employment held temporary contracts, reflecting a significant improvement of 3.8 pps since 2023. These levels continue to reflect structural

[245] Ibid.

[246] Banca d'Italia, Women, labour markets and economic growth, 2023.

challenges such as limited job opportunities, inadequate support for transitions from education to work, and underutilisation of young people's potential. The European Social Fund Plus supports access to employment through the national youth, women and jobs programme as well as through regional programmes. Taken together, these programmes reached more than 115 000 unemployed people between 2021 and 2024.

Vulnerable groups, including low-qualified adults, immediate descendants of migrants and persons with disabilities, also face barriers to labour market integration. Employment outcomes in Italy are closely tied to educational attainment. At 54.5%, the employment rate for people with lower-secondary education or below is 27.7 pps lower than for the tertiary educated. Among women, this gap widens to almost 43 pps. While recent higher education graduates (aged 20-34) generally perform better in the labour market, their employment rate (77.8% in 2024) remains among the lowest in the EU. However, the rate was characterised by a significant improvement of 2.4 pps since 2023. Employment rates are particularly low for recent graduates from medium-level education with a general orientation (48.5% in 2024), while recent graduates from vocational programmes do much better (63.7%). People born in Italy with one or both parents born abroad also participate less in the labour market and have a relatively low and decreasing employment rate of 56.3%, 11.2 pps below those without a migrant background, and well above the EU average gap of 2 pps. Moreover, people from other EU countries and non-EU citizens are more frequently employed under fixed-term contracts than Italian citizens. However, the employment gap between people born outside Italy and those born in Italy is relatively narrow (0.7 pps) compared to the EU average (6.5 pps). Furthermore, the disability employment gap experienced a deterioration from 15.9 pps in 2023 to 25.1 pps in 2024, while Italy has not yet set a target for employing persons with disabilities [247]. At the same time, only 41.7% of persons with disabilities were active in the labour market and close to half of young persons (15-29) was neither in employment, nor education or training (29.8% in the EU).

Persistent skills mismatches, labour shortages, and insufficient job opportunities for highly educated workers hinder potential productivity gains. Job vacancy rates have declined across sectors, reaching 2.1% in 2024 (EU: 2.4%), with the highest rates being reported in construction. At the same time, around a third of employers in services reported limited availability of workers as a factor limiting production in Q4-2024. The overall labour market slack, reflecting the unmet demand for labour, declined by 1.9 pps in 2024 to 15.8%. It remained well above the EU average (11.7%), indicating still significant untapped labour potential. Simultaneously, Italy continues to have one of the highest levels of macroeconomic skills mismatch [248] in the EU, especially among young people. In 2024, it was at 25.7%, far above the EU average (19.2%). The employment rate of people with tertiary education (82.2%) lags behind the EU average (86.5%) and recent tertiary graduates significantly trail their peers in the EU, pointing to barriers in transitioning to the labour market. Furthermore, over-qualification remains a structural issue, with over one in five tertiary-educated workers employed in positions that do not require their level of education. Particularly high over-qualification rates in administrative and support services highlight both a slow response of the education and training system to changing labour market needs and limited capacity among firms to effectively harness skilled labour.

Further integrating underrepresented groups is critical as Italy's ageing population and declining birth rates pose long-term challenges. While the decline in the population has recently slowed, Italy has experienced a net loss of 1.35 million residents since 2014. Births have fallen to historic lows, with only 370 000 births in 2024 (compared to a peak of 577 000 in 2008). This trend is driven by low fertility rates, changes in population structure and delayed parenthood. Italy's total population is projected to shrink by 9.7% between 2022 and 2070, more than twice the EU-wide decline of 4%. The working-age population is projected to decline, despite anticipated increases in migration, leading to a 7.2 pps decrease in the share of the working-

[247] Break in series in 2024.

[248] This indicator highlights the relatively higher difficulty of the low- and medium-qualified in entering the labour market, as compared to the high-qualified.

age (20-64) out of total population by 2070 [249]. As the population is increasingly ageing, the old-age dependency ratio is projected to rise from 40.8% in 2022 to a peak of 66% around 2050, reflecting the transition of the 'baby-boom' cohorts into old age, and reach 65.5% in 2070. These demographic shifts are likely to entail labour market tightness and therefore require activating and better integrating underrepresented groups and those outside the labour market. As part of Italy's RRP, the national programme for the guaranteed employability of workers has introduced uniform standards for public employment services across the country, focusing on skills forecasting, personalised training plans, guidance and job coaching. At least 3 million people are expected to benefit from the programme by 2025, particularly women, long-term unemployed people, persons with disabilities and those under 30 or over 55, through targeted active labour market policies along with upskilling and reskilling. The capacity of the public employment services will be essential for successful implementation. In addition, to address emerging shortages and as other measures may not be sufficient, there may be an increasing need to foster legal migration and attract talent, particularly from non-EU countries, to maintain adequate human capital in key sectors and bolster Italy's competitiveness. Furthermore, the ageing population will put further pressure on the health system, which faces acute shortages (see Annex 14).

Amplifying these developments, many young people, particularly among the highly qualified, are searching for better job prospects abroad. Between 2008 and 2022, over half a million young Italians emigrated, with only a third of them returning [250]. The outflow of talent has intensified, with the share of graduates among people moving abroad increasing from 30.5% in 2013 to 50.6% in 2022 [251]. Improving the quality of job offer and in particular outreach activities, including for vulnerable young people under the Youth Guarantee; strengthening training and education in line with labour market needs, and to better prepare for the transition to work; and enhancing employment opportunities could help retain young talent in the Italian labour market.

The workforce is adapting to the green and digital transitions, with a growing need for skilled workers in emerging sectors. In 2023, employment in the country's energy-intensive industries represented 3.3% of total employment, while jobs in the green economy have expanded rapidly. Between 2016 and 2021, employment in the environmental goods and services sector grew by 52.8%, reaching 4.1% of total employment (EU: 2.7%) [252]. Similarly, the job vacancy rate in construction, a key sector for the green transition, is below the EU average (3.0% vs 3.1% in 2024). The greenhouse gas emission intensity of Italy's workforce has improved, decreasing from 13.9 tonnes per worker in 2015 to 11.3 tonnes in 2023 (EU: 12.3 tonnes), reflecting progress made on the green transition. By contrast, the ICT sector remains underdeveloped, with ICT specialists accounting for 4% of total employment in 2024, compared to 5% in the EU, partly due to low enrolment in higher education programmes preparing ICT specialists (see Annex 12). Women are particularly underrepresented: only 17.1% of ICT specialists are women (EU: 19.5%). Italy also lags behind in terms of broader digital skills among the working population, with only 57.5% of workers (25-64) having at least basic digital skills, underscoring the need for further strengthening of upskilling and reskilling those individuals potentially looking for work.

Recent real wage increases only partly offset past losses, amid structurally low productivity growth. Productivity growth in Italy has long been hindered by factors such as small firm size and slow human capital accumulation, resulting in low innovation capacity (see Annex 3). Between 2013 and 2023, cumulative real labour productivity growth per capita was only 2% compared to 5.8% in the EU. Italy's structurally low labour productivity growth puts a constraint on wage growth. Cumulative real wage developments have been even weaker than productivity growth over the same period: in 2023 real wages in Italy

[249] European Commission, 2024 Ageing Report. Economic and Budgetary Projections for the EU Member States (2022-2070), 2024.

[250] Banca d'Italia, Annual Report – The Governor's Concluding Remarks, 2024.

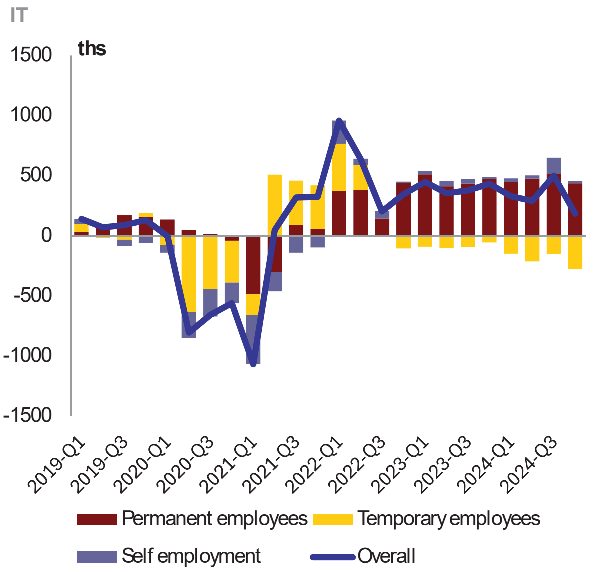
[251] Eurofound, Role of human capital inequalities in social cohesion and convergence, 2024.

[252] The environmental goods and services sectors generate environmental products, i.e. goods and services produced for environmental protection or resource management.

were 3.5% below 2013 levels, while they rose by around 3% EU-wide. After marked declines in 2022 and 2023 (by 4.4% and 2.8%, respectively), real wages increased by 2.3% in 2024 and are forecast to rise by 1.1% in 2025 ([253]), reflecting both moderating inflation and stronger nominal wage growth. However, these gains are unlikely to compensate for the prior losses. In turn, low wage growth over the past decade has enabled cost competitiveness gains. Over recent years, unit labour costs (ULC) have risen more slowly in Italy than in other Member States. ULC growth is forecast to accelerate from 4.3% in 2023 to 5.0% in 2024, before moderating in 2025.

In a context of real wage stagnation, low work intensity and a high prevalence of atypical work negatively impact on job quality. Despite significant improvements over the last five years (see Graph A8.3), with the number of permanent contracts rising by 13% and that of fixed-term contracts falling by 16%, the share of employees with temporary contracts is still above the EU average (14.4% vs 11.6% in 2024), particularly for young workers. In addition, while part-time work (16.7%) is below the EU average (17.2%), involuntary part-time employment remains disproportionately high at 51.3% (EU: 18.2%), particularly among women. These conditions also exacerbate in-work poverty, with Italy's at-risk-of-poverty rates for full-time workers (9.0%) and part-time workers (15.7%) exceeding the respective EU averages (6.9% and 12.8%). The high prevalence of non-standard forms of work, including seasonal work, contributes to low work intensity, which further aggravates the risk of in-work poverty. It also undermines the accumulation of firm-specific human capital as well as social protection coverage and its financing. Despite some improvement in recent years, undeclared work in Italy remains widespread and amounted to almost 3 million full-time equivalent jobs, particularly in southern regions ([254]). Continuing the implementation of RRF measures to tackle undeclared work, including through strengthening the National Labour Inspectorate, will be essential. Furthermore, Italian workers experience a higher incidence of fatal accidents at work. These weaknesses heighten poverty risks and weigh on long-term productivity growth and social cohesion.

Graph A10.3: **Employment by type (y-o-y change)**



Source: Eurostat, LFS [lfsq_egaps, lfsq_etgaed].

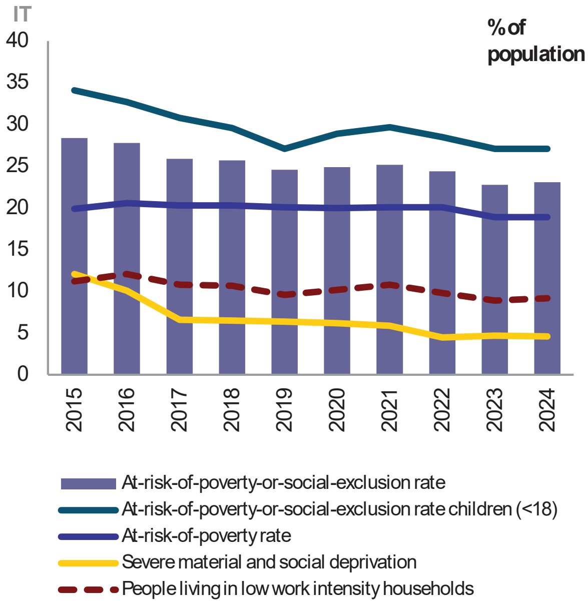
[253] Based on the European Commission Autumn 2024 economic forecast.

[254] ELA, Factsheet on undeclared work – Italy, 2023.

Although social conditions are improving in Italy, poverty and social exclusion continue to pose a risk. This is particularly the case among certain groups and regions, for example, children and the southern regions, where employment rates and incomes are low and in-work poverty rates are high. In addition, adverse demographic trends pose a significant challenge, not only to the sustainability of pension and care systems but also to the provision of quality, accessible, and affordable care, including long-term care.

Poverty and social exclusion risks are in decline but remain high in the South. In 2024, the at-risk-of poverty or social exclusion (AROPE) rate rose by 0.3 pps to 23.1%, as the EU rate decreased by the same amount. While remaining above the EU average of 21.0%, the rate had shown clear signs of convergence over the previous years: the gap between the AROPE rate in Italy and the EU average had narrowed from 4.4 pps in 2015 to 1.5 pps in 2023. With a decrease of 1.4 million in the number of people AROPE in 2023, Italy is on a right path to achieve its national target to reduce that number by 3.2 million by 2030. In part driven by structural weaknesses in the southern economy resulting in fewer job opportunities, the rate is considerably higher in the South (39.8%) and in the Islands (38.1%) than in the North-East (11.2%) and North-West (13.9%), although regional disparities are likely overstated due to territorial differences in the cost of living. Moreover, being a migrant significantly increases poverty and social exclusion risks: the AROPE rate for foreign-born people (34.2%) was substantially higher than the rate of nationals (20.8%), and the gap in the risk of poverty at work was also one of the highest in the EU (20.8% vs 8.3%) reflecting a high prevalence of atypical contracts. At the same time, the incidence of absolute poverty [255], measured by national data (ISTAT), slightly increased from 8.3% in 2022 to 8.4% in 2023. Absolute poverty is higher in the Islands (10.2%) and in the South (10.2%), while lower in the Centre (6.7%). Absolute poverty is also higher among households with at least one foreign member (30.4%), while it stands at 6.3% for households composed exclusively of Italian nationals [256]. Examining the three components of the AROPE rate, the at-risk-of-poverty rate (AROP) remained stable at 18.9%, above the EU average (16.2%). The share of people suffering from severe material and social deprivation also remained stable (4.6%) and below the EU average (6.4%), while the share of people living in households with very low work intensity increased by 0.3 pps, driving the increase of the AROPE rate.

Graph A11.1: **AROPE and its components**



Source: Eurostat, EU-SILC [ilc_peps01n, ilc_li02, ilc_mdsd11, ilc_lvhl11n].

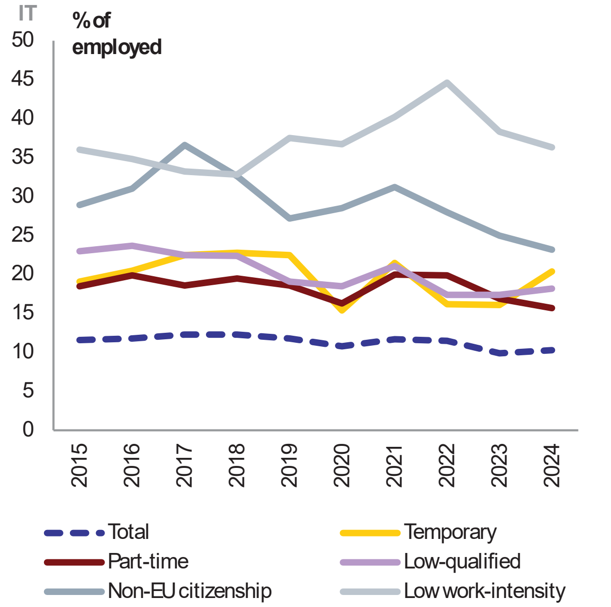
Child poverty dropped slightly but remains high. In 2024, the AROPE rate for children remained stable at 27.1%, the same as in 2019, while the EU average declined by 0.6 pps to 24.2%. Although over previous years Italy was closing the gap with the rest of the EU, thanks to a faster decline in the rate, it has not set a national child poverty reduction target. In order to mitigate the impact of poverty on children, the country is implementing the European Child Guarantee (ECG) according to its action plan of March 2022. The 2024 biennial implementation report shows progress in some areas, e.g. increased take-up of childcare by disadvantaged children. At the same time, there is a need to better understand how many children in need have benefited from the measures. The implementation of the ECG is supported by EU cohesion policy funds and the Recovery and Resilience Facility (RRF), including

[255] Defined as a household with a monthly expenditure equal or less than a basket of goods and services considered essential to avoid severe forms of social exclusion.

[256] ISTAT, Stabile la povertà assoluta, 2024.

through the full implementation of the investment plan to build new nurseries (*Piano Asili Nido*) to improve the availability of childcare facilities. These measures could positively impact mothers' participation in the labour market, as currently only 54.8% of women with children under six years are employed (see Annex 10), while 39.4% of children below the age of three were in early childhood education and care (ECEC). According to estimations by the Joint Research Centre, expanding childcare coverage to 50% could boost the participation rate of women and increase average weekly working hours by 8%, from the current 17.9 [257].

Graph A11.2: **In-work-at-risk-of-poverty rates**



Source: Eurostat, EU-SILC [ilc_iw01, ilc_iw05, ilc_iw07, ilc_iw02, ilc_iw03].

In-work poverty declined, but risks remain high for the low-qualified, for non-EU citizens, and for part-time workers. In 2024, Italy's in-work at-risk-of-poverty rate increased to 10.3% from 9.9% in 2023, one of the highest in the EU and well above the EU average of 8.2%. The risk is particularly severe for low-qualified workers (18.2%) compared to those with tertiary education (4.5%), and for non-EU citizens (23.2%) compared to Italian nationals (8.9%). Key factors contributing to high overall in-work poverty include structurally low wage growth, linked to low productivity, and low work intensity due to non-standard employment. In 2024, among part-time workers, 15.7% were at risk of poverty, a significant improvement compared to the previous year but still above the 12.8% in the EU. For fixed-term employees the risk of poverty increased by 4.3 pps to 20.4%, at a higher pace than the EU average (+0.8pps, 14.2%). Moreover, it was particularly prevalent among those working at low intensity. More than one in three (36.3%) of those with a working time between 20-45% of total combined work-time potential in the previous year faced in-work poverty. Low-wage earners are more vulnerable, as they are more likely to live in households with unemployed members or low work intensity. The high incidence of low-paid, low-intensity work helps to explain why, despite post-pandemic improvements in employment rates, absolute poverty levels have not significantly decreased.

Income inequality and wage dynamics continue to pose significant challenges, even as inflation recedes. In 2024, the income of the richest 20% of the population was 5.53 times higher than that of the poorest 20%, increasing from 2023 (5.27) in contrast with a slightly decreasing EU average (from 4.72 to 4.66). Income inequality is driven by generally low levels of employment, strongly varying by region (see Annex 10). Whereas income inequality is high in Italy, the gross disposable household income (GDHI) per capita stood at 95.3% of its 2008 level compared to 113.6% in the EU. This reflects persistent wage stagnation in Italy over the last two decades, as structurally low labour productivity growth puts a persistent constraint on wage growth. After marked declines in 2022 and 2023, real wages rose by 2.9% in 2024, reflecting both the gradual decrease in inflation and the acceleration of nominal wage growth, and are set to rise also in 2025 (see Annex 10). Wealth inequality is also high, as the richest 10% of the population owns 54.6% of wealth vs 53.4% in the euro area average.

Average house prices in Italy have increased only marginally over the last decade. House prices have increased by around 10% since 2015 in nominal terms. They grew by just 1.3% in 2023, after increasing by 2.6% and 3.8% in 2021 and 2022, respectively. In 2024, they continued to increase mildly (3.9% in 2024-Q3 year-on-year). House prices at national level are not estimated to be overvalued. House transactions and building permits decreased in 2023, as the economy adjusted to higher mortgage rates.

[257] Estimations performed by the European Commission, Joint Research Centre, based on the EUROMOD model, I6.0+.

At macro level housing affordability improved over the last decade. House prices grew at slower pace than household income, on average across the Italian territory and different income groups, over the last decade and the standardised house price-to-income ratio has decreased (-13% from 2015 to 2023). The house price levels are relatively low compared to income levels. Taking into account the cost of mortgage funding, the borrowing capacity of households improved over the past decade. While the rental market is rather small, the ratio of new rents to incomes increased over the last decade.

While the share of households overburdened by housing costs remains low, overcrowding and housing deprivation remain a challenge. In 2024, the housing cost overburden rate, the share of households where housing costs represented more than 40% of disposable income, in Italy was 5.1%, compared to an EU average of 8.2%. Housing overburden is higher for households experiencing poverty risks (21.8%) yet still lower than EU average (31.1%). It is also higher in cities (6.6%) than in towns and suburbs (4.7%) and rural areas (3.2%). At the same time, however, the overcrowding rate in Italy (23.9%) is high and well above the EU average (16.9%). It is considerably higher at the lower end of the income ladder (first income quintile: 33%) and above the EU average (27.8%). Moreover, structural issues such as leaks, damp, or rot affected 17.1% of dwellings in 2023. Even though this reflects improvements – a decrease of 2.5 pps compared to 2021 – the level of housing deprivation still remained above the EU average of 15.5%. The latest partial homelessness count took place in 2021 when over 96 000 individuals were identified as homeless. At the same time, the last National Plan of Interventions and Social Services that covered homelessness policies expired in 2023. With support of the RRF, Italy plans to invest EUR 2.1 billion until 2026 to support the construction and redevelopment of at least 10 000 housing units in order to improve and increase social housing.

Energy and transport poverty levels are low. In 2024, 8.6% of individuals reported being unable to keep their homes adequately warm, which is slightly below the EU average of 9.2%. Conversely, 4.5% of the population faced arrears on utility bills in 2024, marking a slight increase from 4.1% in the previous year but placing this figure well below the EU average of 6.9%. Italy is advancing a national strategy to address energy poverty, with a focus on improving building energy efficiency through renovations and energy performance certifications. Italy's National Energy and Climate Plan (NECP) also includes a range of measures to mitigate energy poverty, including social bonuses and energy efficiency programmes for vulnerable households. However, these measures primarily consist of recurring subsidies, with limited structural interventions targeting the root causes of energy poverty. Italy has established a national energy poverty observatory to monitor and assess the effectiveness of its strategies. The country also plans to launch a voucher scheme to support energy efficiency improvements in low-income households, though the full impact of these initiatives remains to be seen. A facility of EUR 1 381 billion to support renovation for low-income and vulnerable households and alleviate energy poverty is also part of the Italian RRP. Also transport poverty is low: car ownership is broadly affordable in Italy, even for lower-income groups. The share of Italians who could not afford a car was 2.0% in 2024, standing well below the EU average of 5.6%. Similarly, the share of people at risk of poverty who cannot afford a car was 5.6% in 2024 – only a third of the EU average (15.9%). However, the continued dominance of personal cars and the stagnation in public transport use highlight challenges in promoting sustainable and inclusive transportation systems.

The effectiveness of the social protection system is improving, but gaps in terms of adequacy and coverage remain. In 2024, the impact of social transfers (other than pensions) in reducing monetary poverty rose to 31.3% from 30.5% in the previous year, further converging with the EU average of 34.4%. Italy's new minimum income scheme, the *Assegno di Inclusione* (Inclusion Allowance, AdI), replaced the *Reddito di Cittadinanza* (RdC) in 2024. The AdI has stricter eligibility criteria, focusing in particular on households with minors, seniors, persons with disabilities, or those in conditions of disadvantage and supported by social or healthcare services ([258]). While Italy spent EUR 8 billion on the RdC in 2022, projected annual expenditure for AdI in 2024 was EUR 4 billion, reflecting significant savings. However, an estimated 40.6% of households in absolute poverty previously receiving RdC are excluded from AdI, with the

([258])As defined by ministerial decree no. 154 of December 13, 2023.

exclusion risk being higher for single person households, those without minors or elderly, and households in the north. The number of recipient households dropped by 37.6%, from around 1 million (RdC, May 2023) to around 625 000 (AdI, May 2024), while the number of individuals decreased by 28.3%, from around 2.1 million to around 1.5 million, significantly reducing the coverage of the measure. Larger households are more likely to meet the new eligibility requirements. As a result of stricter eligibility criteria and a less generous equivalence scale, the AdI has a more limited poverty-alleviating effect than the RdC. Whereas the RdC reduced the headcount index of households below the poverty line from 7.3% to 6.5% in 2019, under the AdI it would only have been reduced to 7.0%. Similarly, the RdC reduced the absolute poverty incidence from 8.9% to 7.5% in 2019, while AdI would have lowered it only to 8.3% ([259]). At the same, the AdI was accompanied by the introduction of the activation measure *Supporto Formazione e Lavoro.* Working-age individuals who meet the income threshold for the AdI, but do not fall into the eligible categories can receive a fixed EUR 500 in monthly benefits for the duration of their participation in active labour market policies, for a maximum of twelve months. The introduction of the family allowance for dependent children *Assegno unico e universale per i figli a carico* (AUU) in 2022 aimed to improve social safety nets, support parenting, and potentially raise the birth rate. However, further investments in care services and incentives for fathers to take parental leave are needed to achieve these goals and improve women's labour force participation. As AUU eligibility is restricted to residents who have lived in Italy for at least two years, the Commission opened an infringement procedure in March 2023 and in July 2024, referring Italy to the Court of Justice of the European Union for breaching the rights of mobile workers.

Many self-employed workers and those in non-standard employment experience *de facto* gaps in access to social protection. The self-employed and those under non-standard contracts, which represent a high share of the total workforce in Italy, much higher than EU average, experience gaps in access to social protection. This results in low benefit receipt rates. For instance, among the unemployed, only 39.5% of those AROPE received any social benefits compared to 52.4% on average in the EU. Similarly, only 11.7% of self-employed workers that were AROPE received any social benefits compared to 45.4% among employees in 2023. This contributes to a high at-risk-of-poverty rate for non-standard workers, at 20.4% (EU: 13.3%) for temporary contract workers, standing well above the rate of those under permanent contracts (6.9%). AROP is also high among part-timers (15.7% vs 12.8% for the EU) than among full-time workers (9.0%).

Population ageing threatens the adequacy and fiscal sustainability of the pension system. Demographic developments represent a key challenge for Italy. In 2024, the country recorded one of the highest old-age dependency ratios in the EU (38.4% vs 33.9%) and the fertility rate, at 1.18, was well below the replacement rate of 2.1 and one of the lowest in the EU. The total population within the 25-49 age group continues to fall while the 50-64 age group is the largest in the EU in relative terms. The population aged sixty-five and over is expected to increase to 33.6% by 2070, resulting in a dramatic increase in the old-age dependency ratio. As a result, demographic trends are expected to place significant financial strain on the pension system in the future. The proportion of pension expenditure relative to GDP, currently already among the highest in Europe, is expected to increase from 15.6% in 2023 to a peak of 17.3% in 2036 ([260]), which increasingly depends on prolonged working careers to ensure both adequacy and fiscal sustainability.

Demographic trends weigh on long-term care. Although public expenditure on long-term care (LTC) is similar to the EU average, a larger share is allocated to cash transfers rather than services. This has led to limited-service coverage, with only around 3% of those aged sixty-five and over having access to residential facilities and 5% to home care. The RRP focuses on strengthening home care services for non-self-sufficient adults by investing EUR 4.75 billion, with the goal of covering 10% of older people and includes a general reform of the LTC system. It also introduces a reform of non-self-sufficiency,

[259] The Commission's analysis has been informed by the scientific support from the European Social Policy Analysis Network (ESPAN).

[260] EPC-Ageing Working Group, 2024 Ageing report - Italy.

focusing on integrating social and health services, including by establishing one-stop shops as well as measures to improve home care. In addition, the reform introduces a benefit for low-income non-self-sufficient individuals to help cover care service expenses. Despite these positive initiatives, some measures adopted in the LTC field, such as the transformation of the *Indennità di Accompagnamento* into the *Prestazione Unica Universale per la Non Autosufficienza* and the introduction of the *Bonus Badanti,* exhibit several limitations. These include their experimental and temporary nature without clear planning for structural measures, together with a limited scope of application.

ANNEX 12: EDUCATION AND SKILLS

The Italian education and training system struggles with long-standing structural challenges that hinder skills development. Challenges linked to the quality, equity and labour market relevance of education and training, and wide regional disparities, translate into a misalignment between skills demand and supply and significant rates of youth unemployment and inactivity (see Annex 10). Shortcomings in skills development start at an early age with low participation of disadvantaged children in quality early childhood education and care (ECEC), and continue with unequal levels of basic skill proficiency depending on geographical area and type of school, low rates of tertiary educational attainment and limited participation in adult learning. All this harms Italy's innovation capacity and competitiveness.

Low participation in ECEC by younger children, especially from disadvantaged backgrounds, impacts foundational learning and increases inequalities. The participation of children aged below three in formal education and care is growing, but it is strongly influenced by their place of residence and socio-economic background. In 2024, the proportion of children aged 0-2 enrolled in formal education and care reached 39.4%, up 4.9 pps compared to 2023. The rate is now in line with the EU average of 39.2% and approaching the new Barcelona target of 41.7% by 2030 after a clear upward trend over the past years. This can be attributed to a combination of government policies to support families and low birthrates narrowing the gap between the demand and supply of childcare places**.** However, disparities persist, particularly between the north and the south and between large urban and smaller peripheral municipalities, where low and fragmented demand has traditionally hindered the development of childcare services. Moreover, participation rates for children aged 0-2 increase with household income [261] and parents' education level and employment status [262], undermining the capacity of ECEC to compensate disadvantages.

The government is tackling regional imbalances in participation and service provision. In 2024, Italy relaunched the implementation of its recovery and resilience plan (RRP) initiative to expand the supply of ECEC, after the initial approach based on open calls for tender by municipalities produced limited results [263]. The Ministry of Education and Merit has shifted to a top-down approach, directly identifying the municipalities with the greatest need to strengthen childcare provision and allocating funds accordingly. The aim is to encourage municipalities with strong shortcomings in the provision of early childhood services to develop new public nurseries. However, not all eligible municipalities are participating in the programme.

Early school leaving continues to decrease, but large inequalities in educational outcomes persist, leaving parts of the population behind. In 2024, the share of early leavers from education and training (ELET) among 18- to 24-year-olds fell to 9.8% (EU average: 9.3%), compared to 15% in 2014. If this positive trend continues, Italy appears on track to achieve the EU's ELET target of less than 9% by 2030. With early school leaving on a downward trend, the focus needs to shift towards improving overall educational performance. The OECD Programme for International Student Assessment (PISA) 2022 survey highlights significant differences in basic skills proficiency between geographical areas and types of school. The north of the country has the lowest percentage of low-performing students (18%) and the highest percentage of high-performing students (about 9% in the northeast and 12% in the northwest) in mathematics. By contrast, in the south, almost half of all students (46%) fail to achieve basic proficiency and less than 3% reach the top levels. Performance also varies by type of school: students in upper general education (*licei*) obtain higher scores than students in technical and vocational schools and are more likely to perform at the top levels (11%), although almost a fifth (19%) still do not reach basic proficiency. Of particular concern is that in vocational schools (*istituti professionali*), the share of top-performing students is almost non-existent (0.1%), whereas the share of low-achieving students is above 60%, twice the national average.

Further efforts are needed to build a highly skilled teaching workforce that can improve

[261] OECD, Education at a Glance (EAG), 2024.

[262] ISTAT, I servizi educativi per l'infanzia in un'epoca di profondi cambiamenti, 2023.

[263] Italy's revised RRP envisages 150 480 ECEC places by June 2026 instead of 264 480 by December 2025.

the skills of young people. There is a substantial geographical and subject mismatch between the supply of qualified teachers eligible for recruitment on a permanent contract and the staffing needs of schools. This is because relatively low salaries and the lack of career prospects make teaching relatively unattractive to many graduates, especially in science, technology, engineering and mathematics (STEM), who have better career prospects in other sectors. The result is shortages in some subjects and regions and oversupply in others. Shortages are most acute in disciplines like science and mathematics, foreign languages and learning support, and affect mostly the north of the country. In recent years, only half of the vacant posts at the start of each school year could be filled with permanent appointments, resulting in a steady increase in temporary contracts and raising issues about the quality of teaching. A recent reform of initial training and recruitment for secondary school teachers under the RRP aims to address some of these issues by introducing a specific initial training for aspiring secondary school teachers and a clear path to tenure.

Important measures have been implemented in recent years, but additional efforts could enhance the attractiveness of vocational education and training (VET) and further align programmes with labour market needs. The share of pupils in medium-level education attending programmes with a vocational orientation (51.3% in 2023) has steadily decreased over the last decade (-7.8 pps from 2013). Although recent VET graduates have good employment prospects, only 24.7% of them have participated in work-based learning, hindering their transition into work. This is significantly lower than the EU average of 65.3% and falls short of Italy's European Education Area target of achieving at least 60% by 2025. This might contribute to Italy's significantly lower employment rate of VET graduates aged 20-34 compared to the EU (63.7% vs 80.0% in 2024). The 2023 Labour Decree promotes alignment with labour market needs by introducing cross-skilling and guidance pathways, enabling young people to acquire in-demand skills. It also enhances transparency and access to certification by validating non-formal and informal skills, boosting professional growth and employability. Through the RRP, Italy also reformed the VET system in 2022 with the aim of increasing private sector involvement in VET education *(Istituti Tecnici* and *Istituti Professionali)* to better align it with labour market needs, emphasising work-based learning and collaboration with companies. Better governance and collaboration among stakeholders at national, regional and local levels, through coordination platforms and shared monitoring mechanisms for example, could help overcome challenges in implementing education and training policies [264].

The non-academic tertiary education sector is being developed further to equip graduates with the high-level technical skills required by the digital and green transitions. The government has implemented a series of reforms to boost the vocationally oriented tertiary education system (ITS academy), chiefly through Recovery and Resiliency Facility investment. The government is also reforming technical and vocational upper secondary education, linking it directly to the ITS academy system to set up a single technical-vocational track leading to a tertiary degree. ITS academies collaborate closely with local firms, universities, research centres and local entities to provide practical, job-oriented training through advanced programmes. This integrated approach not only meets the needs of local businesses but also facilitates students' professional integration. A significant part of the training includes mandatory internships, often offering opportunities abroad [265].

Although the share of tertiary graduates increased steadily over the last decade, Italy continues to significantly trail behind the rest of the EU. In 2024, 31.6% of people aged 25-34 had a tertiary educational qualification – up from 24.2% in 2014. Although this is a significant improvement, Italy continues to have one of lowest rates of tertiary educational attainment and the gap with the EU (44.2% in 2024) remains wide. Women are more likely to hold a tertiary qualification than men (38.5% vs 25%), while the tertiary educational attainment rate is particularly low among the foreign-born population, whether born in the EU (16.4%) or outside (14.1%). This reflects ongoing difficulties both in including the younger in the post-secondary education system and in attracting highly qualified foreigners.

[264] CEDEFOP, Implementing European priorities in VET , 2024.

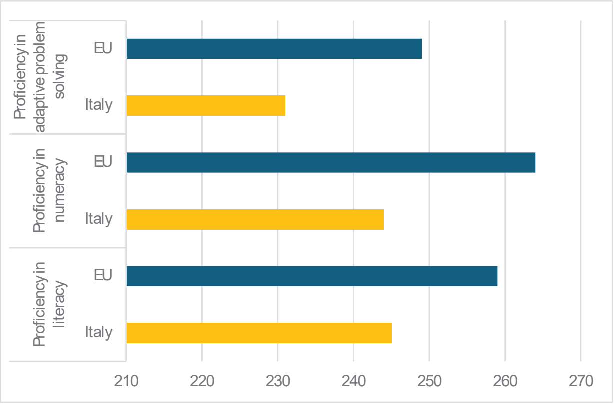
[265] Ibid.

The share of graduates in STEM fields, including ICT, crucial for competitiveness, remains comparatively low. Among those who graduated from tertiary education in 2022, only 23.4% obtained a STEM qualification, compared to 26.6% in the EU. The share of female graduates in STEM fields (39%) is above the EU average (35.4%) and the share of students enrolled in STEM appears to suggest a stable trend: 24.9% at tertiary level in 2022 (EU average: 27.1%), yet just 2.1% enrolled in ICT (EU: 5.2%), and 46.5% in medium-level VET (EU: 36.2%).

A tertiary degree provides an advantage in the labour market, but the transition into employment remains challenging. The employment rate of recent tertiary graduates [266] has improved steadily over the past 10 years, reaching 77.8% in 2024, up 20.3 pps compared to 2015. However, this is well below the EU average of 86.7%. Skills mismatches and low labour demand from a productive sector characterised by small and medium-sized firms are both factors behind graduates' relatively poor employment prospects (see Annex 10). The over-qualification rate, although aligned with the EU average (21.0% vs 21.4%), points to inefficiencies in matching skills to jobs. By contrast, the ITS academy system offers better employment prospects, with 87% of graduates employed within a year and 93.8% of them in a job in line with their qualifications, but it is still a niche provider of education, with just over 9 000 new students enrolled in 2022/23 (0.4% of all students enrolled in tertiary education) [267].

An increasing number of university graduates are leaving the country, resulting in a significant loss of talent and innovative capacity. In 2022, almost 18 000 graduates aged 25-34 moved abroad, 23.2% more than the previous year [268]. Over the same period, the number of young graduates moving back to Italy decreased by 18.9% compared to 2021. Even if this negative flow represents around 3% of the annual number of tertiary graduates, it reflects an increasing loss of highly qualified people, negatively impacting innovation capacity, productivity and competitiveness. The share of graduates among young expatriates has grown from around a third in 2013 to almost 50% in 2022, attesting to a structural challenge, partly driven by better job and wage prospects abroad (see Annex 10) [269]. At the same time, Italy is also struggling to make the most of incoming high-skilled talent. Secondary and tertiary graduates born outside the EU have very similar employment rates (68.0% vs 66.8%), while there is a big difference for native graduates (68.7% vs 83.6%). A contributing factor is the complex process for recognising qualifications obtained abroad. The procedure is often lengthy, costly, and fragmented across the territory and tertiary education institutions, hindering access to the employment opportunities.

Graph A12.1: **Basic skills among adults in Italy**



(1) Unweighted EU average of participating Member States.
Source: OECD, Survey of adult skills 2023.

Italian adults face persistent challenges in basic skills as well as digital skills. In the OECD Survey of Adult Skills (2022-23), Italian adults scored significantly below the average of participating EU countries in literacy, numeracy and adaptive problem solving [270]. Over a third of adults demonstrated literacy and numeracy proficiency only at the lowest level or below (both 35%), while nearly half (46%) struggled with adaptive problem solving. These low-performing adults are limited to basic tasks, such as understanding short texts or performing simple mathematical calculations, highlighting significant gaps in foundational skills. Digital skills also remain a concern. Only 45.8% of Italians possessed at least basic digital skills in 2023, compared to 55.6% across the EU. The share is

[266] People (20-34) who obtained their degree 1-3 years earlier.

[267] Indire, Monitoraggio nazionale, 2024.

[268] ISTAT, Intensi flussi di immigrazione straniera, in lieve ripresa mobilità interna ed espatri, 2024.

[269] AlmaLaurea, Condizione occupazionale dei Laureati, 2024.

[270] Results for Italy might be subject to non-response bias.

higher (59%) among young people (16-24), but still low compared to the EU average of 70%. This may be linked to long-standing challenges stemming from curricula, teachers' digital skills and the infrastructure for digital education. The RRP is funding several training programmes aimed at both public and private sector employees, including teachers, and prospective workers. The persistent gaps in essential skills underscore the pressing need for further targeted educational and training initiatives to equip Italian adults with the competencies necessary for modern challenges.

Skills development is essential for competitiveness, resilience and fairness, in light of a shrinking population and skills shortages. Skills shortages are cited by 66% of SMEs in Italy as hindering business activities, while 75% of employers report that applicants do not meet the necessary skills requirements for the advertised positions. As demographic changes (see Annex 10) lead to a shrinking workforce, more than two thirds of SMEs reported an improved collaboration with public employment services to make recruiting staff with the right skills easier. The occupations identified as the most difficult to fill in 2023 mostly belonged to craft workers, primarily needed in the construction sector and the industrial sector, but also in the healthcare sector (271). Skills shortages in occupations requiring higher qualification levels were reported for three occupations (commercial sales representatives, construction supervisors, and trade brokers). According to projections by the European Centre for the Development of Professional Training (CEDEFOP), Italy's employment needs between 2022 to 2035 will require a workforce with medium and high qualifications (272). By 2035, approximately 6.9 million workers will be needed in occupations requiring high-level education, alongside about 7.5 million workers in roles necessitating medium-level qualifications. Conversely, only around 900 000 workers with low levels of qualifications will be needed.

Participation in adult learning is limited and decreasing, particularly among the low-qualified and those distant from the labour market, further hampering competitiveness. In 2022, only 29.0% of adults participated in formal or non-formal education and training, a marked decrease (4.9 pps) since 2016, against a rising EU average of 39.5%, and far below Italy's 2030 target of 60%. Participation is significantly higher among people with tertiary education (60.2%) compared to those with primary (10.3%) or secondary education (28.2%), reflecting the role of prior qualifications in shaping lifelong learning. Workers in high-skilled roles, such as managers and professionals (55.0%), are far more likely to engage in training than clerical workers (27.8%) or manual workers (16.4%). Employment status further influences participation, with employed people (34.6%) engaging more than unemployed or inactive people (17.1%). Age is another critical factor, as participation declines sharply with age: adults aged 25-34 report the highest rates (40.1%), while those aged 55-64 the lowest (22.2%). Participation consistently decreased across all these groups between 2016 and 2022. These patterns underscore the need for further targeted policies to broaden access to adult learning, especially for vulnerable groups, to support upskilling and competitiveness.

Developing green skills is crucial for Italy's green transition. Participation in education and training (in the past 4 weeks) among employees in energy-intensive industries stands at 6.7%, below the EU average (11.7% in 2024). Furthermore, in 2022, only 52% of Italians believed their current skills enabled them to contribute to the green transition, compared to 54% in the EU. According to a recent report (273), roles requiring green skills are increasingly difficult to fill, limiting the impact of investments. Recruitment challenges are particularly acute in the construction sector, which is receiving substantial funding and faces persistent difficulties due to its low attractiveness. In 2024, shortages were also reported in occupations requiring specific skills related to the green transition, including garbage and recycling collectors, environmental protection professionals and building architects. Addressing these gaps is essential to ensure the workforce is adequately prepared to support Italy's climate goals.

(271) ELA, EURES Report on labour shortages and surpluses, 2024.

(272) CEDEFOP, Skills forecast 2023 – Italy.

(273) ELA, EURES Report on labour shortages and surpluses 2023 – Country fiche Italy, 2024.

Table A13.1:**Social Scoreboard for Italy**

Social Scoreboard for Italy		
Equal opportunities and access to the labour market	Adult participation in learning (during the last 12 months, excl. guided on the job training, % of the population aged 25-64, 2022)	29,0
	Early leavers from education and training (% of the population aged 18-24, 2024)	9,8
	Share of individuals who have basic or above basic overall digital skills (% of the population aged 16-74, 2023)	45,8
	Young people not in employment, education or training (% of the population aged 15-29, 2024)	15,2
	Gender employment gap (percentage points, population aged 20-64, 2024)	19,4
	Income quintile ratio (S80/S20, 2024)	5,53
Dynamic labour markets and fair working conditions	Employment rate (% of the population aged 20-64, 2024)	67,1
	Unemployment rate (% of the active population aged 15-74, 2024)	6,5
	Long term unemployment (% of the active population aged 15-74, 2024)	3,3
	Gross disposable household income (GDHI) per capita growth (index, 2008=100, 2023)	94,2
Social protection and inclusion	At risk of poverty or social exclusion (AROPE) rate (% of the total population, 2024)	23,1
	At risk of poverty or social exclusion (AROPE) rate for children (% of the population aged 0-17, 2024)	27,1
	Impact of social transfers (other than pensions) on poverty reduction (% reduction of AROP, 2024)	31,3
	Disability employment gap (percentage points, population aged 20-64, 2024)	25,1
	Housing cost overburden (% of the total population, 2024)	5,1
	Children aged less than 3 years in formal childcare (% of the under 3-years-old population, 2024)	39,4
	Self-reported unmet need for medical care (% of the population aged 16+, 2024)	1,9

Critical situation	To watch	Weak but improving	Good but to monitor	On average	Better than average	Best performers

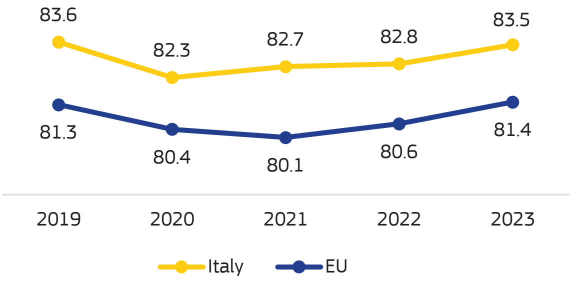
(1) Update of 5 May 2025. Members States are categorised based on the Social Scoreboard according to a methodology agreed with the EMCO and SPC Committees. Please consult the Annex of the Joint Employment Report 2025 for details on the methodology (https://employment-social-affairs.ec.europa.eu/joint-employment-report-2025-0).

Source: Eurostat

Italy's health system performs comparatively well, with high life expectancy at birth linked to low levels of treatable and preventable mortality. However, challenges with accessibility, compounded by shortages of health workers, exist. These need to be addressed if the country is to ensure the health of its population and social fairness, while boosting the competitiveness of the economy.

Life expectancy at birth in Italy rebounded to slightly below its pre-COVID-19 level and was among the highest in the EU in 2023. However, there are gender gaps in health outcomes. Women can expect to live 4 years longer than men. That said, they can only expect to live about 8 months longer than men in good health. Treatable mortality is relatively low in Italy. Diseases of the circulatory system ('cardiovascular diseases') and cancer are the leading causes of death, but with mortality rates lower than the EU average.

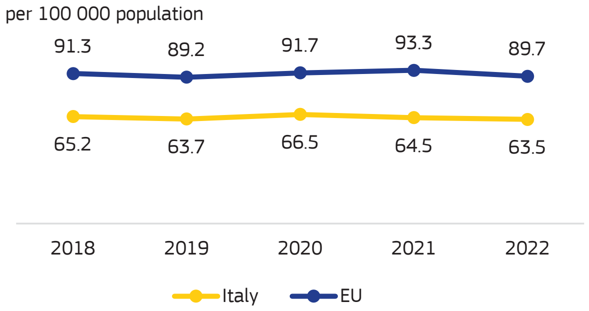
Graph A14.1: **Life expectancy at birth, years**



Source: Eurostat (demo_mlexpec)

Italy's health spending is below the EU average, both in per capita terms and as a measure of GDP. However, health spending is on the rise, as the 2025 Budget Law increased the healthcare budget from EUR 134 billion to EUR 136.5 billion for 2025. Around three quarters of total health expenditure is publicly funded (lower than the EU average), using a mix of national and regional taxes. The main spending categories are outpatient care (around 33% of total health expenditure), inpatient care (29%), followed by retail pharmaceuticals and medical devices (20%). In 2022, the number of hospital beds per capita was lower than the EU average. Out-of-pocket payments account for a greater proportion of spending on health in Italy than the EU average (22.7% vs 14.3%). Nearly half of all out-of-pocket payments are for outpatient care ([274]). Under the Italian recovery and resilience plan (RRP), around EUR 16.1 billion is planned for health reforms and supporting investments. In addition to the RRP, significant funding for healthcare (EUR 1.7 billion) is planned under the EU cohesion policy funds in 2021-2027. These funds aim to improve the accessibility, effectiveness and resilience of health services in the less developed regions of the country, with a focus on improving access for vulnerable groups (see Annex 16) ([275]).

Graph A14.2: **Treatable mortality**



Age-standardised death rate **(mortality that could be avoided through optimal quality healthcare)**
Source: Eurostat (hlth_cd_apr)

As regards public health, Italy places considerable focus on disease prevention. In 2022, the share of total spending on health dedicated to prevention was higher than the EU average. While preventable mortality is low in Italy, rates of physical inactivity and daily smoking among adults are higher than the EU average (see Annex 15) ([276]). In addition, mortality linked to air pollution is high (see Annex 7). Screening rates for some types of cancer (such as cervical cancer) are below the EU average ([277]). In 2023, the consumption of antibiotics was still above the EU average, raising concerns about antimicrobial resistance. The 2025 Budget Law has established a EUR 1.2 million fund for obesity prevention and treatment for 2025, increased financial support for the costs of psychotherapy sessions, and created a dedicated psychological support service fund for students.

Historical differences in policies and financing have created regional imbalances

[274] OECD/European Commission (2024), Health at a Glance: Europe 2024: State of Health in the EU Cycle, pp. 186-187.

[275] The EU cohesion policy data reflect the status as of 15 January 2024.

[276] Health at a Glance: Europe 2024, Chapter 4.

[277] Health at a Glance: Europe 2024, pp. 162-163.

Table A14.1:**Key health indicators**

	2019	2020	2021	2022	2023	EU average* (latest year)
Cancer mortality per 100 000 population	230.9	227.0	221.5	218.7	n.a.	234.7 (2022)
Mortality due to circulatory diseases per 100 000 population	270.7	281.1	266.9	270.3	n.a.	336.4 (2022)
Current expenditure on health, purchasing power standards, per capita	2 529	2 622	2 823	2 945	n.a.	3 684.6 (2022)
Public share of health expenditure, % of current health expenditure	73.7	75.9	74.5	74.4	74.0	81.3 (2022)
Spending on prevention, % of current health expenditure	4.7	5.5	6.7	6.0	5.3	5.5 (2022)
Available hospital beds per 100 000 population**	308	310	304	301	n.a.	444 (2022)
Doctors per 1 000 population*	4.1	4.0	4.1	4.2	n.a.	4.2 (2022)*
Nurses per 1 000 population*	6.2	6.3	6.2	6.5	n.a.	7.6 (2022)*
Mortality at working age (20-64 years), % of total mortality	10.4	9.8	10.4	9.7	10.1	14.3 (2023)
Number of patents (pharma / biotech / medical technology)	367	369	286	224	329	29 (2023)***
Total consumption of antibacterials for systemic use, daily defined dose per 1 000 inhabitants****	21.7	18.4	17.5	21.9	23.1	20.0 (2023)

*The EU average is weighted for all indicators except for doctors and nurses per 1 000 population, for which the EU simple average is used based on 2022 (or latest 2021) data except for Luxembourg (2017). Doctors' density data refer to practising doctors in all countries except Greece, Portugal (licensed to practise) and Slovakia (professionally active). Density of nurses: data refer to practising nurses (EU recognised qualification) in most countries except France and Slovakia (professionally active) and Greece (hospital only). **'Available hospital beds' covers somatic care, not psychiatric care. ***The EU median is used for patents.
Source: Eurostat database; European Patent Office; ****European Centre for Disease Prevention and Control (ECDC) for 2023.

in access to healthcare services. Among people with medical needs, the gap in unmet needs between people below and above the poverty threshold (defined as 60% of the median equivalised income) is much higher in Italy than the EU average. The gender gap in this area is also among the highest in the EU, with higher foregone care for women. As of 2023, the RRP is supporting pharmacies in small municipalities to strengthen healthcare access in rural and remote areas. Moreover, Italy adopted Law 107 in July 2024, which establishes that each region will appoint a Regional Healthcare Manager to address the causes of long waiting times. More recently, the 2025 Budget Law has allocated EUR 50 million for 2025 and EUR 100 million for 2026 to regions as incentives to reduce waiting times and meet targets. In 2024, the Italian parliament also approved Law 86 on differentiated autonomy, allowing regions greater legislative power over healthcare. It will be important to monitor this legislation to ensure that it does not exacerbate existing regional disparities in healthcare access and outcomes.

Italy faces shortages of health workers, which limits the availability of care. For several years, the density of doctors in Italy has been similar to the EU average. However, the distribution of doctors is uneven both across the country and among medical specialties. Around 27% of practising physicians are aged between 55 and 64, and only 11% are under the age of 35. This raises concerns about the long-term accessibility of health services. Italy had around 5.2 specialists for every general practitioner (GP) in 2022, highlighting the considerable shortfall in GPs compared to specialists. The RRP is supporting the award of 2 700 additional scholarships in general medicine over 2021-2026 to boost the number of GPs (see Annex 16). In 2022, the density of practising nurses in Italy was lower than the EU average, making it difficult to expand care services for an ageing population (see Annex 11). Nurses in Italy do not earn more than the average wage of all workers, limiting the job's attractiveness ([278]). Efforts are underway to make nursing professions more attractive by revising educational pathways, with the launch of specialisation programs in family and community primary care, neonatal and paediatric care, and intensive care and emergency nursing. The 2025 Budget Law has introduced measures to improve retention and recognise the contributions of key workers, increased allowances for various health professionals, including a new flat 5% personal income tax rate on nurse overtime and salary increases for medical and other health trainees, with additional increases for less attractive specialties. In 2024, Italy also adopted several regulations to tackle the issue of violence against health professionals and protect them during care delivery. Furthermore, Italy participates in the HEROES joint action under EU4Health, through which EU countries share knowledge and experience on health workforce planning ([279]).

The Italian health system significantly contributes to driving innovation and fostering industrial development in the EU medical sector. Italy is among the EU countries that report the highest public spending on health

([278])Health at a Glance: Europe 2024, pp. 196-197.
([279])JA HEROES | Health workforce planning project.

research and development (see Annex 3). This is reflected in the high number of European patents granted to patent in 2023 in the combined areas of pharmaceuticals, biotechnologies and medical devices ([280]). Clinical trial activity in Italy is among the highest in the EU ([281]).

Italy plans to accelerate the digitalisation of its health system, with significant support from EU programmes. While the share of people using online health services (excluding phone) instead of in-person consultations in Italy (29.3%) exceeded most EU countries in 2024, the share of people accessing their personal health records online (26.9%) was very close to the EU average. Despite the above average overall technical deployment of electronic health records (see Annex 6), their use by patients can still be increased. Significant planned investments under the RRP and cohesion policy aim to boost the digital transformation of the healthcare sector in Italy (see Annex 16). Measures include: (i) accelerating the adoption of telemedicine, especially for patients with chronic diseases; (ii) improving health information systems and digital tools, including for hospitals' technological equipment; and (iii) providing training on digital skills to health workers. In addition, Italy participates in the joint action TEHDAS2 ([282]) and receives direct grants under EU4Health to help it implement the European Health Data Space.

([280])European Patent Office, Data to download | epo.org.

([281])EMA (2024), Monitoring the European clinical trials environment, p. 9.

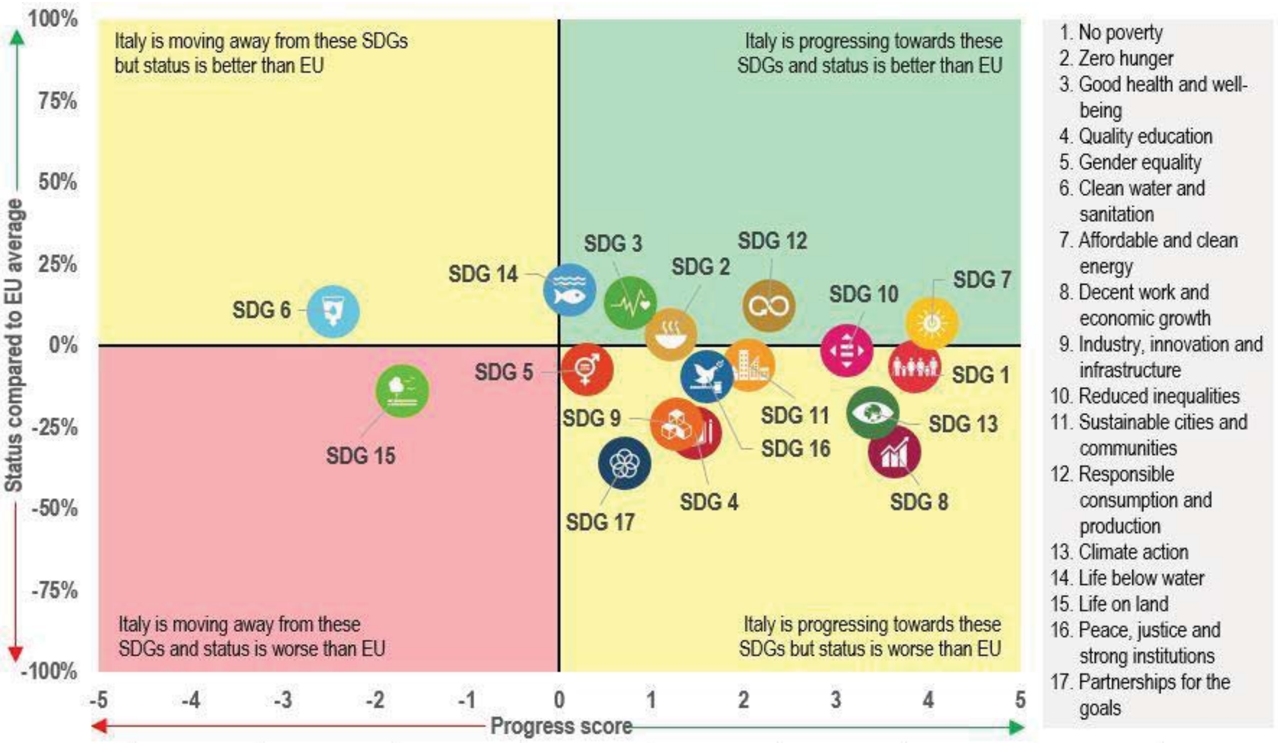
([282])Second Joint Action Towards the European Health Data Space – TEHDAS2 - Tehdas

ANNEX 15: SUSTAINABLE DEVELOPMENT GOALS

This Annex assesses Italy's progress on the Sustainable Development Goals (SDGs) along the dimensions of competitiveness, sustainability, social fairness and macroeconomic stability. The 17 SDGs and their related indicators provide a policy framework under the UN's 2030 Agenda for Sustainable Development. The aim is to end all forms of poverty, fight inequalities and tackle climate change and the environmental crisis, while ensuring that no one is left behind. The EU and its Member States are committed to this historic global framework agreement and to playing an active role in maximising progress on the SDGs. The graph below is based on the EU SDG indicator set developed to monitor progress on the SDGs in the EU.

Italy needs to catch up with the EU average on all SDGs related to *competitiveness* (SDGs 4, 8, 9), but it is improving. Gross domestic expenditure on R&D decreased and remains below the EU average (1.3% of GDP, against 2.2% in the EU in 2023; SDG 9). Real GDP per capita is almost on a par with the EU (EUR 32 810 vs EUR 33 530 in the EU in 2024) and investments represent 22% of GDP (SDG 8), which is slightly above the EU average (21.7%). The share of households with a high-speed internet connection in 2023 (59.6%) was well below the EU average (78.8%), despite significant progress since 2019 (30%) (SDG 9). The percentage of adults aged 16 to 74 with at least basic digital skills remained below the EU average (45.8% vs 55.6% in the EU in 2023; SDG 4). Italy progressed on indicators related to tertiary education and adult learning but remains well below the EU average (SDG 4). The recovery and resilience plan (RRP) is expected to contribute significantly to competitiveness by investing in the digitalisation of public administration, justice, education and research, as well as in the tourism and cultural sector. Measures supporting the digitalisation and competitiveness of manufacturing and research and innovation are

Graph A15.1: **Progress towards the SDGs in Italy**



For detailed datasets on the various SDGs, see the annual Eurostat report 'Sustainable development in the European Union'; for details on extensive country-specific data on the short-term progress of Member States: Key findings – Sustainable development indicators - Eurostat (europa.eu). A high status does not mean that a country is close to reaching a specific SDG, but signals that it is doing better than the EU on average. The progress score is an absolute measure based on the indicator trends over the past five years. The calculation does not take into account any target values, as most EU policy targets are only valid for the aggregate EU level. Depending on data availability for each goal, not all 17 SDGs are shown for each country.

Source: Eurostat, latest update of 28 April 2025. Data refer mainly to the period 2018-2023 or 2019-2024. Data on SDGs may vary across the report and its annexes due to different cut-off dates.

also expected to boost productivity.

Italy is improving on most of the SDGs related to *sustainability* (SDGs 2, 7, 9, 11, 12, 13, 14) and performs well on some of them (SDGs 2, 6, 7, 12, 14). However, it is moving away from the indicator on clean water and sanitation as well as the one on life on land (SDGs 6, 15). Italy still needs to catch up with the EU average indicators on industry, innovation and infrastructure, sustainable cities and communities, climate action and life on land (SDGs 9, 11, 13, 15). In Italy the use of circular material is higher than in the rest of the EU (20.8% of material input for domestic use vs 11.8% in the EU in 2023), but generation of waste increased between 2018 and 2022 (from 2.8 to 3.2 kg per capita; SDG 12). While the percentage of marine protected areas is below the EU level (9.7% vs 12.3% in the EU in 2022), the figure for marine waters affected by eutrophication is virtually zero, outperforming the EU average (0.01% of the exclusive economic zone vs 0.4% in the EU in 2024; SDG 14). Italy performs well on energy efficiency and consumption (SDG 7), but the share of renewable energy remains lower than the EU average (19.6% of gross final energy consumption vs 24.6% in the EU in 2023; SDG 13). Italy also faces some of the highest and increasing climate-related economic losses (EUR 63.5/inhabitant vs EUR 44.8 in the EU in 2023; SDG 13). On a positive note, net greenhouse gas emissions removals from land use and forestry are improving compared to 2018 and are higher than the EU level (-177.4 tonnes CO_2 eq. per km^2 vs -47 in the EU in 2023, SDG 13). While Italy performs well on sustainable agricultural production, ammonia emissions from agriculture remain above the EU average (23.1 kg per hectare of utilised agricultural area vs 18.3 kg in the EU in 2022; SDG 2). The share of railways and inland waterways in freight transport is far from the EU average (9.9 pp. difference in % of inland freight tonne/km in 2023; SDG 9). The recycling rate of waste at municipal level is above the EU average (53.3% in 2022 vs 48.2% in the EU; SDG 11). Access to sanitation worsened: despite remaining below 1%, the share of population without sanitary facilities doubled between 2018 and 2023 (SDG 6). Soil sealing increased leading to significant environmental impact, and the area at risk of severe soil erosion by water is well above the EU average (24.9% of non-artificial erodible area vs 5.3% in the EU in 2016; SDGs 2, 15). Moreover, the impact of drought on ecosystems increased from 2018 to 2023 but remains under EU levels (1.8% of the country area vs 3.6% in the EU in 2023; SDGs 6, 15) following the drought year of 2022 (18.2% of the country area vs 16.2% in the EU). The average performance in each dimension of environmental sustainability masks large regional differences across the country. The RRP includes important measures expected to support the green transition in renewable energy, circular economy, natural resource management, the reduction of hydrogeological risks, sustainable transport and the energy efficiency of buildings.

Italy is improving in all SDGs related to *social fairness* (SDGs 1, 3, 4, 5, 7, 8, 10), and it performs well on good health and well-being and affordable and clean energy compared with the rest of the EU (SDGs 3, 7). On the other hand, Italy needs to catch up with the EU average on most indicators (SDGs 1, 4, 5, 8, 10). Labour market participation improved but wide gaps compared with the EU average remain. The share of young people not in education, employment or training is declining but is still well above the EU average (15.2% of the population aged 15-29 vs 11% in the EU in 2024; SDG 8). Despite a relatively high share of women in senior management positions (44.6% in 2024 vs 32.6% in the EU; SDG 5), the participation gender gap due to caring responsibilities remains higher than the EU average (1 pps vs 0.8 in the EU in 2024 in the population aged 20-64; SDG 8) and so is the gender employment gap (19.4 pps vs 10 pps in the EU in the population aged 20-64 in 2024; SG 5). In a context of low tertiary education attainment and low labour market participation of women, the share of women attaining tertiary education is higher than that of men; the gap is increasing and higher than the EU average (13.5 pps vs 11.2 in the EU in 2024 in the population aged 25-34; SDG 5). The share of employed people at risk of poverty slightly decreased (12.2% of population over 18 in 2018 vs 9.9% in 2023), and fatal accidents at work also declined slightly, but remain higher than the EU average (2.03 per 100 000 workers vs 1.7 in the EU in 2022; SDG 8). Numerical skills worsened across the EU: over 2018-2022, the percentage of low achievers in mathematics among 15-year-olds increased by almost 7%, reaching about 30% in Italy and the EU (SDG 4). Participation in early childhood education has slightly decreased in Italy, while improving at the EU level (93.5% of children aged 3 and over vs 94.6% in the EU in 2023; SDG

4). Preventing early leaving from education remains a challenge, especially for students with a migrant background (18.9 percentage points difference between EU and non-EU population aged 18-24 vs 15.4 pp. difference in the EU in 2024; SDG 10). Access to housing in terms of excessive costs (SDG 1) and affordable energy (SDG 7) improved in Italy, as the share of the population unable to keep their homes adequately warm decreased, falling below the EU average (9.5% of population vs 10.6% in the EU in 2023; SDG 7). The share of people at risk of poverty or social exclusion declined but remains slightly higher than in the EU (22.8% of the total population in 2023 vs 21.3% in the EU) and, despite a decrease in the relative median of the at-risk-of-poverty gap, Italy remains slightly above the EU average (23.8% distance to poverty threshold vs 23% in the EU in 2023; SDG 1). Healthy life years at birth and the share of people perceiving themselves as healthy slightly increased, against a decline at EU level, with 73.3% of Italian population above 16 in 2018 (vs 68.6% of population in the EU), and 73.9% in 2023 (vs EU 67.9%). At the same time, obesity and the share of households suffering from noise increased, while remaining lower than the EU average (SDG 3). RRP measures on education and training, active labour market policies, social and territorial cohesion, social services and inclusion and gender equality are expected to improve Italy's performance on the SDGs related to fairness.

While the country is improving on SDGs related to *macroeconomic stability*, it still needs to catch up with the EU average on all of them (SDGs 8, 16, 17). Italy has made progress on peace, justice and the quality of its institutions, with a significant reduction in reported crime, falling below the EU average (from 11.3% in 2018 to 6.4% in 2023, EU: 10% of the total population in 2023; SDG 16). Access to justice remains a challenge, with only 36% of the population perceiving the justice system as independent, and the trust in institutions with regard to perceived corruption remains below the EU average (SDG 16). There has been some progress related to sustainable economic growth and employment indicators, but the country remains below the EU average (SDG 8). There is still little uptake on global partnerships, and important challenges remain on public debt (135.3% of GDP vs EU average of 81% in 2024; SDG 17). Several structural reforms included in the RRP are expected to improve Italy's macroeconomic stability, particularly the public administration and justice system reforms and the measures to fight tax evasion.

As the SDGs form an overarching framework, any links to relevant SDGs are either explained or depicted with icons in the other annexes.

Italy faces structural challenges in a wide range of policy areas, as identified in the country-specific recommendations (CSRs) addressed to the country as part of the European Semester. They refer, among other things, to taxation policy, the functioning of the labour market and policies to help people find work or stay in work, skills and education, the business environment, restrictions on competition, regional development, the public administration including the capacity to manage EU funds, the justice system and energy.

The Commission has assessed the 2019-2024 CSRs considering the policy action taken by Italy to date and the commitments in its recovery and resilience plan (RRP). At this stage, Italy has made at least 'some progress' on 94% of the CSRs [283], and 'limited progress' on 4% (Table A16.2).

EU funding instruments provide considerable resources to Italy by supporting investments and structural reforms to increase competitiveness, environmental sustainability and social fairness, while helping to address challenges identified in the CSRs. In addition to the EUR 194.4 billion funding from the Recovery and Resilience Facility (RRF) in 2021-2026, EU cohesion policy funds [284] are providing EUR 42.2 billion to Italy (amounting to EUR 73.9 billion with national co-financing) for 2021-2027 [285] to boost regional competitiveness and growth. Support from these instruments combined represents around 11.1% of 2024 GDP [286]. The contribution of these instruments to different policy objectives is outlined in Graphs A16.1 and A16.2. This substantial support comes on top of financing provided to Italy under the 2014-2020 multiannual financial framework, which financed projects until 2023 and has had significant benefits for the economy and Italian society. Project selection under the 2021-2027 cohesion policy programmes has accelerated, while significant volumes of investment are yet to be mobilised.

The Italian RRP contains 150 investments and 66 reforms to stimulate sustainable growth and address social and regional divides. A year before the end of the RRF timespan, implementation is on its way with 63% of the funds disbursed. At present, Italy has fulfilled around 43% of the milestones and targets in its RRP [287]. Efforts are needed to ensure completion of all RRP measures by 31 August 2026. It is essential for Italy to accelerate the implementation of reforms and investments by addressing relevant challenges. In particular, Italy would benefit from strengthening administrative capacity, notably at local level, and detecting and addressing potential delays in a timely manner.

Italy also receives funding from several other EU instruments, including those listed in Table A16.1. Most notably, the common agricultural policy (CAP) provides Italy with an EU contribution of EUR 28 billion under the CAP strategic plan for 2023-2027 [288]. A further EUR 964 million are available under the Asylum, Migration and Integration Fund (AMIF), together with the Border Management and Visa Instrument (BMVI) and internal security funds. Furthermore, operations amounting to EUR 4.5 billion [289] have been signed under the InvestEU instrument backed by the EU guarantee, improving access to financing for riskier operations in Italy.

[283] 6% of the 2019-2024 CSRs have been fully implemented, 19% substantially implemented, and some progress has been made on 69%.

[284] In 2021-2027, cohesion policy funds include the European Regional Development Fund, the European Social Fund Plus and the Just Transition Fund. The information on cohesion policy included in this annex is based on adopted programmes with the cut-off date of 5 May 2025.

[285] European territorial cooperation (ETC) programmes are excluded from the figure.

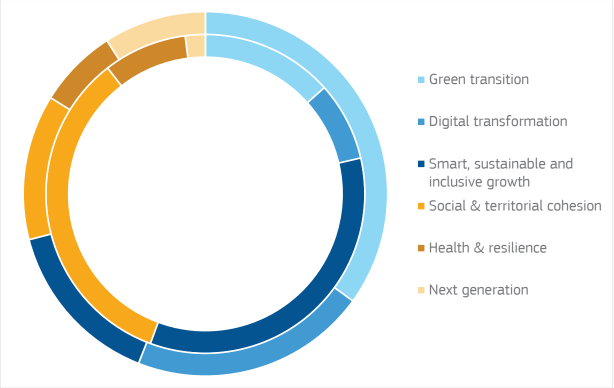
[286] RRF funding includes both grants and loans, where applicable. GDP figures are based on Eurostat data for 2023.

[287] As of mid-May 2025, Italy has submitted 7 payment requests, the last one being under assessment.

[288] An overview of Italy's formally approved strategy to implement the EU's common agricultural policy nationally can be found at: https://agriculture.ec.europa.eu/cap-my-country/cap-strategic-plans/italy_en.

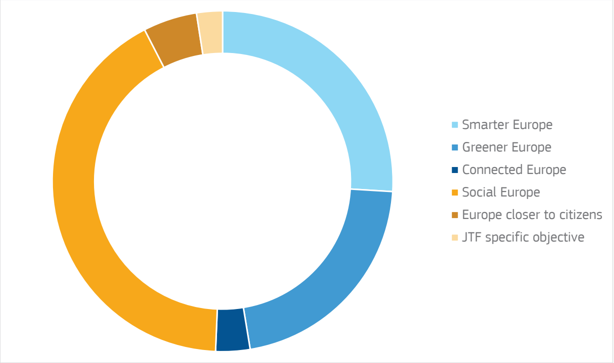
[289] Data reflect the situation on 31.12.2024.

Graph A16.1: **Distribution of RRF funding in Italy by policy field**



(1) Each RRP measure helps achieve the aims or two of the six policy pillars of the RRF. The primary contribution is shown in the outer circle, while the secondary contribution is shown in the inner circle. Each circle represents 100% of the RRF funds. Therefore, the total contribution to all pillars displayed on this chart amounts to 200% of the RRF funds allocated.
Source: European Commission

Graph A16.2: **Distribution of cohesion policy funding across policy objectives in Italy**



Source: European Commission

Cohesion policy funds aim to increase the productivity and competitiveness of Italian firms and improve the business environment. Cohesion policy support is particularly important for boosting competitiveness and growth in the less developed regions in southern Italy, benefiting from the highest amounts of support. The European Regional Development Fund (ERDF) will support nearly 17 000 small and medium-sized enterprises (SMEs) investing in skills for smart specialisation, for industrial transition and entrepreneurship. It will help nearly 4 000 public institutions develop digital services, products and processes, thus also improving the business environment. Italy is making significant use of the Strategic Technologies for Europe Platform (STEP) to strengthen the resilience and competitiveness of its regions and reduce the strategic dependencies of the EU as a whole. It has already allocated around EUR 3 billion to STEP priorities, of which around EUR 2.7 billion in regions in southern Italy, covering digital technologies and deep tech (including in the Campania region 'Quantum valley'), clean and resource-efficient technologies and efficiency of production processes. This will involve reducing energy consumption and promoting solar energy and biotechnologies, notably for the pharmaceutical sector. The Just Transition Fund (JTF) is focusing on Taranto (Puglia), to address challenges arising from the industrial transition, and the mining area of Sulcis-Iglesiente (Sardegna). In both territories, the JTF is supporting investment in renewable energies and the environment, diversification of economic activity, creation of new businesses, and upskilling and reskilling measures for workers impacted by the transition. The European Social Fund Plus (ESF+) is supporting upskilling and reskilling initiatives across all sectors, earmarking around EUR 2 billion (about 14% of the total ESF+ allocation) for the development of green skills and jobs in Italy. Similar amounts are allocated to investment in digital skills and jobs. This funding is also used to support technical non-academic post-secondary education, which is designed to equip participants with skills in high demand from companies.

Other funds are contributing to competitiveness in Italy, for instance through open calls. The Connecting Europe Facility has financed strategic investments for instance in rail infrastructure and the modernisation of Italy's maritime and inland waterways transport network; energy market integration, decarbonisation of the energy system and security of energy supply, in particular electricity interconnectivity; as well as capacity, resilience and security of backbone digital infrastructure and advancing the deployment of 5G in smart communities. Horizon Europe has supported research and innovation, from scientific breakthroughs to scaling up innovations, with Climate, Energy and Mobility and Digital, Industry and Space as top priorities in Italy. In Italy, the Technical Support Instrument (TSI) is focused on realising the potential of AI in the financial sector and developing a more sustainable, resilient and digital tourist industry.

Italy's RRP also contains ambitious reforms and investments to improve the business environment and competitiveness. As part of the measures covered by payment requests submitted over the past year, major reforms have been implemented to make the public administration and judicial system more efficient. This includes recruiting 12 000 staff for the trial office and technical administrative posts to significantly reduce the backlog of cases in regional administrative courts. Italy also undertook reforms to increase competition in the electricity, retail and pharmaceutical sectors; and to modernise public procurement, by training more than 20 000 civil servants in public purchasing and significantly reducing the time taken to award contracts. Firms are being supported in their digital transition by 147 557 tax credits for tangible and intangible investments. Regarding the digital transformation of the public administration, 10 675 public administrations have joined and provide services through the 'IO' app (an increase of 251% compared to 2021).

EU funds are playing a significant role in promoting environmental sustainability and green transition in Italy during the current seven-year EU budget (multiannual financial framework). Within its budget for green investment exceeding EUR 8.7 billion, the ERDF is investing more than EUR 1.2 billion in measures for climate-related disaster prevention, preparedness and resilience with a focus on hydrogeological risks and wildfires in the most affected regions of the South. The ERDF is also reducing dependence on fossil fuels by boosting the capacity to produce renewable energy by 898 MW through small to medium-scale investments, by promoting self-consumption and renewable energy communities. It is improving wastewater management for over 1.5 million people mainly residing in Italy's southern regions. Furthermore, Italy's CAP strategic plan allocates over EUR 10 billion to interventions relating to the climate and the environment through 34 voluntary schemes that support farmers by applying more sustainable practices, such as reduced use of fertilisers and pesticides and soil conservation practices. Moreover, Italy allocates approximately EUR 2 billion to organic farming.

Italy's RRP, including the REPowerEU chapter, has a comprehensive set of reforms and investments for the green transition. Measures covered by the payment requests submitted over the last year include, among others, the streamlining of authorisation procedures to build structures for producing renewable energy. Italy has also significantly reduced irregular landfills. The regional gap between the national average and the worst performing regions in separate waste collection has been reduced, and significant investments have been made in primary water infrastructure. Italy has also started the construction of high-speed railway connections to the South. Contracts have been awarded to equip urban public transport with at least 231 additional kilometres of new infrastructure by 2026; more than 3 000 zero-emission public transport buses are being purchased; and 200 km of cycling lanes have been completed in metropolitan areas.

Promoting fairness, social cohesion and improving access to basic services are among the key priorities of EU funding in Italy. ERDF support will enable access to new or modernised healthcare facilities for over 5 million people a year, especially in less developed regions, improving the capacity of the health care system. The ESF+ promotes social cohesion in Italy through active inclusion programmes supporting disadvantaged people, improved health, social and care services, and improved access to services for vulnerable groups and people living in less developed regions. Among their interventions, ESF+ programmes will support at least 590 000 people in unemployment, 151 000 people outside the labour force, at least 133 000 people who are homeless or affected by housing exclusion and more than 35 000 people with a disability ([290]). In addition, the AMIF supports healthcare for applicants and beneficiaries of international protection in reception centres in Italy. Special emphasis is placed on proper protection of the mental and physical health of unaccompanied minors by establishing systems of care pathways for correct diagnosis and care.

Italy's RRP contains several reforms and investments related to fairness and social policies. All levels of the education system have been strengthened through comprehensive reforms and investments covered by payment requests over the last year. This includes teacher recruitment; the reform of the vocational training system; scholarships for more than 55 000 students in socio-economic difficulties; the awarding of contracts for building new schools

([290])An overview of Italy's formally approved strategy to implement the EU's common agricultural policy nationally can be found at: https://agriculture.ec.europa.eu/cap-my-country/cap-strategic-plans/italy_en.

and the building/renovation of more than 300 sports facilities for school use. In the field of healthcare, legislation has been adopted to strengthen the autonomy of people with a disability and action has been taken to support dependent older people. Italy has also increased the number of scholarships for general medicine and is investing in telemedicine solutions and healthcare innovation to address challenges with access and quality of care. To help Italy implement its RRP, in 2024 the TSI assisted with measures for improving digital skills, for increasing the quality and resilience of the health system, and for designing and implementing the universal civil service.

Table A16.2:**Summary table on 2019-2024 CSRs**

Italy	**Assessment in May 2025**	**Relevant SDGs**
2019 CSR 1	**Some progress**	
Ensure a nominal reduction of net primary government expenditure of 0.1% in 2020, corresponding to an annual structural adjustment of 0.6% of GDP. Use windfall gains to accelerate the reduction of the general government debt ratio.	No longer relevant	SDGs 8, 16
Shift taxation away from labour, including by reducing tax expenditure and reforming the outdated cadastral values.	Some progress	SDGs 8, 10, 12
Fight tax evasion, especially in the form of omitted invoicing, including by strengthening the compulsory use of e-payments including through lower legal thresholds for cash payments.	Substantial progress	SDGs 8, 16
Implement fully past pension reforms to reduce the share of old-age pensions in public spending and create space for other social and growth-enhancing spending.	No progress	SDG 8
2019 CSR 2	**Some progress**	
Step up efforts to tackle undeclared work.	Some progress	SDG 8
Ensure that active labour market and social policies are effectively integrated and reach out notably to young people and vulnerable groups.	Substantial progress	SDGs 1, 2, 8, 10
Support women's participation in the labour market through a comprehensive strategy, including through access to quality childcare and long-term care.	Some progress	SDGs 8, 10
Improve educational outcomes, also through adequate and targeted investment, and foster upskilling, including by strengthening digital skills.	Some progress	SDG 4
2019 CSR 3	**Some progress**	

Table (continued)

Focus investment on the green and digital transition, in particular on clean and efficient production and use of energy,	Some progress	SDGs 7, 9, 13
research and innovation,	Some progress	SDG 9
sustainable public transport,	Some progress	SDG 11
waste and water management	Some progress	SDGs 6, 12, 15
as well as reinforced digital infrastructure to ensure the provision of essential services.	Some progress	SDG 9
2020 CSR 4	**Substantial progress**	
Improve the efficiency of the judicial system and	Substantial progress	SDG 16
the effectiveness of public administration.	Substantial progress	SDG 16
2021 CSR 1	**No longer relevant**	
In 2022, use the Recovery and Resilience Facility to finance additional investment in support of the recovery while pursuing a prudent fiscal policy. Preserve nationally financed investment. Limit the growth of nationally financed current expenditure.	No longer relevant	SDGs 8, 16
When economic conditions allow, pursue a fiscal policy aimed at achieving prudent medium-term fiscal positions and ensuring fiscal sustainability in the medium term.	No longer relevant	SDGs 8, 16
At the same time, enhance investment to boost growth potential. Pay particular attention to the composition of public finances, on both the revenue and expenditure sides of the budget, and to the quality of budgetary measures in order to ensure a sustainable and inclusive recovery. Prioritise sustainable and growth-enhancing investment, in particular investment supporting the green and digital transition.	No longer relevant	SDGs 8, 16
Give priority to fiscal structural reforms that will help provide financing for public policy priorities and contribute to the long-term sustainability of public finances, including, where relevant, by strengthening the coverage, adequacy and sustainability of health and social protection systems for all.	No longer relevant	SDGs 8, 16
2022 CSR 1	**Some progress**	
In 2023, ensure prudent fiscal policy, in particular by limiting the growth of nationally financed primary current expenditure below medium-term potential output growth, taking into account continued temporary and targeted support to households and firms most vulnerable to energy price hikes and to people fleeing Ukraine. Stand ready to adjust current spending to the evolving situation.	No longer relevant	SDGs 8, 16
Expand public investment for the green and digital transitions, and for energy security taking into account the REPowerEU initiative, including by making use of the Recovery and Resilience Facility and other Union funds.	No longer relevant	SDGs 8, 16
For the period beyond 2023, pursue a fiscal policy aimed at achieving prudent medium-term fiscal positions and ensuring credible and gradual debt reduction and fiscal sustainability in the medium term through gradual consolidation, investment and reforms.	No longer relevant	SDGs 8, 16
In order to further reduce taxes on labour and increase the efficiency of the system, adopt and appropriately implement the enabling law on the tax reform, particularly by reviewing effective marginal tax rates, aligning the cadastral values to current market values, streamlining and reducing tax expenditures, also for VAT, and environmentally harmful subsidies while ensuring fairness, and by reducing the complexity of the tax code.	Some progress	SDGs 8, 10, 12
2022 CSR 2		
Proceed with the implementation of its recovery and resilience plan, in line with the milestones and targets included in the Council Implementing Decision of 13 July 2021.	RRP implementation is monitored by assessing RRP payment requests and analysing reports published twice a year on the achievement of the milestones and targets. These are to be reflected in the country reports.	
Swiftly finalise the negotiations with the Commission of the 2021-2027 cohesion policy programming documents with a view to starting their implementation.	Progress on the cohesion policy programming documents is monitored under the EU cohesion policy.	
2022 CSR 3	**Some progress**	
Reduce the reliance on fossil fuels and diversify energy import.	Some progress	SDGs 7, 9, 13
Overcome bottlenecks to increase the capacity of internal gas transmission,	Some progress	SDGs 7, 9, 13
develop electricity interconnections,	Some progress	SDGs 7, 9, 13
accelerate the deployment of additional renewable energy capacities	Some progress	SDGs 7, 9, 13
and adopt measures to increase energy efficiency	Some progress	SDG 7
and to promote sustainable mobility.	Some progress	SDG 11

(Continued on the next page)

Table (continued)

2023 CSR 1	**Substantial progress**	
Wind down the emergency energy support measures in force, using the related savings to reduce the government deficit, as soon as possible in 2023 and 2024. Should renewed energy price increases necessitate new or continued support measures, ensure that such support measures are targeted at protecting vulnerable households and firms, are fiscally affordable and preserve incentives for energy savings.	Substantial progress	SDGs 8, 16
Ensure prudent fiscal policy, in particular by limiting the nominal increase in nationally financed net primary expenditure in 2024 to not more than 1,3%.	Some progress	SDGs 8, 16
Preserve nationally financed public investment and ensure the effective absorption of grants under the Facility and of other Union funds, in particular to foster the green and digital transitions.	Full implementation	SDGs 8, 16
For the period beyond 2024, continue to pursue a medium-term fiscal strategy of gradual and sustainable consolidation, combined with investments and reforms conducive to improved productivity and higher sustainable growth, in order to achieve a prudent medium-term fiscal position.	Full implementation	SDGs 8, 16
Further reduce taxes on labour and make the tax system more efficient by adopting and duly implementing the enabling law on tax reform while preserving the progressivity of the tax system and improving fairness, in particular by streamlining and reducing tax expenditures, including VAT and environmentally harmful subsidies, and by reducing the complexity of the tax code. Align the cadastral values with current market values.	Some progress	SDGs 8, 10, 12
2023 CSR2		
Ensure effective governance and strengthen administrative capacity, in particular at subnational level, in order to allow for the continued swift and steady implementation of the recovery and resilience plan. Swiftly finalise the REPowerEU chapter with a view to rapidly starting the implementation thereof. Proceed with the speedy implementation of cohesion policy programmes, in close complementarity and synergy with the recovery and resilience plan.	RRP implementation is monitored through the assessment of RRP payment requests and analysis of the bi-annual reporting on the achievement of the milestones and targets, to be reflected in the country reports. Progress with the cohesion policy is monitored in the context of the Cohesion Policy of the European Union.	
2023 CSR 3	**Some progress**	
Reduce the reliance on fossil fuels.	Some progress	SDGs 7, 9, 13
Streamline permitting procedures in order to accelerate the production of additional renewable energy, and	Some progress	SDGs 7, 8, 9, 13
develop electricity interconnections to absorb it.	Some progress	SDGs 7, 9, 13
Increase the capacity for internal gas transmission in order to diversify energy imports and strengthen security of supply.	Some progress	SDGs 7, 9, 13
Increase energy efficiency in the residential and corporate sectors, including through better targeted incentive schemes, addressing in particular the most vulnerable households and the worst-performing buildings.	Some progress	SDGs 1, 2, 7, 10
Promote sustainable mobility, including by removing environmentally harmful subsidies and speeding up the roll-out of charging stations.	Some progress	SDGs 8, 10, 11, 12
Step up policy efforts aimed at the provision and acquisition of skills and competences needed for the green transition.	Limited progress	SDG 4
2024 CSR 1	**Substantial progress**	
Submit the medium-term fiscal-structural plan in a timely manner.	Full implementation	SDGs 8, 16
In line with the requirements of the reformed Stability and Growth Pact, limit the growth in net expenditure in 2025 to a rate consistent with, inter alia, putting the general government debt on a plausibly downward trajectory over the medium term and reducing the general government deficit towards the 3% of GDP Treaty reference value.	Full implementation	SDGs 8, 16
Make the tax system more supportive to growth, with a focus on reducing the tax wedge on labour and in line with fiscal sustainability objectives, including by reducing tax expenditures and updating cadastral values, while ensuring fairness and progressivity and supporting the green transition.	Some progress	SDGs 8, 10, 12
2024 CSR 2		
Strengthen administrative capacity to manage EU funds, accelerate investments and maintain momentum in the implementation of reforms. Address relevant challenges to allow for continued, swift and effective implementation of the recovery and resilience plan, including the REPowerEU chapter, ensuring completion of reforms and investments by August 2026. Accelerate the implementation of cohesion policy programmes. In the context of their mid-term review continue focusing on the agreed priorities, while considering the opportunities provided by the Strategic Technologies for Europe Platform initiative to improve competitiveness.	RRP implementation is monitored through the assessment of RRP payment requests and analysis of the bi-annual reporting on the achievement of the milestones and targets, to be reflected in the country reports. Progress with the cohesion policy programming is monitored in the context of the Cohesion Policy of the European Union.	
2024 CSR 3	**Some progress**	
In order to mitigate the effects on potential growth, tackle negative demographic trends including by attracting and retaining workers with adequate skills and by addressing labour market challenges, in particular with regards to women, young people and in work poverty, notably of workers with non-standard contracts.	Some progress	SDGs 8, 10
2024 CSR 4	**Some progress**	
Define an industrial and development strategy to reduce the territorial divide by streamlining current policy measures and by taking into account key infrastructure projects as well as strategic value chains.	Limited progress	SDGs 8, 9, 10, 11
Address remaining restrictions to competition, in particular in the retail sector, regulated professions and railways.	Some progress	SDG 9

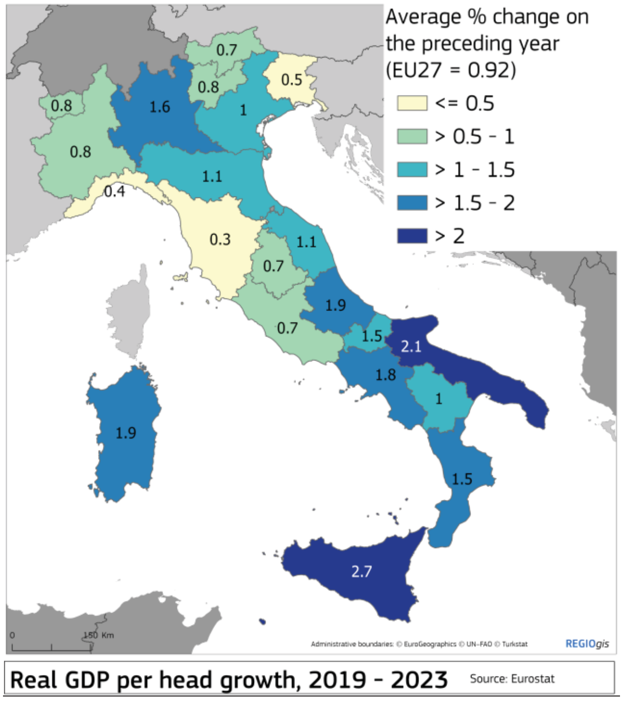
Source: European Commission

Divergence between Italian regions is heavily affected by competitiveness and demographic trends. The improvement and sustainability of local public services, the accessibility, availability and quality of public infrastructure, including for logistics, and tailored activities to promote innovation in strategic supply chains are key drivers that could help achieve a stable process of socio-economic catching-up in the Mezzogiorno.

While economic growth since the COVID-19 pandemic has shown convergence towards the EU average, Italy still registers significant disparities, internally and with the EU. Since 2021, Italy has experienced sustained growth in GDP per head. After having lost ground to the EU average in terms of real GDP per head over the three previous decades, Italy recovered swiftly over 2021-2022 followed by slower growth in 2023-2024. Moderate growth is expected in 2025-2026, providing a favourable environment to tackle regional disparities. Six regions – all in the Mezzogiorno [291]- were still below 75% of the EU average in terms of GDP per head in 2023 (Table A17.1). Calabria is the poorest region, with GDP per head below 60% of the EU average, closely followed by Sicilia, Campania and Puglia, which are just above 60%. These figures are the result of a long and steady deterioration in relative development levels, particularly affecting the Mezzogiorno.

Many regions in the South and Insular Italy have experienced post-pandemic growth which exceeds EU average. This can in part be attributed to the post-pandemic resilience measures put in place in Italy, which benefited the economies of regions most dependent on public interventions**.** Between 2019 and 2023, the average annual growth was strongest in the less developed regions, especially Sicilia and Puglia, while Toscana, Liguria and Friuli Venezia Giulia grew at a pace well below the EU average and many regions in the North and Centre did not keep up with the EU average pace (see Map A17.1). Looking at longer trends, the national performance in terms of real GDP per head growth (1.2%) over 2014-2023 is the result of moderate growth in the regions of northern Italy as well as some regions in Southern and Insular Italy[292] . Central Italian regions, which have historically represented an intermediate level of development between the poorer south and the richer north, have been on a divergent path, with average annual growth rates well below the national average. These trends show that central Italy is on a path that could lead to a situation of relative underdevelopment, also because of its demographic dynamics.

Map A17.1: **Real GDP per head growth (2019-2023)**



Source: Eurostat

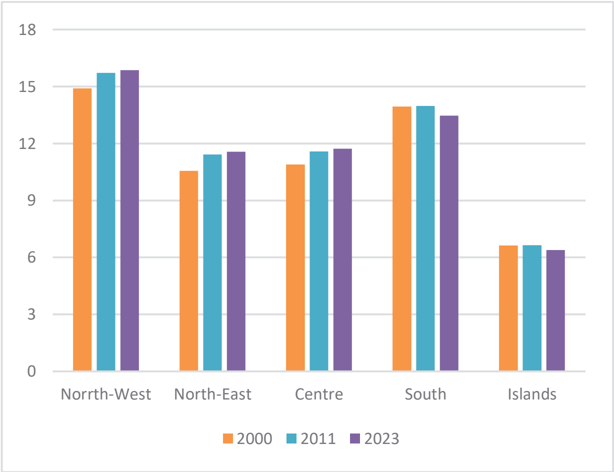
Demographic trends heavily affect the economic performance of the Italian regions and vice versa. The performance of northern Italian regions has been showing better GDP per head than the rest of the country, boosted in part by population trends. While the Italian population has declined overall, the best economically performing regions Lombardia, Emilia-Romagna, Trento and Bolzano are showing population growth. The demographic situation is particularly stark in the Mezzogiorno (Graph A17.1), where low birth rates are compounded by outward migration, particularly of young graduates. The South registered a decline in the working-age population of 6.2% for 2015-2023, compared to the Insular Italy -7.2%, Centre -3.2%, North-west -2.3%, and

[291]Mezzogiorno includes southern and insular regions and Abruzzo.

[292]Insular Italy ("Isole") is one of the five statistical NUTS 1 regions in Italy.

North-east -1.6%. The most affected regions are Sardegna, Calabria and Molise, where the decline is around 9%. The share of graduates moving out of the South equals 39.8% of total graduates, against 5.8% for the North and 21.4% for the Centre [293]. These trends mean that the country's productive base is shrinking (especially in the South), reducing its growth potential and exacerbating regional disparities.

Graph A17.1: **Population dynamics**



Unit: Million persons
Source: Eurostat

In the face of demographic trends, it is important to mobilise inactive people – in particular women and young people – in the less developed regions in the Mezzogiorno to improve economic performance. The unemployment rate for people aged 15-24 in 2024 was more than double in the Islands and the South (33-34%) North-West (14.9%) and North-East (11.3%). There also appears to be a significant skills and education gap affecting the younger component of the labour force in the less developed regions. Reducing early school-leaving in these regions and providing skills in line with labour market needs could bring more young people into the labour market. Female labour market participation remains low in South (39.4%) and Insular Italy (41.6%). This is in part explained by limited access to childcare services. Authorised places and educational services for children up to 2 years of age exceed the EU target of 33% in almost all regions of central and northern Italy, while in the Mezzogiorno they are generally below (except for Sardegna) [294]. The availability of services is the lowest in Campania (13.2% of children aged 0-2) and in Sicilia (13.9%), which are also among the regions with the lowest female employment rates in Italy and in the EU. Improving access to childcare services remains key to making full use of the labour force potential in these regions.

The competitiveness of the Italian regions is low relative to other EU Member States. Only Lombardia slightly exceeds the EU average of the EU Regional Competitiveness Index [295] and its innovation sub-index. The other Centre-North regions and the entire Mezzogiorno are below and far below the EU average, respectively. These differences mainly reflect gaps in higher education, lifelong learning and labour market efficiency and innovation (see the sub-components of the index). Small to medium-sized enterprises, throughout the country – which tend to be small and include a very high share of micro-businesses – score low on innovation when compared to their Swedish, French, Dutch and German counterparts [296].

The differences in educational attainment and skills as well as in sectoral specialisation are significant factors behind the productivity gaps between Italian regions. The share of employment in high-tech sectors is above the EU average only in Lombardia and Lazio, while it is about 25% lower in most other central-northern regions, and less than half in most of southern and insular Italy, reflecting overall an imbalanced production structure in high technologies. The situation appears even more unfavourable when looking at human resources in science and technology as a percentage of total employment, where all regions are below the EU average, although with smaller regional differences. At national level, the ratio of business enterprise R&D expenditure (BERD) to GDP is below 60% of the EU average at 0.8% of GDP. Only Piemonte and Emilia-Romagna are slightly

[293] ISTAT, 2023

[294] ISTAT special report (October 2024) available at: https://www.istat.it/wp-content/uploads/2024/10/Report-Completo_I-servizi-educativi-per-linfanzia-in-Italia_16_10_24-1.pdf.

[295] 2022 Regional Competitiveness Index 2.0, available at: https://ec.europa.eu/regional_policy/assets/regional-competitiveness/index.html#/.

[296] JRC Industrial Innovation Scoreboard.

Table A17.1:**Selection of indicators at regional level in Italy**

	GDP per head (PPS)	Real GDP growth	Real GDP per head growth	Productivity - GDP per person employed (PPS)	Productivity - GDP per hour worked (PPS)	Real productivity growth (per hour worked)	R&D expenditure	Employment in high-technology sectors	Population with high educational attainment	Population growth	Natural population change	Net migration	Female employment rate 20-64	Household income per capita (PPS)
	Index EU-27 = 100	Average annual % change	Average annual % change	Index EU-27 = 100	Index EU-27 = 100	Average annual % change	% of GDP	% of total employment	% of population aged 25-64	Average annual change per 1000 residents	Average annual change per 1000 residents	Average annual net crude migration rate (%)	% of women 20-64	Index, EU27 = 100
	2023	2014-2023	2014-2023	2023	2022	2013-2022	2022	2024	2024	2014-2023	2014-2023	2014-2023	2024	2022
European Union (27 MS)	100	1.7	1.6	100	100	0.9	2.3	5.2	36.1	1.7	-1.5	3.2	70.8	100
Italy	98	1.0	1.2	107	99	0.3	1.4	4.3	22.3	-1.8	-3.8	2.0	57.4	104
Nord-Ovest (North-West)	122	1.1	1.2	122	111	0.3	1.4	5.3	23.2	-0.9	-4.3	3.4	66.9	122
Nord-Est (North-East)	116	1.1	1.1	113	105	0.5	1.6	3.4	23.2	-0.4	-3.7	3.3	68.2	117
Centro (IT) (Center)	105	0.6	0.7	107	100	-0.1	1.6	5.7	26.0	-1.8	-4.3	2.6	63.8	108
Sud (South)	65	0.8	1.3	87	82	0.3	1.0	3.0	19.3	-4.3	-2.8	-1.4	39.4	80
Isole (Insular)	65	0.7	1.2	88	82	-0.1	0.9	2.3	18.1	-4.3	-3.5	-0.8	41.6	82
Abruzzo	85	0.6	1.0	94	87	0.1	1.1	3.1	23.8	-4.1	-5.0	0.8	56.1	93
Basilicata	75	1.1	1.9	91	95	1.2	0.6	2.1	20.2	-7.4	-5.1	-2.2	46.2	82
Calabria	58	0.2	0.9	82	77	0.3	0.6	1.8	20.1	-5.6	-3.2	-2.5	35.8	77
Campania	63	0.9	1.3	88	83	0.4	1.3	3.9	18.7	-3.7	-1.6	-2.1	35.0	76
Emilia-Romagna	118	1.1	1.0	115	106	0.6	2.0	3.6	24.9	0.1	-4.5	4.6	68.0	122
Friuli-Venezia Giulia	103	0.6	0.9	109	104	0.8	1.5	3.2	24.1	-2.5	-5.9	3.4	68.7	112
Lazio	114	0.6	0.5	114	105	-0.3	1.9	8.3	28.3	-0.9	-3.1	2.3	60.1	108
Liguria	104	0.2	0.7	110	106	0.1	1.5	2.9	23.8	-4.2	-8.5	4.3	64.2	113
Lombardia	134	1.4	1.3	129	117	0.4	1.2	6.2	23.9	0.9	-2.9	3.8	67.1	126
Marche	90	0.7	1.1	95	90	-0.1	1.0	2.1	24.2	-4.3	-5.3	1.0	66.2	104
Molise	73	0.7	1.5	91	84	0.1	0.7	1.9	23.1	-7.8	-6.5	-1.3	50.7	88
Piemonte	100	0.6	1.0	108	98	0.2	2.1	3.8	21.2	-3.6	-6.0	2.4	67.1	114
Provincia Autonoma di Bolzano/Bozen	163	1.4	1.0	136	121	0.5	0.8	2.2	19.1	4.3	1.1	3.1	74.0	141
Provincia Autonoma di Trento	126	1.0	0.9	121	117	0.7	1.5	3.9	23.7	1.2	-1.6	2.8	70.8	114
Puglia	64	1.0	1.5	83	78	0.2	0.9	2.6	18.0	-3.7	-3.1	-0.6	40.5	81
Sardegna	72	0.7	1.2	87	80	-0.1	0.9	2.1	19.0	-4.7	-5.1	0.4	53.8	89
Sicilia	62	0.7	1.2	89	83	-0.1	0.9	2.4	17.8	-4.2	-2.9	-1.2	37.7	79
Toscana	103	0.7	0.9	106	100	0.2	1.5	3.7	23.3	-1.7	-5.5	3.9	68.3	110
Umbria	83	0.3	0.7	90	85	-0.4	0.9	3.5	25.6	-4.0	-5.7	1.6	66.3	103
Valle d'Aosta/Vallée d'Aoste	126	-0.1	0.3	119	114	-0.3	0.5	0.0	21.4	-4.6	-4.8	0.2	73.5	111
Veneto	111	1.1	1.2	108	100	0.4	1.3	3.4	21.7	-1.1	-3.2	2.1	67.3	111

Source: Eurostat and JRC

above the EU average, while the Mezzogiorno shows values of a few tenths of a point, and Basilicata, Calabria and Sardegna are close to zero (see Annex 3). In addition, the tertiary education attainment rate for 25-34 year-olds in Italy (31.6%), which was well below the EU average of 44.2% in 2024, varies significantly across regions. The regions with a shrinking working-age population and lagging level of tertiary education are mainly in the South, but some are also in the Centre and North. These factors point to the country having: i) a reduced capacity, especially its less developed regions, to capture growth trends in dynamic and advanced sectors; and ii) poor access to international value chains of the industrial ecosystems.

The specialisation of Mezzogiorno in some industrial sectors shows prospects for growth. Some industrial supply chains in the Mezzogiorno are characterised by high structural growth potential and high value added, as their advanced technological content attracts external (including foreign) investments and fuels innovation. Other industrial sectors (see Annex 7) are strategically important and highly relevant as regards economic and social challenges connected to climate change or are of crucial importance in the decarbonisation of the economy while guaranteeing high labour intensity (such as the automotive sector). The industrial matrix of the Mezzogiorno identifies the production areas with high transformation potential, in the following order: i) agroindustry (1.53), ii) naval shipbuilding (1.28), iii) aerospace (1.10), iv) construction (1.05) and v) automotive (1.04) [297]. The area's specialisations are substantially driven by Campania and Puglia, which host almost all the industries.

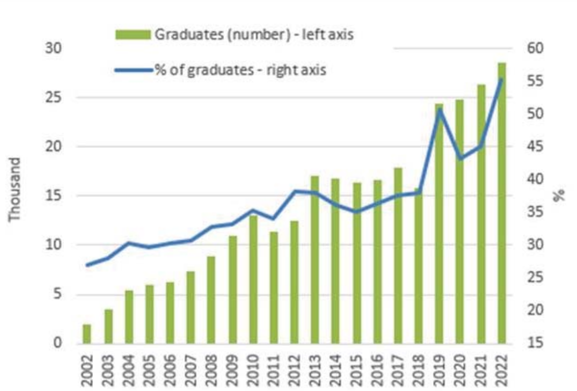
The potential availability of a specialised workforce and the widespread presence of underused technical faculties can become competitive factors for the Mezzogiorno. In the last 20 years, the share of graduates aged 25-34 leaving the Mezzogiorno regions has increased from 18% to 58% (Graph A17.2), highlighting the need to put in place policies to retain these resources in the South. In the context of an overall increase of enrolments in Italian universities between 2016 and 2022 [298], significant variations occur: in the North-West enrolments grew by about 25%, but they decreased in the universities of the South and Insular Italy. The enrolment of students in universities depends on

[297] The indexes express the ratio between the southern share and the national share of employees in each supply chain (SVIMEZ, 2024)

[298] Agenzia Nazionale di Valutazione del sistema Universitario e della Ricerca, report 2023.

the territories' economic, socio-cultural, infrastructural and quantity/quality of service characteristics. Promoting sectoral specialisation at territorial level and increasing the cooperation between universities and businesses would help to reduce the number of students leaving Mezzogiorno regions to study elsewhere instead of opting for universities in these regions.

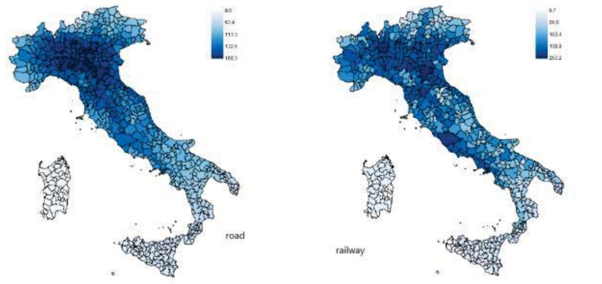
Graph A17.2: **Youth migration from Mezzogiorno to Centre-North**



Source: SVIMEZ (2024)

Territorial competitiveness in the Mezzogiorno is significantly affected by structural deficiencies in accessibility, availability, and quality of public infrastructure. The infrastructural gaps between the Mezzogiorno and the rest of Italy remain large. Infrastructure endowment in the Centre-North approaches or exceeds EU levels, providing the essential preconditions for economic development and growth, whereas most of the Mezzogiorno remains far behind. Accessibility to transport networks is lower in the Mezzogiorno than in the rest of Italy (Map A17.2). Basilicata, Molise, Abruzzo, Calabria and Sicilia are the regions with the highest share of the population that has a lower level of access to railway stations (Istat 2023).

Map A17.2: **Accessibility indices based on connection times**



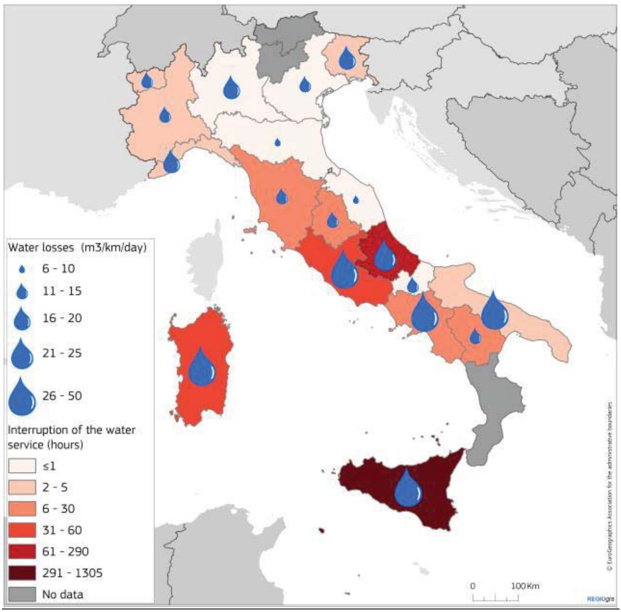
Italy = 100. Ref years 2019 and 2020
Road accessibility - left
Railway accessibility – right
Source: Banca d'Italia (2021)

Southern Italy is strategically positioned as a logistics platform in the Mediterranean. The widespread presence of port facilities located on the routes that connect to Northern Africa and the Suez Canal, in a context of increasing maritime transport costs and emissions containment policies, makes structural interventions necessary to reduce cost fluctuations along the main global supply chains. The Mezzogiorno is ideally positioned to provide strategic services to place manufacturing phases along global value chains: research, development and design, marketing and distribution as well as integrated freight transhipment services and process activities. The processes of regionalisation of value chains could imply a significant change in the way in which multinational companies organise the production and distribution of goods and services, with the expansion of the market for intermodal and combined road-rail and road-sea transport to the ports of Southern Italy, along the main rail intermodal corridors and along the Tyrrhenian and Adriatic coastal maritime intermodal corridors. The development of ports and port areas requires modernisation measures. Therefore, the multimodal hubs, railway terminals, logistics platforms, ports and port areas would need to be transformed into a network whose nodes also provide storage, distribution and supply centres of alternative fuels for road tractors as well as for ships, identifying a specific role for the Mezzogiorno in regional supply chains.

The poor delivery of public services heavily affects the Mezzogiorno's territorial attractiveness. The quality of public services in the fields of waste, water, local transport, education (see Annex 12), healthcare (see

Annex 14), social care (see Annex 11), electricity provision etc. tend to be lower in the Mezzogiorno than in the rest of Italy. This is regardless of whether these services are provided by local or national administrations. The quality of water infrastructure and water services is lower in most southern and insular regions, with higher levels of water losses, than in the north (see Map A17.3).

Map A17.3: **Technical quality of water services, 2023**

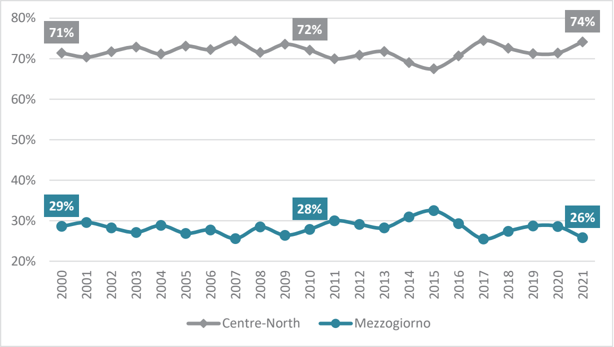


Unit: Water losses in m^3/km/day
Source: ARERA, Annual report 2024

Access to healthcare in rural areas shows significant regional differences. The proportion of the population living within a 10-minute drive of the nearest health centre ranges from 10.7% in the mountainous region of Valle d'Aosta to 42.7% in Lombardia. Noticeably, seven regions are below 20%, mostly with mountainous territories, including the Mezzogiorno regions of Sardegna, Calabria and Basilicata, where difficult accessibility is combined with less favourable socio-economic conditions in general.

In the less developed regions, the interplay of resource availability, regional economic factors and the capacity and organisation of the administrations affects public service delivery and infrastructure development. While the Mezzogiorno counts for more than a third of the Italian population, public investment spending in these regions, including that of national public companies such as railways (RFI), highways (ANAS) and electricity distribution (TERNA) operators and the investments from EU funds) over the past 20 years has always been below 30% and dropped to 26% in 2021 (Graph A17.3). Given the limited fiscal capacities of most regions, particularly in the Mezzogiorno, investments in new infrastructure and services typically tend to be deterred by the cost of maintenance and management of existing infrastructures.

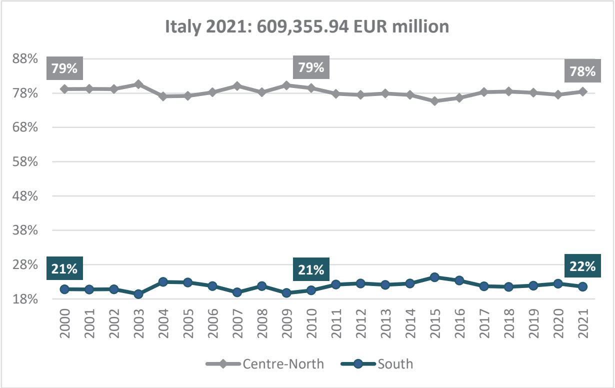
Graph A17.3: **Capital expenditure in Centre-North and Mezzogiorno**



***Unit:** % of total expenditure in Italy*
Source: Elaboration based on Conti Pubblici Territoriali

Local governments in the less developed regions often have limited capacity to deliver essential services effectively and equitably. Administrations in Mezzogiorno regions tend to have fewer resources than elsewhere, which results in more challenges related to ageing infrastructure, delayed maintenance, and an inability to modernise public services. Limited revenue constrains the ability of local governments to invest in public projects that could stimulate economic growth and improve the quality of life for residents (Graph A17.4). In addition, many public services rely partly on tariffs or user fees to cover operational costs. In lower-income areas, residents have less capacity to pay high tariffs, leading to affordability constraints and creating a barrier to cost recovery and reinvestment in essential infrastructure which cannot be overcome without extraordinary budget transfers. In the Mezzogiorno, local governments have lower administrative capacity, poor coordination and inefficiencies that also limit their capacity to attract investment. In addition, the organisation of public service providers influences the quality and reach of services.

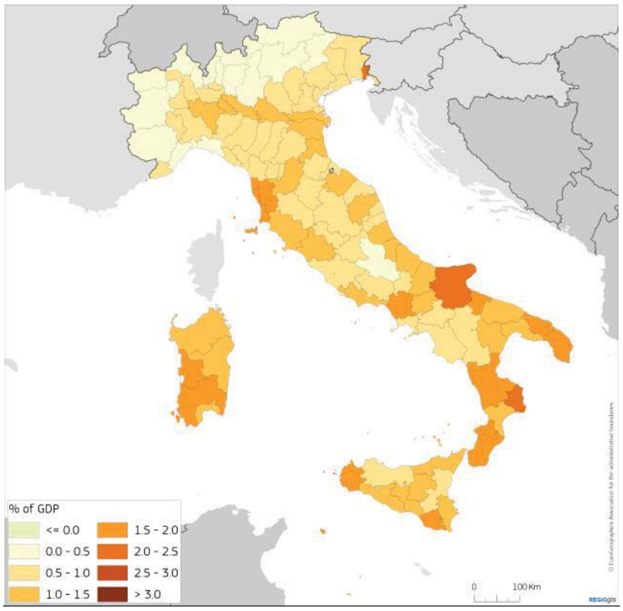
Graph A17.4: **Revenues of regional and local public sector**



Source: Elaboration based on Conti Pubblici Territoriali

Almost all Italian regions show a high level of climate-related vulnerability, but Mezzogiorno regions are confronted with a risk of higher costs from climate change than the rest of the country (Map A17.4). With an increased frequency and intensity of weather-related disasters (see Annex 9) such as extreme temperatures, storms, inland and coastal flooding, droughts and wildfires, the Mezzogiorno regions are frequently hit by severe events. The limited economic resources available to regional and local administrations constrain the capacity of these regions to carry out investments to increase resilience and mitigate climate-related risks.

Map A17.4: **Costs of climate-related vulnerability**



Additional economic costs of a 2°C global warming scenario by 2050 compared to the present-day baseline.
Source: 9th Cohesion Report (JRC data)