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**2020 European Semester: Assessment of progress on structural reforms, prevention and
correction of macroeconomic imbalances, and results of in-depth reviews under
Regulation (EU) No 1176/2011**

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EXECUTIVE SUMMARY

Facing a weak macroeconomic outlook and the challenge of ensuring sustainability, lifting productivity and potential growth is key to reducing Italy's public debt ratio and unwinding its macroeconomic imbalances. Implementing ambitious structural reforms and prudent fiscal policies, and well-targeting investments would support Italy's digital and environmental transformation, ensuring sustainable growth. As a matter of priority, a revived reform momentum should ensure sound public finances, more effective public administration and justice, a more efficient education system and labour market, a friendlier business environment and a more resilient banking sector ⁽¹⁾.

Economic activity in Italy remains weak, despite a gradually improving labour market. After real GDP growth of 0.8% in 2018, GDP expanded by 0.2% in 2019 and is expected to grow by 0.3% and 0.6% in 2020 and 2021. Domestic demand remains subdued, as real disposable income remains below pre-crisis levels and savings have risen. However, the new minimum income scheme introduced in 2019 and the sizeable drop in interest rates are expected to support household spending. Despite showing signs of recovery in 2019, public investment remains below pre-crisis levels. Sluggish productivity growth is still hindering Italy's economic recovery. A number of downside risks persist, especially concerning the international trading context and domestic stability. While the employment rate remains well below the EU average, particularly for women and young people, it continued to increase in 2019, driven by permanent contracts especially in the North. The unemployment rate declined to 9.8% in Q3-2019 from 10.3% a year earlier. However, wide gaps in employment rates remain between the country's regions.

⁽¹⁾ This report assesses Italy's economy in light of the European Commission's Annual Sustainable Growth Strategy, published on 17 December 2019. In this document, the Commission sets out a new strategy on how to address not only the short-term economic challenges but also the economy's longer-term challenges. This new economic agenda of competitive sustainability rests on four dimensions: environmental sustainability, productivity gains, fairness, and macroeconomic stability.

Italy has made some progress in addressing the 2019 country-specific recommendations⁽²⁾.

There has been *substantial* progress in:

fighting tax evasion, including by strengthening the compulsory use of electronic payments.

There has been *some* progress in:

i) ensuring that active labour market and social policies are effectively integrated and reach out to vulnerable groups; ii) focusing investment-related economic policy on research and innovation and the quality of infrastructure; iii) making the public administration more effective; iv) fostering bank balance sheet restructuring; v) improving non-bank financing for smaller and innovative firms.

There has been *limited* progress in:

i) shifting taxation away from labour, reducing tax expenditure and reforming the cadastral system; ii) tackling undeclared work; iii) supporting women's participation in the labour market, through a comprehensive strategy; iv) improving educational outcomes, also through adequate and targeted investment, and fostering upskilling; v) reducing the length of civil trials, by enforcing and streamlining procedural rules; and vi) improving the effectiveness of the fight against corruption, by reforming procedural rules to reduce the length of criminal trials.

There has been *no* progress in:

i) reducing the share of old-age pensions in public spending and creating space for other social and growth-enhancing spending; and ii) addressing restrictions to competition, including through a new annual competition law.

The Social Scoreboard supporting the European Pillar of Social Rights points to employment and social challenges. Labour market conditions remain difficult. The unemployment rate is still high and employment and activity rates remain low, especially for women. Young people and the long-term

⁽²⁾ Information on the level of progress and actions taken to address the policy advice in each respective subpart of a country-specific recommendation is presented in the overview table in annex.

unemployed also face particular difficulties. The share of temporary contracts rose in past years, but job creation in 2019 was mainly driven by permanent contracts. Weak labour market conditions also impact social outcomes. While the risk of poverty and social exclusion is declining, income inequality increased in 2018. In-work poverty has been steadily rising and stabilised at high levels in 2018. Access to services such as childcare and healthcare is close to the EU average. However, it varies widely across regions.

Regarding the Europe 2020 strategy, Italy has already reached its targets on greenhouse gas emissions reduction, renewable energy, energy efficiency, early school leaving and tertiary education. Limited progress has been made in meeting the targets on the employment rate, R&D investment and poverty and social exclusion.

Italy is making progress in achieving the United Nations' Sustainable Development Goals (SDG). As confirmed by the progress in reaching its Europe 2020 targets (annex A), Italy achieved significant results in climate mitigation (SDG 13). By contrast, achieving SDG 4 (quality of education) will need further efforts in all related areas: basic education, tertiary education and adult learning ⁽³⁾.

The main findings of the in-depth review and the related policy challenges are as follows:

Italy's public debt remains an important source of vulnerability for the economy. Italy's debt-to-GDP ratio reached 134.8% in 2018 and the Commission forecasts that it will further rise to 136.2% in 2019, 136.8% in 2020 and 137.4% in 2021, amid persistently weak nominal growth and a deteriorating primary balance. The Commission's debt sustainability analysis points to high risks in the medium and long term, due to the high level of debt and ageing costs. The recent pension reform will generate further costs up to 2028 and, if extended beyond its trial period, could

further erode potential growth and debt sustainability. In the short term, sustainability risks appear limited, also thanks to historically low sovereign yields since September 2019, but the need to rollover sizeable amounts of debt, at around 20% of GDP per year, still exposes Italy's public finances to sudden rises in financial markets' risk aversion. High debt-servicing costs also reduce the fiscal space to implement growth-enhancing and countercyclical policies.

Productivity growth has been sluggish despite measures to support it. The productivity gap between Italy and the EU continues to widen. In 2018, labour productivity declined by 0.3%, while in the euro area it grew by 0.5%. This is the result of declining labour productivity in southern regions and in services, as well as slower productivity growth in manufacturing compared to the euro area average. The effectiveness of recent measures to raise productivity growth, including incentives to invest and innovate, has been limited by delays in implementation, policy uncertainty and lack of a comprehensive strategy. More broadly, barriers to investment continue to constrain productivity dynamics and thus growth prospects, in turn hampering the reduction of the public debt-to-GDP ratio. Moreover, the weight of the informal economy in key economic sectors has a negative impact on their productivity.

The unemployment rate remains high, although declining, and policies to raise labour market participation are yet to be fully implemented. Slow economic growth, low average educational attainment, skill mismatches, and low activity rates, especially among women, limit employment growth. Youth unemployment remains extremely high. Moreover, the high share of involuntary part-time workers and discouraged workers suggests that labour market conditions remain weak. Strengthening active labour market policies is key for labour market reforms and the minimum income scheme to succeed. However, policies to increase people's skills and actively integrate jobless people in the labour market should be further developed

The banking sector became more resilient, but pockets of vulnerability remain. Italian banks continued to make progress in reducing non-performing loans, but the total stock is still high compared to euro area peers, especially for less

⁽³⁾ Within the scope of its legal basis, the European Semester can help drive national economic and employment policies towards the achievement of the United Nations Sustainable Development Goals (SDGs) by monitoring progress and ensuring closer coordination of national efforts. The present report contains reinforced analysis and monitoring of the SDGs. A new annex (Annex E) presents a statistical assessment of trends in relation to SDGs in Italy during the past 5 years, based on Eurostat's EU SDG indicator set.

significant institutions. Following the recent fall in sovereign bonds yields, pressure on the capital and funding of Italian banks has subsided. However, bank exposure to domestic sovereign bonds remains high, therefore increasing the risk of it feeding back and spilling over to the real economy. The reform of the large cooperative banks has not yet been fully implemented, whereas the reform of small mutual banks has broadly been completed. The reform of the insolvency framework was adopted and is expected to be implemented by August 2020. Access to bank financing can be challenging, especially for smaller firms. Non-bank finance remains underdeveloped, in particular for small and innovative firms.

A sustained budgetary-neutral public investment stimulus would substantially improve output and result in small but positive cross-border spillovers. A simulation with the Commission's QUEST model suggests that an investment programme would have a sizeable effect on real GDP, improve its external position and lower its public debt ratio. However, the potential output effects are greatly dependent on the extent to which public investment is efficient.

Other key structural issues analysed in this report, which point to particular challenges for Italy are:

The taxation of labour remains high and tax compliance low. Italy's tax burden on labour is still among the highest in the EU, while value-added taxes are under-exploited, because of the large use of reduced rates. The 2020 budget reduced tax expenditures and the tax wedge on labour. A shift of the tax burden onto property and a revision of outdated cadastral values to bring them closer to market values have not taken place. Several measures have been enacted in recent years to encourage tax compliance, but tax evasion remains very high, especially in specific sectors.

Challenges remain in the labour market. Employment growth continues, though at a slower pace. The increase in the number of employees more than compensated for the decrease in the number of self-employed, while the shift from fixed-term to permanent contracts accelerated. The gender employment gap is among the highest in the EU and shows no sign of improving. Labour market slack and undeclared work remain serious concerns. In this context, real wages growth

remains close to zero. Collective bargaining at firm or local level continues to play only a limited role, while legislative initiatives on statutory minimum wages are under discussion. Active labour market policies continue to be implemented in the context of the new minimum income scheme, although at a relatively slow pace. Participation in adult learning is very limited, especially for low-skilled and underemployed workers, holding back firms' competitiveness and productivity growth.

Education is a key challenge, especially in southern Italy, hindering the quality of skills.

Italy has a much higher rate of early-school leavers and low achievers compared to the EU average, especially in the South. Shortages of secondary education teachers remain a challenge, as does attracting, selecting and motivating them. Compared to the EU average, the percentage of people having completed higher education remains low and the number of scientific/technical graduates is still insufficient. Higher education is underfinanced and understaffed. Despite better employability rates, vocational-oriented higher education is limited in scope. Shortages in basic and advanced digital skills are a serious concern. Measures to enhance vocational training are slowly being implemented. A comprehensive approach to upskilling, reskilling and adult learning is lacking.

Social policies remain poorly integrated with other policies, including active labour market policies.

While declining, the risk of poverty remains above the EU average, including for children and people with a migrant background. In-work poverty is also a challenge, especially for temporary workers. The southern regions and urban areas are the most affected. Limited access to quality social services increases the risk of poverty. Access to affordable and adequate housing remains a challenge, while the quality of the health services varies greatly across regions. In 2019, the citizenship income replaced the previous income support scheme to fight poverty, but more needs to be done to bring people to work. More efforts are needed to provide childcare and long-term care and promote equal opportunities and work-life balance. The lack of these affects women's participation in the labour market and the broad demographic trends, in a context of low birth rates and a reduced net migration rate.

Productivity growth does not show signs of improving, despite positive investment trends.

In the last two decades, Italy's labour productivity has stagnated, especially due to the poor performance of the services sector. Trends greatly differ depending on geographical area and firm size, particularly in manufacturing. A recovery of fixed investment could support productivity in the future. In this regard, higher levels of firms' digitisation, investments in research and innovation, a more efficient public sector and adequate skills are key. A comprehensive strategy to support productivity and investment is missing. Measures remain fragmented and temporary, not taking sufficient account of sectoral and geographical aspects.

The business environment is improving, but strengthening Italy's public administration, justice system and anti-corruption framework remains a challenge.

The digitisation of public services is progressing. Further efforts are needed to improve public employment, especially at management level. Weak administrative capacity is diminishing the public administration's ability to invest and carry out policy or enforcement tasks that affect businesses such as market surveillance. In this regard, a comprehensive strategy to strengthen it is missing. Inefficiencies in public procurement also remain often unaddressed. Despite recent improvements, the length of civil trials remains among the highest in the EU. Recent reforms are starting to bear fruit and an enabling law to streamline the civil procedure is under discussion. However, to reduce trial length, there is still ample room to ensure more efficient management of cases and limit unfounded appeals. The anti-corruption framework was strengthened recently, also through the anti-corruption law of January 2019. However, it needs to be completed. Indeed, no regulation sanctions conflict of interest for elected public officials, embezzlement in the private sector remains only partly criminalised, and provisions against lobbying do not apply to members of government and parliament. Moreover, the low efficiency of criminal justice in appeals continues preventing prosecuting corruption effectively. A reform of the criminal procedure and appeal system is still pending.

Compliance with single market rules and the removal of barriers to competition would benefit several sectors, particularly services.

Services are most affected by low enforcement of single market rules, with negative consequences for individuals and firms. They are also over-regulated, especially the retail sector, regulated professions and the collaborative economy. The lack of competitive processes to manage public services and limited authorisations for using public goods affects the quality and cost of services provided. The implementation of the 2015 Competition Law is delayed, and no new initiatives to address barriers to competition or improve sectoral regulation have been announced.

The regional divide remains large and is widening.

In the last decade, public spending decreased in the southern regions. The recent possibility for local governments to spend their surpluses without prior authorisation is having positive effects in municipalities with budgetary surpluses. Efforts to reduce the gap in private investment have been modest, especially for research and innovation where national policies actually widened the gap. Large disparities also remain in the quality of governance, the level of labour productivity and competitiveness. In this context, the high unemployment in the South leads to low and high skilled individuals migrating, worsening the local brain drain.

Sustainability-related reforms and investment represent an opportunity for Italy.

Italy performs above the EU average for resource productivity and investment in the circular economy. It is on track to reach its 2020 climate and energy targets, although more efforts are needed for longer-term goals. Implementing planned policies as laid out in the national energy and climate plan will be needed to reach the 2030 target for greenhouse gas emissions not covered by the EU emissions trading system. Transport emissions have increased strongly over the last five years and constitutes a key challenge for reaching the 2030 target. On the other hand, air quality, sustainable mobility, climate adaptation, prevention of hydrogeological and seismic risks, and water and waste management remain challenges.. Investing in environmental sustainability could be an opportunity for growth and high-skilled employment in the South.

The Commission's proposal for a **Just Transition Mechanism** under the next multi-annual financial framework for 2021-2027 includes a Just

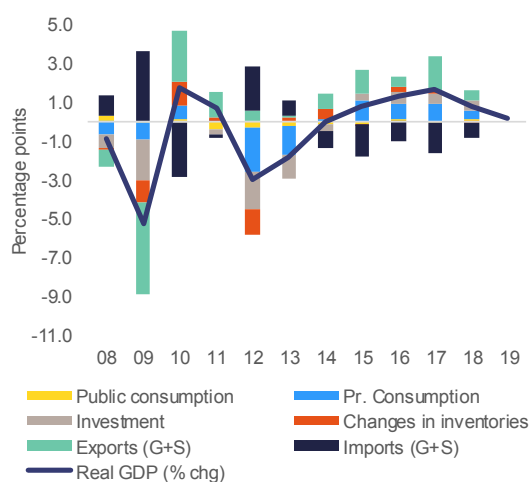
Transition Fund, a dedicated scheme under InvestEU, and a new government loan facility with the EIB. It is designed to ensure that the transition towards EU climate neutrality is fair and could help the most affected regions in Italy to address the social and economic consequences. Key priorities for support by the Just Transition Fund, set up as part of the Just Transition Mechanism, are identified in Annex D, building on the analysis of the transition challenges outlined in this report.

1. ECONOMIC SITUATION AND OUTLOOK

Real GDP growth, prospects and risks

Output growth has been feeble, as the economy remains stuck in low gear. The Italian economy has been showing few signs of rebounding from its slowdown in 2018, when positive annual average GDP growth was exclusively due to a relatively strong carryover from the previous year. Economic activity slowed further in 2019, especially in the manufacturing sector, where firms trimmed inventories on a massive scale (Graph 1.1). This allowed firms to maintain their export activity, while reducing industrial output in view of lingering trade conflicts and related uncertainties over demand. The weakness in the manufacturing sector has also started spreading to the tertiary sector. Based on quarterly outturn data, real GDP grew by 0.2% in 2019 and is expected to expand by 0.3% and 0.6% in 2020 and 2021 respectively (European Commission, 2020).

Graph 1.1: Real GDP growth and components



Source: Eurostat

A modest pick-up in domestic demand is set to support output growth in the near term. In 2018, household consumption slowed down, in view of an economy at the margin of stagnation. The stagnating real disposable income weighs on consumer spending, which remained subdued in 2019⁽⁴⁾. In addition, households increased their precautionary savings amid weakening consumer

confidence. The impact of the slowing economy on the labour market and thus aggregate incomes is likely to be felt only with a lag. However, the new social benefits introduced in 2019 and targeted at low-income groups⁽⁵⁾, who tend to have a relatively large propensity to consume, are expected to lend some support to household spending. In addition, the sizeable drop in interest rates since September 2019 is likely to free up household resources, by reducing the servicing costs of mortgages and consumer loans, and hence to increase private consumption.

Firms' profit margins have been falling, but favourable financing conditions are lending support to business investment. Since the beginning of 2018, gross value added in the industrial sector has been shrinking and profitability in the corporate sector declining, hence affecting firms' self-financing capacity. Gross fixed capital formation, at 18.1% of GDP in Q3-2019, is still markedly below both the latest peak of 2007 (22%) and the EU average (20.6%). While spending on equipment is almost back to 2007 levels, investment in construction has only recently bottomed out. The share of intangible assets, albeit still low by EU standards, had increased to 2.9% of GDP by 2015 but has stagnated since then. The recovery of private investment is forecast to slow down sizeably, on the back of uncertain demand prospects. By contrast, public investment picked up in 2019, after 9 years of decline, and is expected to support aggregate capital spending.

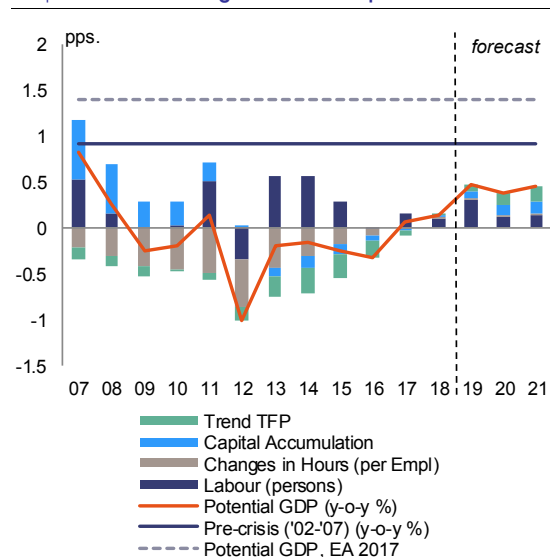
Weak productivity growth, albeit varied across sectors, constrains economic expansion. Labour productivity (real gross value added per hour worked) has been declining since Q2-2018, on the back of weak growth in gross value added. However, labour productivity differs across sectors, with manufacturing and some parts of the service sector registering a noticeable rise in real output per hour worked. Overall, the productivity gap between Italy and the rest of the EU remains pronounced and is widening. Labour productivity in Italy rose on average by 0.5% per year between 2010 and 2018, compared with an EU average of 1.3%.

⁽⁴⁾ Spending on some consumer items, in particular food, clothing and transport, declined in the first half of 2019 compared to the first half of 2018.

⁽⁵⁾ The new minimum income scheme (*Reddito di cittadinanza*) was introduced in April 2019 (see also Section 4.3).

Potential growth is estimated to have picked up moderately in 2019. Potential output declined between 2009 and 2016 due to the negative contributions from labour and total factor productivity (TFP). Supported by rising labour input, growth in potential output is estimated to have turned slightly positive in 2017 and is projected at 0.5% in 2019-2021 (Graph 1.2), sizeably below the EU average (1.6%). Trend TFP growth is estimated to have resumed in 2018 and begun making a positive contribution (Graph 1.2).

Graph 1.2: Potential growth and components



Source: European Commission.

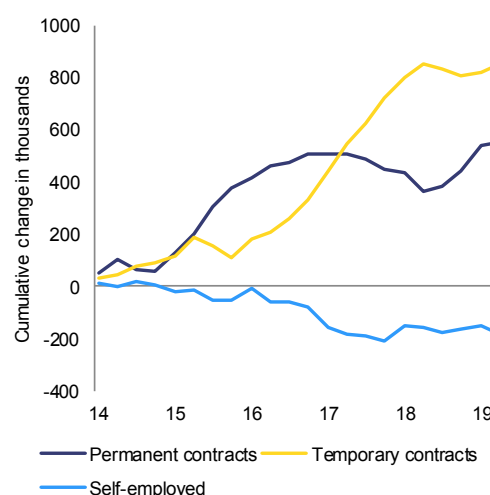
The balance of risks to the growth outlook remains skewed to the downside. As a large exporter, Italy is particularly exposed to the global economy. The latter remains prone to further policy-related shocks caused by, among other factors, trade conflicts, as well as structural shifts in the global manufacturing sector. Also, concerns about future fiscal policy might dent confidence and partly reverse the recent sovereign yield compression. On the upside, easing trade tensions and stronger-than-expected pick-up in global growth would benefit investment and exports.

Labour market

In the first 9 months of 2019, employment grew despite an almost stagnating economy. Between Q3-2018 and Q3-2019, headcount employment grew by 0.6%, driven by the rise of permanent

employees (Graph 1.3).⁽⁶⁾ By contrast, the level of self-employed declined in the same period, while temporary employment remained broadly constant. Employment has been increasing since end-2013, and the employment rate rose to 63.6% in Q3-2019, while the unemployment rate fell to 9.8%, despite a slight drop in the labour force. The average duration of unemployment increased to 27 months, and the share of long-term unemployment over total unemployment rose to 59%, well above the EU average (43.5%). Youth unemployment is slowly falling (28.3% in Q3-2019) but remains one of the highest in the EU, as does the number of young people not in employment, education or training (19.2% in 2018).

Graph 1.3: Labour market developments



Source: Istat.

Employment growth has been concentrated in labour-intensive sectors with low value-added. Most of the 151,200 additional headcount employment registered between Q3-2018 and Q3-2019 was generated in the service sector, mostly administrative and support services, household care and repair, and personal care, and in northern regions. As jobs tend to be created mostly in relatively less productive sectors, employment shifts tend to have a negative impact on aggregate productivity and average wages.

⁽⁶⁾ The growth in permanent positions is also driven by the fact that more temporary posts are being turned into permanent posts because of recent legislative changes (*Dignity Decree*), see also Section 4.3.

Stagnating labour productivity bodes ill for future employment growth. Gross value added in the manufacturing sector has been declining since early 2018, implying a contraction of labour productivity, while the drop in productivity in the services sector was less pronounced. In addition, the number of hours authorised under the Italian short time working scheme (*Cassa Integrazione Guadagni*) ⁽⁷⁾ has increased since the end of 2018, potentially leading to future reductions in employment in the industrial sector.

Slack in the labour market remains considerable. Hours worked and employment (expressed in full-time equivalents) are still below the 2007 levels. The increase in total hours worked in the first three quarters of 2019 (0.5%) was largely driven by the growth in additional positions. Since 2010, part-time work has been an important driver of job creation. In the first three quarters of 2019, part-time work increased on average by 2.5% compared to the same period of 2018, while the number of full-time positions remained broadly unchanged. Moreover, involuntary part-time remains widespread, and the pool of discouraged workers is around three million people. The increase in involuntary part-time and temporary employment has been particularly marked in the South.

Wages, prices and costs

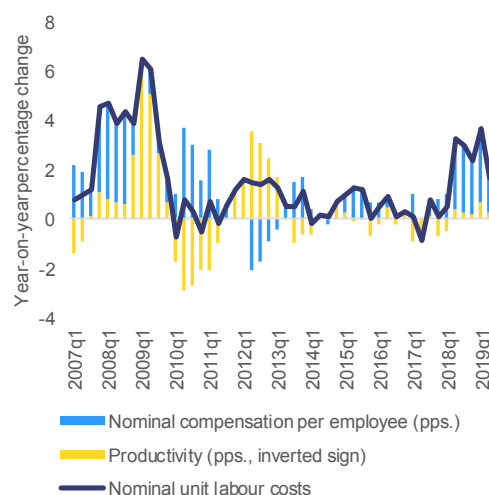
Wages continue to grow at a moderate pace. In 2019, hourly negotiated wages grew by 1.0% on average, driven by increases in the public sector (1.8%). By contrast wages in the private sector grew by 0.8%, where contract renewals are still pending for around 29.4% of employees) ⁽⁸⁾. In the fourth quarter of 2019, nominal compensation per employee increased by 0.7% year-on-year, and real compensation by 0.5%.

⁽⁷⁾ The *Cassa Integrazione Guadagni* (CIG) supplements wages for employees affected by temporary layoffs (who are not considered unemployed), or under a forced reduction of working hours. The recent increase is driven by the extraordinary CIG component (*Cassa Integrazione Guadagni Straordinaria*), which is activated in case of business crises and restructuring.

⁽⁸⁾ In December 2019, along with a slowdown in the pace of growth of negotiated wages, the share of employees with negotiations ongoing on the renewal of national sectoral collective contracts stood at 46%. It has been on average 16 months since national contracts, for which renewal negotiations are still pending, expired.

Growth in unit labour costs slightly accelerated in 2018. With the beginning of the slowdown in the manufacturing sector, aggregate unit labour costs started to rise. This is because labour productivity declined in 2018-2019 (-0.1%)(Graph 1.4) and labour costs increased, due to the moderately increasing nominal wage growth and the end of the exemption from social contributions of a rising share of labour contracts ⁽⁹⁾. Wage growth is broadly in line with what could be expected based on productivity developments, prices and the unemployment rate.

Graph 1.4: Wages, labour costs and productivity



Source: Istat.

Moderate domestic demand and subdued wage growth suggest only a gradual rise in core inflation. Consumer price inflation (harmonised index of consumer prices - HICP) slowed down to 0.6% in 2019, from 1.2% in 2018. HICP inflation is expected to increase to 1.0% by 2021. Annual HICP core inflation (i.e. excluding unprocessed food and energy) stood at 0.6% in 2019 and is set to gradually pick up, in line with moderate wage growth and the recovery of profit margins. The growth rate of the GDP deflator, on a downward trend since 2010 due to subdued demand and only moderate growth in unit labour costs, is projected to have fallen to 0.6% in 2019 but is forecast to rise to 1.1% by 2021.

⁽⁹⁾ The Jobs Act labour market reform adopted in end-2014 included temporary incentives for companies that hired permanent workers on new, less-protected terms in the form of a three-year exemption from social contributions.

Inequality and poverty risk

Income inequality is among the highest in the EU. The Gini coefficient (of equalised disposable income), already one of the highest in the EU, rose further in 2018, indicating a more uneven distribution of incomes. The tax-and-benefit system, albeit among the least effective in the EU, is mitigating the unequal distribution of market incomes but largely to the benefit of pensioners. The large weight of pensions in social expenditure is reflected in lower income inequality among the elderly. In 2018, the ratio of the total income received by the 20% of the population with the highest income to that received by the 20% with the lowest income stood at 6.55 for persons under 65 years old, but only at 4.86 for persons aged 65 or above.

The risk of poverty is declining, but in-work poverty remains high. Helped by solid employment growth in recent years, the risk of poverty and social exclusion declined to 27.3% in 2018, down from its peak of 30% in 2016. Yet, it remains sizeably above the EU average (21.7%) and above the level registered in 2007 (26%), while regional disparities loom large. By contrast, the rate for those in work who are at-risk of poverty has trended upwards since 2010 and reached 12.3% in 2018, almost 3 percentage points above the EU average. Key reasons are that, despite an improving overall labour market situation, the share of (involuntary) part-time employment has increased, and wage growth has remained subdued. As a result, real gross disposable income was almost 10% lower in 2018 than in 2007 ⁽¹⁰⁾.

Financial developments

Government bond yields have fallen sharply on the back of declining sovereign risk premiums. Currently, yields for Italian sovereign bonds are well below the peak levels observed in 2018. Political uncertainty has gradually abated, financial tensions eased and market conditions improved. This was supported by both the ECB's return to a more expansionary monetary policy stance ⁽¹¹⁾ and

the Italian government's decisions to make adjustments to their fiscal targets. The sovereign risk premium on Italian government securities, as measured by credit default swaps (CDS), has declined but is still higher than at the beginning of 2018 (Bank of Italy, 2019a) ⁽¹²⁾. Vulnerabilities remain as regards the debt rollover risks. The ten-year sovereign bond yield dropped from 2.7% at the beginning of 2019 to below 1% end-August but has again risen above 1.3% by mid-January 2020. The spread vis-à-vis German bonds narrowed by almost 100 basis points over the same period but is still wider than the one for Spanish or Portuguese bonds. The yields on Italian sovereign bonds with maturities of up to 2 years turned negative in summer 2019 and were close to zero in mid-January 2020. In 2019, rating agencies kept Italy's credit rating stable and the outlook unchanged. ⁽¹³⁾

The sharp decline in long-term interest rates buoyed share and corporate bond prices. Amid pronounced volatility on global stock markets due to the weakening global outlook and heightened trade policy risks, Italian equity prices gained substantially in 2019. The Milan benchmark stock exchange index increased by 30% between end-2018 and mid-January 2020, with the bank sub-index rising about 22%. Following the reduction in Italy's sovereign yields, the risk premiums on the two main Italian banking groups, as measured by CDS spreads, have declined and are only slightly higher than the average of the other large European banks. However, the price-to-book ratio of Italian listed banks, a standard metric to gauge their economic value, is below unity and lower than for other European banks', indicating subdued earnings expectations and elevated risk premiums demanded by investors.

Since early 2019, foreign investors have again increased their exposure to Italian assets. After the sharp sell-offs in the second half of 2018, non-

announcement made at the ECB Forum on Central Banking held in June 2019.

⁽¹²⁾ The gap between the premium on CDS contracts that offer protection against redenomination risk and that on contracts with no such provision (ISDA basis) has narrowed to levels only a little higher than in the first months of 2018, although the spread compared with other euro area countries remains sizeable (see Bank of Italy, 2019a, p. 24f.).

⁽¹³⁾ Moody's rates Italy at Baa3 (BBB-), one notch above investment grade, while Standard & Poor's left its rating unchanged at BBB on 25 October 2019, but kept its outlook at 'negative'.

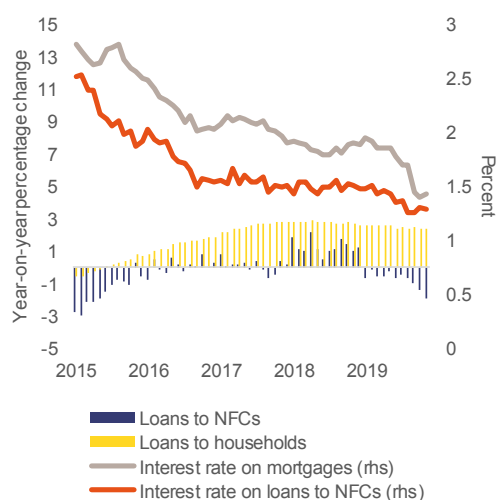
⁽¹⁰⁾ See also Section 4.3.2.

⁽¹¹⁾ In September 2019, the ECB Governing Council adopted a broad package of expansionary measures (ECB, 2019). The effect was already visible in summer due to the

resident investors raised their portfolio of Italian government securities by €90 billion until November 2019. In the same period, foreign holdings of bank bonds rose by €9.9 billion. Deposits placed with Italian banks remained stable, and private sector deposits rose by 7.6% in November 2019 compared to the same month of 2018. Since May 2018, deposits from domestic households and non-financial corporations have overall slightly increased.

Lending to households is rising at a moderate pace, while lending to firms is decreasing. The growth of lending to households slowed down slightly over 2019, but is still solid for house purchases and consumer credit. On average, loans to the non-financial corporate sector continue to decrease on an annual basis, albeit with large variations across risk classes (Graph 1.5).

Graph 1.5: **Lending volumes and interest rates, private sector**



(1) Interest rates for new businesses.

Source: Bank of Italy.

The contraction in lending is concentrated among the riskiest firms. By contrast, lending continues to grow for financially sound larger firms (Bank of Italy, 2019a). The cost of new loans, which has been decreasing in recent months, is at historically low levels. Bank lending surveys indicate an easing of credit conditions for firms and households. Meanwhile, credit demand from companies has declined, given firms' reduced need to finance fixed capital formation or inventories and working capital.

Financial conditions are stable but remain vulnerable to adverse cyclical conditions. Firms' profitability is weakening, but debt repayment capacity remains strong thanks to low interest rates and sounder balance sheet structures than in the past. Moreover, the high average residual maturity of Italy's public debt slows down the transmission of an increase in government yields to the average cost of debt. However, a marked economic slowdown and higher interest rates in light of high public debt could expose financial vulnerabilities.

External position

Italy's current account surplus rose in 2019 due to an increasing goods balance. Despite the slowdown in global trade, export growth remained stable and exporting firms broadly maintained market shares. By contrast, imports decelerated sharply, owing to a negative inventory cycle. As a result, the current account balance registered a surplus of 2.9% in the 12-month period up to November 2019 (Graph 1.6). Savings and investment decisions at sector level determine current account fluctuations. Since 2009, the corporate sector, traditionally in a debtor position, has acted as net lender to the economy and its net lending position widened to 0.8% of GDP in 2018. By contrast, households reduced net lending from 2.3% of GDP in 2014 to 1.3% of GDP in 2018.

The cyclically adjusted current account surplus is estimated at 2.7% of GDP in 2019. This surplus is estimated to be sufficient to keep Italy's net international investment position (NIIP) stable and bring it closer to the level that fundamentals suggest (in the absence of valuation effects) ⁽¹⁴⁾.

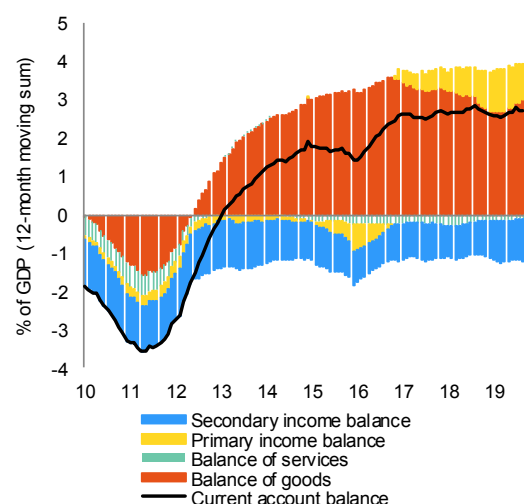
The NIIP is almost balanced. Since the low point in early 2014, Italy's NIIP improved by €351 billion. As a result, the stock of net external liabilities fell to €55.3 billion (or 3.1% of 2018 GDP) by Q3-2019. That positive trend was helped by persistent current account surpluses and supported by valuation effects.

In 2019, the TARGET2 balance improved. In December 2019, the Bank of Italy's net debtor position in the TARGET2 European payment

⁽¹⁴⁾ For details regarding the estimation of current accounts based on fundamentals, see Coutinho, L. et al. (2018).

system stood at €439 billion, down from the €493 billion in August 2018.

Graph 1.6: Current account balance



Source: Bank of Italy.

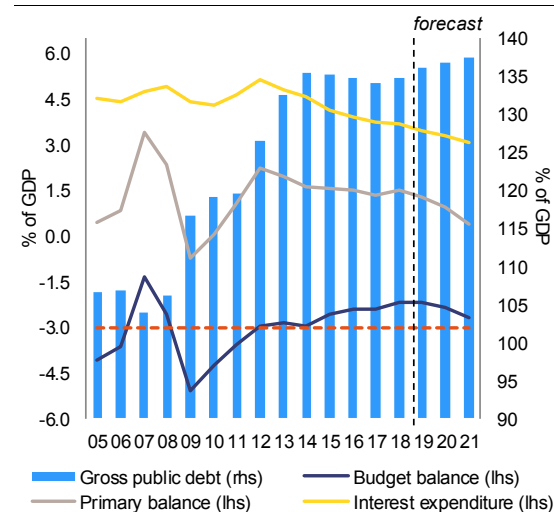
Public finances: public deficit and debt

The government headline deficit is expected to remain broadly stable in 2019 and 2020, leading to a worsening primary balance. After slightly declining from 2.4% of GDP in 2017 to 2.2% of GDP in 2018, the government deficit is projected to have remained stable in 2019 and to marginally increase to 2.3% of GDP in 2020, based on the Commission 2019 Autumn Forecast. The new minimum income and early retirement schemes will lead to a large increase of public spending over 2019-2020, which will only partially be compensated by measures on the revenue side. In 2021, under a no-policy-change assumption (in particular, not considering the increase in VAT legislated as a safeguard clause), the headline deficit is expected to increase to 2.7% of GDP. Given the projected reduction of interest spending (from 3.7% of GDP in 2018 to 3.1% of GDP in 2021), the government primary surplus is expected to decline from 1.5% of GDP in 2018 to 0.4% of GDP in 2021 (Graph 1.7). The structural balance is projected to improve from -2.4% of GDP in 2018 to -2.2% in 2019, and to deteriorate to -2.5% and -2.9% of GDP in 2020 and 2021 respectively.

The government debt-to-GDP ratio is expected to continue growing until 2021. In September 2019, Italy's national statistical institute (ISTAT)

and the Bank of Italy published revised data on the country's public debt, which implied an upward level shift over the recent years. Following the revision, Italy's debt-to-GDP ratio peaked at 135.4% in 2014, before declining to 134.1% in 2017 and rising again to 134.8% in 2018. The increase in 2018 was due to particularly low real GDP growth and a large stock-flow adjustment (0.7% of GDP), mainly related to fluctuations of the Treasury liquidity reserves and negative developments in the financial markets. The Commission 2019 Autumn Forecast expects Italy's debt-to-GDP ratio to further rise to 136.2% in 2019, 136.8% in 2020 and 137.5% in 2021, amid persistently weak nominal GDP growth and a deteriorating primary balance (see Section 4.1). Given the track record of recent years, those projections do not consider any proceeds from privatisations, although the government is targeting 0.2% of GDP per year over 2020-2022.

Graph 1.7: Public finances indicators



Source: European Commission

Italy is making progress in achieving the United Nations' Sustainable Development goals. Over the past 5 years, progress has been relevant in most of the UN Sustainable Development Goals (SDGs), particularly for SDGs 3 (good health and well-being), 7 (affordable and clean energy), 12 (responsible consumption and production) and 16 (peace, justice and strong institutions). By contrast, SDGs 1 (no poverty), 10 (reduce inequalities) and 15 (life on land) present a mixed picture, with some indexes worsening in the short run. Overall, Italy underperforms the EU average in most of the

indexes related to SDGs 4 (quality of education), 5 (gender equality), 8 (economic growth) while it performs better than average on SDGs 6 (clean water and sanitation), 11 (sustainable cities) and 12 (responsible consumption). In this context, Italy's initiative on well-being indicators (based on the well-being evaluation scale - WES) and on SDGs at national and regional level (ISTAT, 2019i) is a European best practice supported by civil society organisations (see ASVIS, 2019). In particular, the former indicators include, together with social indicators on poverty, inequality and gender balance, indicators on the level of CO2 emissions as well as a proxy for soil erosion. Regarding the latter, by summer 2020 Italy's regions and autonomous provinces are to have approved their own sustainable development strategies for 2017-2030.

Table 1.1: Key economic and financial indicators - Italy

	2004-07	2008-12	2013-16	2017	2018	forecast		
						2019	2020	2021
Real GDP (y-o-y)	1,4	-1,4	0,0	1,7	0,8	0,2	0,3	0,6
Potential growth (y-o-y)	0,8	-0,2	-0,2	0,1	0,1	0,5	0,4	0,5
Private consumption (y-o-y)	1,2	-1,1	0,2	1,5	0,8	.	.	.
Public consumption (y-o-y)	0,3	-0,4	-0,4	-0,2	0,4	.	.	.
Gross fixed capital formation (y-o-y)	1,8	-4,9	-0,8	3,3	3,2	.	.	.
Exports of goods and services (y-o-y)	5,9	-0,9	2,3	6,0	1,8	.	.	.
Imports of goods and services (y-o-y)	5,3	-2,9	2,7	6,2	3,0	.	.	.
Contribution to GDP growth:								
Domestic demand (y-o-y)	1,2	-1,7	-0,1	1,4	1,1	.	.	.
Inventories (y-o-y)	0,1	-0,2	0,2	0,2	-0,1	.	.	.
Net exports (y-o-y)	0,1	0,6	-0,1	0,1	-0,3	.	.	.
Contribution to potential GDP growth:								
Total Labour (hours) (y-o-y)	0,3	-0,4	0,1	0,1	0,1	0,3	0,1	0,2
Capital accumulation (y-o-y)	0,6	0,3	-0,1	0,0	0,0	0,1	0,1	0,1
Total factor productivity (y-o-y)	-0,1	-0,1	-0,2	-0,1	0,0	0,1	0,1	0,2
Output gap	1,8	-1,6	-3,7	-0,4	0,2	-0,2	-0,1	0,2
Unemployment rate	7,2	8,4	12,1	11,2	10,6	10,0	10,0	10,0
GDP deflator (y-o-y)	2,3	1,5	1,0	0,7	0,9	0,6	0,9	1,1
Harmonised index of consumer prices (HICP, y-o-y)	2,2	2,4	0,4	1,3	1,2	0,6	0,8	1,0
Nominal compensation per employee (y-o-y)	2,9	2,0	0,6	0,7	2,2	1,0	1,1	1,0
Labour productivity (real, person employed, y-o-y)	0,3	-1,0	-0,1	0,5	-0,1	.	.	.
Unit labour costs (ULC, whole economy, y-o-y)	2,3	2,4	0,5	-0,1	2,2	1,6	0,8	0,5
Real unit labour costs (y-o-y)	0,0	0,8	-0,6	-0,8	1,3	1,0	-0,2	-0,5
Real effective exchange rate (ULC, y-o-y)	1,5	-0,2	-0,5	0,1	2,2	-2,1	-1,8	-1,5
Real effective exchange rate (HICP, y-o-y)	0,1	-0,8	-0,4	0,7	1,8	-2,1	-1,5	-1,0
Net savings rate of households (net saving as percentage of net disposable income)	8,6	4,6	3,2	2,5	2,5	.	.	.
Private credit flow, consolidated (% of GDP)	9,9	2,9	-1,1	1,3	1,6	.	.	.
Private sector debt, consolidated (% of GDP)	99,1	120,9	116,7	108,8	107,0	.	.	.
of which household debt, consolidated (% of GDP)	34,1	42,4	42,2	40,8	40,8	.	.	.
of which non-financial corporate debt, consolidated (% of GDP)	65,0	78,5	74,5	68,0	66,2	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (2)	4,4	8,3	13,1	9,4	6,9	.	.	.
Corporations, net lending (+) or net borrowing (-) (% of GDP)	-0,2	0,6	2,7	3,6	3,5	3,8	3,9	4,3
Corporations, gross operating surplus (% of GDP)	23,0	21,3	21,1	22,1	21,4	21,0	20,8	20,9
Households, net lending (+) or net borrowing (-) (% of GDP)	2,4	0,9	1,9	1,5	1,2	1,3	1,3	1,2
Deflated house price index (y-o-y)	3,7	-1,6	-5,1	-2,3	-1,5	.	.	.
Residential investment (% of GDP)	5,5	5,4	4,3	4,1	4,2	.	.	.
Current account balance (% of GDP), balance of payments	-1,1	-2,2	1,8	2,7	2,6	2,9	2,9	2,9
Trade balance (% of GDP), balance of payments	-0,2	-0,7	2,9	3,0	2,5	.	.	.
Terms of trade of goods and services (y-o-y)	-1,4	-1,0	2,5	-1,5	-0,7	-0,1	0,2	-0,1
Capital account balance (% of GDP)	0,1	0,1	0,1	0,0	0,0	.	.	.
Net international investment position (% of GDP)	-17,9	-21,0	-18,9	-7,7	-4,7	.	.	.
NENDI - NIIP excluding non-defaultable instruments (% of GDP) (1)	-9,4	-22,4	-18,5	-6,1	-6,2	.	.	.
IIP liabilities excluding non-defaultable instruments (% of GDP) (1)	94,5	113,9	123,4	121,1	119,4	.	.	.
Export performance vs. advanced countries (% change over 5 years)	0,5	-12,2	-9,8	-1,6	-1,7	.	.	.
Export market share, goods and services (y-o-y)	-2,6	-5,8	0,3	-0,1	-0,7	0,6	-1,1	-1,0
Net FDI flows (% of GDP)	0,8	1,0	-0,1	0,0	0,0	.	.	.
General government balance (% of GDP)	-3,1	-3,7	-2,7	-2,4	-2,2	-2,2	-2,3	-2,7
Structural budget balance (% of GDP)	-4,5	-3,1	-0,8	-2,2	-2,4	-2,2	-2,5	-2,9
General government gross debt (% of GDP)	105,6	117,6	134,5	134,1	134,8	136,2	136,8	137,4
Tax-to-GDP ratio (%) (3)	40,1	41,9	43,1	42,1	42,0	42,2	42,4	42,0
Tax rate for a single person earning the average wage (%) (4)	28,6	30,2	31,1	31,1	31,3	.	.	.
Tax rate for a single person earning 50% of the average wage (%) (4)	19,3	21,7	18,1	15,9	16,2	.	.	.

(1) NIIP excluding direct investment and portfolio equity shares

(2) Domestic banking groups and stand-alone banks, EU and non-EU foreign-controlled subsidiaries and EU and non-EU foreign-controlled branches.

(3) The tax-to-GDP indicator includes imputed social contributions and hence differs from the tax-to-GDP indicator used in the section on taxation

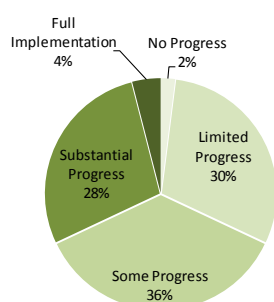
(4) Defined as the income tax on gross wage earnings plus the employee's social security contributions less universal cash benefits, expressed as a percentage of gross wage earnings

Source: Eurostat and ECB as of 4-2-2020, where available; European Commission for forecast figures (Winter forecast 2020 for real GDP and HICP, Autumn forecast 2019 otherwise)

2. PROGRESS WITH COUNTRY-SPECIFIC RECOMMENDATIONS

Since the start of the European Semester in 2011, 68% of all country-specific recommendations (CSRs) addressed to Italy have recorded at least 'some progress' ⁽¹⁵⁾. By contrast, 32% have recorded 'limited' or 'no progress' (Graph 2.1). The areas that registered the best performance include measures to improve the business environment and reform the labour market. Good performances have also been recorded in the banking sector and in improving the quality of Italy's fiscal governance.

Graph 2.1: Overall multiannual implementation of 2011-2019 CSRs to date



(1) The overall assessment of the country-specific recommendations related to fiscal policy exclude compliance with the Stability and Growth Pact.
 (2) 2011-2012: different CSR assessment categories.
 (3) The multiannual CSR assessment looks at the implementation since the CSRs were first adopted until the February 2020 Country report.

Source: European Commission

Concerning public finances and taxation, some progress was made to address the related CSRs. Overall, the budgetary process has been improved, including by introducing regular spending reviews. In recent years, several measures have been adopted to fight tax evasion, including the introduction of compulsory e-invoicing and e-transmission of receipts. Moreover, the 2020 budget has introduced several measures to tackle tax evasion from omitted invoicing, including by encouraging e-payments. On the other hand, repeated tax amnesties may have negatively

affected tax compliance. There has been some progress in reducing taxes on labour but none in shifting taxes to other revenue sources, as tax expenditures have been reviewed but not streamlined and the outdated cadastral system has not been reformed. Moreover, while past pension reforms helped improve the long-term sustainability of public finances, the share of old-age pensions in total expenditure is still set to rise mainly due to the early retirement scheme introduced in 2019.

As regards labour market and social policies, progress in carrying out reforms was limited. Five years after its adoption, the implementation of the 'Jobs Act' reform remains incomplete. Despite recent efforts to make active labour market policies more effective and reinforce public employment centres, performance varies widely among regions and integration and coordination with other social and educational policies remains weak. The employment rate of women remains sizeably below the EU average and family-related social policies still lack proper coordination. While some steps have been taken to facilitate access to childcare services through financial support to families, a comprehensive strategy that combines a more efficient tax system with access to care services and measures to reconcile career and family life is missing.

Some progress was registered in improving the business environment and investment conditions. Efforts to simplify administrative procedures continued, but the burden remains high overall. Some progress has also been recorded in increasing the effectiveness and digitisation of the public administration, but a reform of local public services and measures to tackle restrictions to competition are still pending. Public investment remains subdued in Italy, but the strengthened budgetary autonomy of local governments is showing positive signs, and more funds have been earmarked for public investment. Moreover, numerous measures have been introduced in recent years to support private investment, including with a focus on innovation and green expenditure. On the other hand, the investment capacity of the

⁽¹⁵⁾ For the assessment of other reforms implemented in the past, see Section 4 in particular.

public administration remains weak, R&D expenditure remains low and unequal across regions, and there is still scope for streamlining and stabilising the most efficient incentives. The assessment of this CSR does not take into account the contribution of the EU 2021-2027 cohesion policy funds ⁽¹⁶⁾.

There has been some progress in increasing the efficiency of civil justice and fighting corruption. Civil justice reforms have been passed in recent years, increasing the specialisation and digitalisation of courts, reinforcing alternative dispute resolution and introducing stricter admissibility rules for appeals. That notwithstanding, the time it takes to resolve civil and commercial litigious cases in Italy remains a challenge. Long disposition times for criminal trials also continue to raise concerns at the appeal level. Italy has recently improved its anti-corruption system, through, among other things, a framework to protect whistle-blowers, a stronger role for the National Anti-Corruption Authority and the anti-corruption law of January 2019, which stops the statute of limitations after a first-instance ruling. However, the low efficiency of the criminal justice keeps hindering the prosecution of corruption, in the absence of a needed reform of criminal procedure, especially to tackle the high number of cases at appeal courts.

Some progress has been made regarding banks' balance sheet repair and access to finance. This includes non-performing loans disposals through outright sales and securitisations supported by the government guarantees. The reform of large cooperative banks has not been fully implemented yet, unlike the reform of small mutual banks, which has essentially been concluded. The reform of the insolvency framework, finalised by the government in early 2019, will enter into force in August 2020. Although firms' financing remains predominantly bank-based, past measures to give firms greater access to capital markets are having some positive effects. The reintroduction of the allowance for corporate equity in the 2020 budget can help address corporate undercapitalisation. By

contrast, measures to improve the recourse to venture capital have not been implemented yet.

Overall, Italy has made some progress in addressing the 2019 country-specific recommendations⁽¹⁷⁾. Limited progress has been made in shifting the tax burden away from labour, as there was no reduction of the large tax expenditures in value added taxes nor a reform of the outdated cadastral values. No progress has been recorded in reducing the share of old-age pensions in public spending to create space for other social and growth-enhancing spending. Substantial progress has been made in fighting tax evasion, including by encouraging electronic payments. However, the magnitude of the challenge warrants a continuous reform effort. Limited progress has been made in tackling undeclared work, in putting forward a comprehensive strategy to support women's participation in the labour market and in fostering educational outcomes, upskilling and digital skills. Some progress has been made in improving the effectiveness of active labour market policies and their integration with social policies. Some progress has also been recorded in improving investment conditions, both for public and private investment, and in strengthening administrative capacity. There has been no progress on competition policies, as no new initiatives were put forward and backtracking is still being discussed. Limited progress has been made in reducing the length of civil trials at all instances by enforcing and streamlining procedural rules. Progress is also limited in improving the effectiveness of the fight against corruption by reforming procedural rules to reduce the length of criminal trials. Some progress has been made in fostering bank balance sheet restructuring, by improving efficiency and asset quality through non-performing loans disposals, and diversifying funding. There has also been some progress in improving non-bank financing for smaller and innovative firms.

Upon request by a Member State, the Commission can provide tailor-made expertise via the Structural Reform Support Programme to help design and implement growth-

⁽¹⁶⁾ The regulatory framework underpinning the programming of the 2021-2027 EU cohesion policy funds has not yet been adopted by the co-legislators, pending inter alia an agreement on the multiannual financial framework (MFF).

⁽¹⁷⁾ Information on progress and action taken to address the advice in each respective subpart of a country-specific recommendation is presented in the overview table in Annex A. The overall assessment does not include an assessment of the Stability and Growth Pact compliance.

enhancing reforms. Since 2017, support has been provided to Italy for 36 projects. In 2019, several projects were delivered on the ground. The Commission, for example, provided an action plan for the accrual-based accounting reform in Italy's public administration and is now supporting its implementation. In 2018, the Commission supported the establishment of Zones of Economic Interest in the South. In 2019 the Commission further helped defining the governance structure of the three already-established zones as well as the

central government's oversight and monitoring. Work has also started on improving data collection and courts' organisation as regards insolvency and enforcement; strengthening the system of active labour market policies; developing a model to improve evaluation of VAT and excise policies; further improving national coordination of efforts to prevent corruption; and improving both central and local management of European Structural and Investment Funds.

Table 2.1: Assessment of 2019 CSR implementation (*)

Italy	Overall assessment of progress with 2019 CSRs: some progress
<p>CSR 1: 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. Shift taxation away from labour, including by reducing tax expenditure and reforming the outdated cadastral values. 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. 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. (MIP relevant)</p>	<p>Some progress</p> <ul style="list-style-type: none"> • Not assessed: The compliance assessment with the Stability and Growth Pact will be included in Spring when final data for 2019 will be available. • Limited progress in shifting taxation away from labour, in reducing tax expenditure and in reforming the cadastral system. • Substantial progress in fighting tax evasion, including by strengthening the compulsory use of electronic payments. • No progress in reducing the share of old pensions in public spending.
<p>CSR 2: Step up efforts to tackle undeclared work. Ensure that active labour market and social policies are effectively integrated and reach out notably to young people and vulnerable groups. Support women's participation in the labour market through a comprehensive strategy, including through access to quality childcare and long-term care. Improve educational outcomes, also through adequate and targeted investment, and foster upskilling, including by strengthening digital skills. (MIP relevant)</p>	<p>Limited progress</p> <ul style="list-style-type: none"> • Limited progress in stepping up efforts to tackle undeclared work • Some progress in ensuring that labour market and social policy are effectively integrated and reach out to vulnerable groups • Limited progress supporting women's participation in the labour market • Limited progress in improving educational outcomes and fostering upskilling, including by strengthening digital skills
<p>CSR 3: Focus investment-related economic policy on research and innovation, and the quality of infrastructure, taking into account regional disparities. Improve the effectiveness of public administration, including by investing in the skills of public employees, by accelerating digitalisation, and by increasing the efficiency and quality of local public services. Address restrictions to competition, particularly in the retail sector and in business services, also through a new annual competition law. (MIP relevant)</p>	<p>Some progress</p> <ul style="list-style-type: none"> • Some progress in focusing investment-related economic policy on research and innovation and quality of infrastructures • Some progress in improving the effectiveness of public administration including investing in skills, accelerating digitalisation and increasing the efficiency of local public services • No progress in addressing restrictions to competition
<p>CSR 4: Reduce the length of civil trials at all instances by enforcing and streamlining procedural rules, including those under consideration by the legislator. Improve the effectiveness of the fight against corruption by reforming procedural rules to reduce the length of criminal trials. (MIP relevant)</p>	<p>Limited progress</p> <ul style="list-style-type: none"> • Limited progress in reducing the lengths of civil trials • Limited progress in improving the effectiveness of the fight against corruption
<p>CSR 5: Foster bank balance sheet restructuring, in particular for small and medium-sized banks, by improving efficiency and asset quality, continuing the reduction of non-performing loans, and diversifying funding. Improve non-bank financing for smaller and innovative firms. (MIP relevant)</p>	<p>Some progress</p> <ul style="list-style-type: none"> • Some progress in fostering bank balance sheet restructuring • Some progress in improving non-bank financing for smaller and innovative firms

Source: European Commission

(*)The assessment of CSR 3 does not take into account the contribution of the EU 2021-2027 cohesion policy funds. The regulatory framework underpinning the programming of the 2021-2027 EU cohesion policy funds has not yet been adopted by the co-legislators, pending inter alia an agreement on the multiannual financial framework (MFF)

Box 2.1: EU funds and programmes to address structural challenges and foster growth and competitiveness in Italy

Italy is one of the countries benefiting most from EU support. The financial allocation from the EU cohesion policy funds ⁽¹⁾ for Italy amounts to €53.2 billion in the current Multiannual Financial Framework equivalent to around 0.4% of its GDP annually. As of the end of 2019, Italy lagged behind in its implementation of cohesion policy compared to the EU average: Italy allocated to specific projects some €42.2 billion (79% of the total allocation planned against 88% for the EU) and spent €17.2 billion (about 32.0% against 38% for the EU)⁽²⁾.

EU cohesion policy funding heavily supports structural challenges in Italy. The cohesion policy programmes for Italy have allocated €9.1 billion for smart growth, €9.5 billion for sustainable growth and sustainable transport and €14 billion for inclusive growth. In 2019 following a performance review⁽³⁾, €2.26 billion were made available for Italy. In addition, €782 million have to be reprogrammed by Italy within the priority areas listed above.

EU cohesion policy funding is contributing to major transformations of the Italian economy. EU cohesion policy funding together with the Connecting Europe Facility are supporting the development of key infrastructure within the TEN-T core network, with €1.8 billion and €1.6 billion respectively. By 2019, investments driven by the EU Funds had ensured broadband access for more than 15,700 additional households; 4,600 enterprises and 523 start-ups had also received support, generating 1,533 new jobs. For research and innovation, EU cohesion policy funds allocate €3.3 billion to support R&D, innovation in firms, and training for innovative skills. Around 5 million people participated in training initiatives and more than 1 million people found employment after 6 months. The Youth Guarantee and the Youth employment initiative supported 676,000 young people, and more than half of them are already in employment (ANPAL, 2019). EU funding has addressed poverty and social exclusion by strengthening the capacity of the social and employment services to accompany the process of active inclusion. The ESF has supported the participation in employment and social inclusion initiatives of more than 444,000 persons with migrant or foreign background or from minorities, and 107,600 persons with disabilities. EU funds helped to reduce greenhouse gas emissions by 48,253 tons of CO₂ and to reduce primary energy consumption for public buildings by 43,288,552 Kw/year. The funds also improved health services for more than 1.5 million persons. A good performance was also observed in the tourism industry and especially in the valorisation of natural heritage and cultural assets with an additional 962,818 visits per year and an increase in particular in non-Italian visitors, including in the “Mezzogiorno”.

EU funding helps to mobilise significant private investment. At the end of 2018, €3.5 billion⁽⁴⁾ from the European Regional Development Fund had been programmed for funding in the Italian operational programmes (regional and national). The amounts committed in the funding agreements totalled about €2.8 billion (80%) and €430 million (12%) were paid to the final recipients. Of the €2.8 billion committed, €1.1 billion are loans; €546 million guarantees and €351 million are equity.

Agricultural and fisheries funds and other EU programmes also help to address development needs. Together with the European Agricultural Fund for Rural Development (EAFRD) support, with €20.9 billion, and the European Maritime and Fisheries Fund (EMFF) support, with €979 million, Italy benefits from other EU programmes. Horizon 2020 provided €3.9 billion for R&D and innovation, including €703 million for SMEs.

EU funds already invest substantial amounts on actions in line with the Sustainable Development Goals (SDGs). In Italy, the European Structural and Investment Funds support 13 out the 17 SDGs and up to 95% of the expenditure is contributing to those.

⁽¹⁾ European Regional Development Fund, European Social Fund, Youth Employment Initiative.

⁽²⁾ <https://cohesiondata.ec.europa.eu/countries/IT>. Note: for the programs for which data were not reported by the regulatory deadline of 31.01.2020, the previously reported data were used.

⁽³⁾ The performance review is regulated by art 22 of the Regulation (EU) No 1303/2013

⁽⁴⁾ Member States' reporting on financial instruments based on Article 46 of Regulation No 1303/2013, cut-off date 31/01/2020.

3. OVERALL FINDINGS REGARDING IMBALANCES, RISKS AND ADJUSTMENT ISSUES

The 2020 Alert Mechanism Report concluded that a new in-depth review should be carried out for Italy to assess if imbalances are unwinding, persisting or aggravating, while taking stock of the corrective policies implemented. In February 2019, Italy was identified as having excessive imbalances (European Commission, 2019d). The identified imbalances and legacy issues relate to high public debt, low productivity growth, and high rate of unemployment and non-performing loans. This section summarises the findings of the Macroeconomic Imbalance Procedure in-depth review contained in various sections of this report ⁽¹⁸⁾.

Imbalances and their gravity

At 134.8% of GDP in 2018, high public debt remains an important source of vulnerability for the economy. In the medium and long term, the Commission's debt sustainability analysis ⁽¹⁹⁾ points to high risks, related to Italy's high level of debt and ageing costs. In the short term, given the current interest rate environment, sustainability risks are considered low. However, sizeable debt rollover needs (around 20% of GDP per year) expose Italy's public finances to sudden increases in financial market risk aversion. Furthermore, high debt-servicing costs reduce the fiscal space for growth-enhancing and countercyclical policies.

Subdued productivity growth, particularly in services and for smaller firms, limits competitiveness and potential growth. In 2018, GDP growth continued to be driven by increases in employment. Aggregate labour productivity continued to decline in 2018 (-0.3% versus +0.5% in EA19) and productivity growth is expected to remain subdued in 2019-2020. The decline in labour productivity in some Southern regions and in services contributed to the subdued aggregate evolution of productivity. On the other hand, productivity in manufacturing rose since 2000, but more slowly than in peer countries. TFP rose

slightly in 2018 (0.3 pps. versus 0.6% in the EA19), but is still lower than in 2000. Persistent structural barriers, including to investment, constrain Italy's productivity dynamics and growth, hampering in turn the reduction of the public debt-to-GDP ratio.

Employment continued to increase in 2019, but the unemployment rate remains high. Despite weak economic activity, employment growth continued in the first three quarters of 2019, when total headcount employment grew by 0.6 % compared to the same period of 2018. However, hours worked grew at a slower pace and were still below the 2007 levels. Unemployment dropped below 10 %, amid a shrinking labour force and persistently high inactivity rates. Youth unemployment also trended downwards but, at a rate of 28.3% in the third quarter of 2019, remained among the highest in the EU. Moreover, high shares of involuntary part-time and discouraged workers suggest a still large slack in the labour market.

Italian banks continued to make significant progress in reducing Non Performing Loans (NPLs), but the legacy stock remains high. The gross NPL ratio at system level declined from 8.4 % at end-2018 to 8.1 % in the second quarter of 2019. However, the legacy stock of bad loans and unlikely-to-pay exposures remains high compared to EU peers, especially for less significant banks. Following the easing of market tensions and the reduction in sovereign bond yields, Italian banks have recently reduced their exposure to domestic sovereign debt. However, they remain substantially exposed to their sovereign, implying a home bias and risk of feedback loops. Despite recent improvements in banks' balance sheets, lending to households rose only moderately, while lending to firms has come to a halt.

Simulations show that a stimulus to public investment would likely entail positive spillovers to the rest of the euro area. An increase in public investment, financed in a budget-neutral way (Box 3.1), is estimated to lift Italy's GDP sizeably, even when using a cautious assumption for the growth-enhancing impact of

⁽¹⁸⁾ Analyses relevant for the in-depth review can be found in the following sections: Public finances (Section 4.1); Financial sector (Section 4.2); Labour market (Section 4.3); and Investment (Section 4.4).

⁽¹⁹⁾ European Commission, Debt Sustainability Monitor 2019, forthcoming.

capital spending. Spillovers to other euro area Member States are non-negligible, at least in the first years after the initial investment stimulus.

Evolution, prospects and policy responses

Italy's debt-to-GDP ratio is projected to further rise under a no-policy change assumption. The ratio increased from 134.1% in 2017 to 134.8% in 2018 and is projected by the Commission 2019 Autumn Forecast to reach 137.4% in 2021, due to weak nominal GDP growth and lack of fiscal effort. Between May 2018 and July 2019, sovereign yields shifted upward, experiencing high peaks and strong volatility. Despite a substantial decline since August 2019, they remain sensitive to increases in financial market risk aversion. The pension provisions introduced in 2019 will cause additional costs up to 2028 and, if extended, they would worsen the medium-term debt sustainability. Furthermore, those measures could negatively affect potential growth. Several measures have been adopted to fight tax evasion, including by encouraging electronic payments.

Measures to boost productivity have been taken, but their impact is limited by policy uncertainty and the lack of a comprehensive strategy. In early 2019, Italy passed a new anti-corruption law, which could contribute to a more supportive business environment. On the other hand, further announced revisions to the public procurement code create uncertainty for investment planning. The impact of incentives to promote investment and innovation has had a positive effect, but streamlining and stabilisation could increase their efficiency. Funds for public investment have been increased, but the efficiency of the public sector remains low, notably in its capacity to invest. Better capital allocation, including through non-bank finance, could help to increase investment and productivity.

The implementation of policies to raise labour market participation remains incomplete. Activity rates, in particular of women and young people, are markedly below the EU average. A reform of active labour market policies was part of both the 2015 "Jobs Act" and the recently introduced minimum income scheme. In that context, steps have been taken to strengthen public employment services, including through staff reinforcements. However, the job placement

capacity remains weak. Moreover, measures to strengthen women's participation in the labour market remain insufficient.

Banks have continued to reduce NPLs and address sovereign risk. Besides improving their internal workout capacity, banks benefited from the prolongation in May 2019 of a state-guaranteed securitisation scheme for another 24 months. To shield their capital base from the impact of higher sovereign yields, banks have pursued a rebalancing of part of their sovereign bond portfolios to the held-to-collect category. Given the comparatively favourable conditions, the pace of balance sheet restructuring should be kept, in particular for less significant banks, in order to further strengthen financial stability and facilitate the provision of credit to the economy.

Overall assessment

Italy's imbalances are not expected to unwind in the near term, although the situation in the banking sector and in the labour market has improved. The public debt-to-GDP ratio rose in 2018 and is expected to further rise in the coming years due to low nominal GDP growth and lack of fiscal consolidation. The new social schemes introduced in 2019 will further weigh on public finances in 2020, and the pension provisions will worsen the public spending bias towards old-age pensions. On the other hand, progress has been made in fighting tax evasion and corruption. Productivity remains subdued, mainly due to the negative contribution of services. Public investment increased from a very low level, but more efforts are needed to raise administrative capacity. Investment is still hampered by an unstable policy setting. The unemployment rate continued to fall but remains high. Measures to increase labour market participation, in particular of women, are not yet complete but go in the right direction. The situation of banks has considerably improved, with a further reduction of NPLs. However, the stock of NPLs remains high, especially for small and medium banks, while firms' limited recourse to non-bank finance leaves them vulnerable to banking shocks. Overall, a sustained reform agenda accompanying the reduction of public debt, with an improvement of its composition (notably towards adequate investment) and structural reforms is crucial to

support a virtuous cycle for the unwinding of imbalances.

Box 3.1: Public investment and potential spillovers – The case of Italy

Following the 2019 Country specific recommendations on investment-related economic policy the European Commission QUEST ⁽¹⁾ model is applied to simulate the domestic and cross border impact of an investment stimulus of 1% of GDP sustained over 10 years. Public investment in Italy as a share of GDP has been almost continuously shrinking since 2010, implying a substantial investment gap (European Commission, 2018a). A sustained reversal of the previous declining trend is expected to support growth and imply positive spillovers on neighboring countries. The simulation assumes that additional investment is financed in a budgetary-neutral way, in this case through an increase in consumption taxes. The output elasticity with respect to the public capital stock for the central scenario is assumed to be 0.12, which roughly corresponds to the median estimate in the empirical literature. Two additional scenarios are considered, applying a higher (0.17) and lower output elasticity (0.07), thus reflecting a high-efficiency and a low-efficiency scenario (in 't Veld, 2016). Monetary policy is assumed to retain its accommodative stance at the zero lower bound (ZLB) for the first two years and gradually normalize afterwards.

A sustained public investment stimulus would create sizeable output effects in Italy and positive cross-border spillovers. Compared with a rise in public consumption or lower tax rates public investment spending tends to have a higher output multiplier. The output effect of the increase in public investment is sizeable, due to the longer-term impact of public investment on growth and the capital stock (Table 1). The fact that the additional investment is financed via a rise in consumption taxes weighs on private consumption and dampens the overall output effect. By contrast, the debt-to-GDP ratio declines throughout the simulation period due to the positive growth effect and the external position improves. A lower real interest rate (inflation in the euro area increases while nominal interest rates remain constant) and higher demand from Italy lead to positive spillovers to the rest of the euro area. At the ZLB, the ECB does not react to higher euro area wide inflation with an increase of the nominal interest rate. This implies that the real interest rate falls, inducing a rise in private demand.

Table 3.1a: Spillover effects of Italy implementing an investment programme over 10 years - Central scenario

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Italy										
Real GDP	0.4	0.3	0.3	0.4	0.6	0.7	0.8	1.0	1.1	1.2
Employment	0.2	0.1	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	-0.1
General government gross debt (% GDP)	-0.5	-0.6	-0.8	-0.9	-1.1	-1.4	-1.7	-2.1	-2.5	-2.9
Trade balance (% GDP)	0.1	0.0	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3
Rest of euro area										
Real GDP	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Note: Results in % or pps (trade balance and gross debt) from the baseline.

Source: European Commission.

The efficiency of public investment has a significant bearing on output effects. Compared to the central scenario, output effects differ widely, especially after the initial years of the investment stimulus. While additional public investment increases domestic real GDP by 0.6% by 2029 in the low-efficiency scenario compared to the baseline, real GDP is 1.7% higher in the high-efficiency scenario. This confirms the view that alongside the quantity of the public capital stock the quality of public infrastructure and the way in which a public investment programme is implemented is equally important (Buseti et al., 2019).

⁽¹⁾ For detailed information on the QUEST model and applications, see: http://ec.europa.eu/economy_finance/research/macroeconomic_models_en.htm.

Table 3.1: MIP Assessment Matrix

	Gravity of the challenge	Evolution and prospects	Policy response
Productivity and competitiveness	<p>Aggregate productivity growth has been dismal in last decades; total factor productivity (TFP) is some 5% below its 2000 level. Weak productivity growth constrains competitiveness, wage rises and potential growth which, together with a shrinking working population, hampers public debt ratio dynamics. Low investment, especially public (2.1% of GDP in 2018) and in innovation, a weak public sector, a non-supportive business environment, capital misallocation and a lack of high-skilled people contribute to weak productivity growth.</p>	<p>Labour productivity declined in 2018 (-0.3%) and is expected to remain subdued in 2019-2021, while TFP grew by +0.3%. Productivity growth is especially dismal in services and in some Southern regions. Private, and only more recently public, investment increased, but they are still below their pre-crisis level. After years of contained growth, ULC increased moderately in 2018 but it estimated to have moderated somewhat in 2019 and forecast to remain below the euro area this year and next. The trade balance surplus is forecast to remain close to 3% of GDP until 2021.</p>	<p>Public schemes supporting innovative investment had generally a positive effect, but remain temporary and still lack and in-depth assessment of their efficiency. Some reforms go in the direction of increasing the efficiency of the public administration and supporting the business environment, while others are still pending or missing, notably in competition and justice. Effective investments are needed to strengthen administrative capacity, human capital and innovation, as well as to reduce regional disparities.</p>
Public debt	<p>Italy's public debt ratio-to-GDP stood at 134.8% in 2018. It represents a major vulnerability for the Italian economy, as well as a potential source of negative spillovers to the euro area.</p> <p>The high debt servicing costs crowd out productive public expenditure and reduce the fiscal space to respond to economic shocks. The high rollover needs expose Italy to sudden increases in financial market risk aversion. The significant exposure of domestic banks to public debt implies the risk of negative spillovers to the banking sector and ultimately to financing conditions for firms and households.</p>	<p>The debt-to-GDP ratio is expected to have increased to 136.2% in 2019 and forecast to further rise in the coming years, reaching 137.4% in 2021. Sovereign yields increased significantly between May 2018 and July 2019, also due to uncertainties around the government fiscal policy. Although they recorded an historical low in September 2019, they remain particularly sensitive to financial market risk perceptions. Fiscal sustainability risks are high both in the medium and the long term, based on the Commission debt sustainability analysis.</p>	<p>Only a small fiscal consolidation effort was made in 2019 while a fiscal expansion is expected in 2020 and 2021, based on the Commission 2019 autumn forecast. Reducing uncertainty on fiscal plans for 2020 contributed to increase investors' confidence and reduce sovereign yields. Additional measures have been taken to fight tax evasion. Despite ambitious targets, there were no privatisation proceeds over 2017-2019. The new social schemes introduced in 2019 substantially increased government spending, with additional costs from 2020. The new pension provisions will also increase the public spending bias towards old-age pensions and risk hampering potential growth.</p>
Labour market participation and unemployment	<p>The unemployment rate doubled during the crisis, and the long-term unemployment rate steadily increased over the period for all age groups. The risk of labour market exclusion is particularly high for youngsters: the youth unemployment rate and the share of young people not in employment, education or training (NEET) are among the highest in the EU. The participation rate, particularly of women, is still very low despite recent increases.</p>	<p>The unemployment rate averaged 10.6 % in 2018 down from 12.7 % at the end of 2014 and is expected to have fallen below 10 % by the end of 2019. In 2020-2021, weak economic activity is likely to dampen jobs growth substantially, implying a stable unemployment rate about 10 %. Long-term and youth unemployment are slowly declining and the participation rate is increasing moderately.</p>	<p>The reform of active labour market policies and the strengthening of work-based learning could help to improve labour market matching and support the transition from education to work in the medium term. However, implementation is proving challenging. Measures to foster labour market participation are limited.</p>

(Continued on the next page)

Table (continued)

Banks' asset quality	<p>The gross non-performing loans (NPL) ratio came at still 8.1% in June 2019. The gross NPL ratio has more than halved since the peak level in Q-3 2015. However, and despite the substantial progress made, the legacy stock of bad loans (sofferenze) and of unlikely-to-pay exposures still remains high compared to EU peers and in particular for some of the less significant institutions. Bank credit to non-financial firms, especially smaller and innovative ones, is still subdued and limiting investment growth.</p>	<p>Besides existing structural vulnerabilities (in particular the slow judicial system), the current economic downturn could slow down the pace of reduction of NPLs going forward. Second-tier banks are also more challenged in resolving their NPLs.</p>	<p>The NPL disposal has been facilitated by the development of the secondary market for impaired assets besides public support for NPL disposal such as State-guaranteed securitisations. The bad loan securitisation scheme (GACS) was extended in May 2019 for another 24 months, which is expected to help banks to further decrease their stock of NPL.</p>
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Conclusions from the IDR analysis

- The public debt-to-GDP ratio remains very high, exposing public finances to changes in financial market risk aversion. Productivity growth has been weak for long, which has dampened potential GDP growth and the room for deleveraging. Unemployment, especially long-term, is still comparatively high even if it has declined somewhat. Banks' balance sheet repair has further progressed but the non-performing loans (NPL) ratio is still high.
- The government debt ratio is expected to further increase in 2020 and 2021 amid weak nominal GDP growth and a worsening primary balance. Productivity dynamics are weak, especially in services, and not closing the gap with the EU. The unemployment rate is forecast to stabilise around 10% this year and next. Despite the decline in the legacy NPL stock, vulnerabilities remain, in particular related to banks' exposure to the sovereign and to the state of medium and small banks.
- Overall, a clearer and more sustained reform agenda would be crucial for supporting a virtuous cycle in the unwinding of Italy's macroeconomic imbalances. Some policy measures, such as those on fighting tax evasion, boosting public investment and supporting childcare, go in the right direction, the implementation of reforms in some other areas, for instance ALMP, has been slow. Policies to boost productivity and innovation are continued but remain temporary and fragmented. In addition, the main measures introduced by the 2019 budget will further weigh on Italy's public finances in 2020.

(*) The first column summarises "gravity" issues, which aim at providing an order of magnitude of the level of imbalances. The second column reports findings concerning the "evolution and prospects" of imbalances. The third column reports recent and planned relevant measures. Findings are reported for each source of imbalance and adjustment issue. The final three paragraphs of the matrix summarise the overall challenges. In terms of their gravity, developments and prospects, policy response

Source: European Commission

4. REFORM PRIORITIES

4.1. PUBLIC FINANCES AND TAXATION

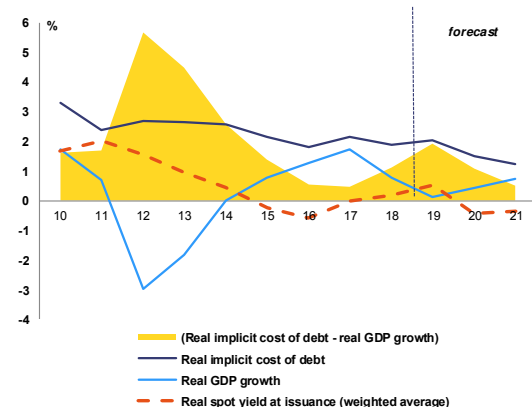
4.1.1. PUBLIC DEBT, DEBT SUSTAINABILITY ANALYSIS AND FISCAL RISKS

Weak nominal GDP growth and a worsening primary balance are expected to cause an increase in the government debt-to-GDP ratio. Based on the Commission 2019 Autumn Forecast, the government debt-to-GDP ratio is expected to have increased in 2019 by 1.4 percentage points. The real implicit cost of debt is set to have marginally increased due to an upward level shift in sovereign yields observed between May 2018 and July 2019, while real GDP growth has declined to close to zero. The positive and widening difference between the two indicators leads to a large and debt-increasing “snow-ball” effect. Furthermore, a lower GDP deflator is expected in 2019 and the government primary balance is projected to have declined as a share of GDP by 0.2 percentage points. In 2020 and 2021, the “snow-ball” effect, although still debt-increasing, is set to progressively shrink, thanks to recovering real GDP growth and a declining real implicit cost of debt. The GDP deflator is also projected to slightly recover. However, the primary balance is expected to decline more markedly as a share of GDP, by 0.3 and 0.6 percentage points in 2020 and 2021 respectively. Overall, Italy’s debt-to-GDP ratio is projected to increase by 0.6 percentage points in both 2020 and 2021.

Government sovereign yields have declined substantially compared to the end of 2018 but remain sensitive to sudden increases in financial market risk aversion. The large size of Italy’s public debt makes investors very sensitive to perceived risks, including the government’s fiscal policy and its stance towards European fiscal rules. After substantially increasing in May 2018 (from around 130 to 290 bps), the 10-year sovereign spread versus German bonds peaked at 320 bps in October and November 2018 during the discussions on Italy’s 2019 budget, before declining in January 2019 after the amendments to the budget law. Similarly, the spread widened again in May 2019 during the discussions on Italy’s stability programme, before declining in July thanks to the mid-year budget. Also in light of the fiscal policy announced by the incoming

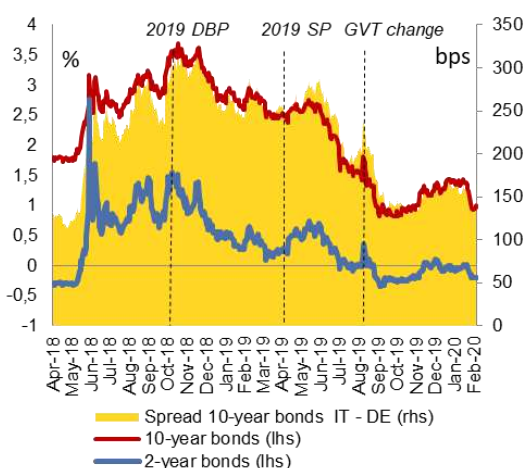
government, by September 2019, the spread returned to early 2018 levels and the yields on 10-year government bonds recorded an historical low level (0.8%), before increasing to around 1.0% by January 2020.

Graph 4.1.1: Drivers of the “snowball” effect on public debt



Source: European Commission

Graph 4.1.2: Italy's sovereign yields



Source: Bloomberg

The share of government securities held by foreign investors is recovering from the drop in 2018. In 2018, foreign investors divested part of their government securities, reducing their share of outstanding securities to 32.1% from 35.6% in 2017. However, starting from January 2019, their share progressively recovered, reaching 35.1% by October 2019. Conversely, Italian banks reduced their exposure only marginally (Section 4.2).

The Commission's debt sustainability analysis points to high risks in the medium and long term. The indicator for short-term developments (S0) points to low risks, mainly thanks to the financial-competitiveness indicators. However, the fiscal component of the short-term indicator is above the indicative threshold for high risk, also due to the high public debt and gross financing needs. In fact, in the short term, the sizeable rollover needs related to Italy's government debt, around 20% of GDP per year, expose its public finances to sudden increases in financial market risk aversion. In the medium term, the Commission's indicator (S1) points to high risks, as the high level of government debt would require a substantial fiscal effort to bring its ratio to 60% by 2034. The Commission's debt sustainability analysis confirms this finding (see Annex B). In the long term, the Commission's indicator (S2), although improved compared to the 2019 Country report (European Commission, 2019a), points to medium risks, in light of the fiscal effort required to stabilise the debt-to-GDP ratio, also taking into account the cost of ageing. A more comprehensive debt sustainability analysis, which also takes into account the vulnerabilities related to the high level of debt, points to high risks.

The provisions implemented in 2019 will further increase pension expenditure in the coming years. The 2019 budget and a following implementing decree broadened possibilities for early retirement, including through a new early retirement scheme ("Quota 100"). The scheme is currently accessible until 2021, and allows retiring at age 62 with 38 years of contributions. Overall, the government estimates that pension expenditure, which is already among the highest in the EU as a share of GDP (15.6% in 2018), will further increase as a consequence of the reform by 0.1% of GDP in 2019, 0.3% of GDP in 2020 and 0.4% of GDP in 2021 (MEF, 2019a). Updated projections from the Economic Policy Committee - Ageing Working Group suggest that the reform will cause additional costs also in the following years, amounting to 0.4% of GDP in 2022 and gradually declining to 0.1% of GDP per year by 2028. If extended beyond their trial period, the new pension measures would cause even higher and longer-lasting costs, worsening debt sustainability in the medium term. Furthermore, these measures could negatively affect labour supply and potential growth (see Section 4.3). The

2020 budget law confirmed the new pension measures and extended to 2020 the temporary early retirement schemes for women and for vulnerable workers ("APE sociale").

4.1.2. FISCAL FRAMEWORK AND COMPOSITION OF PUBLIC EXPENDITURE

Public investment and social expenditure are expected to increase over the coming years. Together with the recent pension provisions, the new minimum income scheme will increase social transfers in cash over the coming years. Although the time needed to process applications to the scheme led to savings in 2019 compared to the government's initial cost estimates, the full yearly costs of 0.3% of GDP will materialise from 2020. Based on the government's estimates, social transfers other than pensions will increase by 8% in 2019, 3.6% in 2020 and 1.3% in 2021. Public investment is also expected to progressively recover as a share of GDP, after a continuous decline over the past years (see Section 4.4). Interest spending is set to continue decreasing, as past government securities are rolled over in the current low-rate environment. However, the upward shift in Italy's sovereign risk premiums observed from May 2018 to September 2019 offsets part of the potential savings.

Yearly spending reviews help reducing expenditure growth, but improving spending-efficiency needs a medium-term approach. The government assessment of the first spending review conducted under the new budgetary framework for budgetary year 2018 concluded that the overall target of saving €1 billion had been reached. However, it also highlighted that ministries tended to reach such targets by cutting or postponing spending programmes and only partially through efficiency gains. Additional spending reviews have been carried out for budgetary years 2019 and 2020, but, as the saving targets were assigned to the ministries with a delay, the effects on the quality of public expenditure could be suboptimal. Furthermore, the spending reviews only affect the central government, while no equivalent process exists at the regional or local level despite accounting for around 30% of public expenditure.

Italy is quite advanced in reporting the environmental impact of its budget (*green budgeting*). Since 2000, Italy has been publishing an annex to its budgetary plans which details planned expenditure on environmental protection and on resource management (*“ecobilancio”*). Since 2010, a similar document (*“ecorendiconto”*) reports the budgetary execution of the same expenditure items. Furthermore, Italy’s budgetary documents include an annex reporting on recent trends and expected progress with respect to 12 indicators on fair and sustainable well-being. These indicators include poverty, inequality, gender balance and emissions of greenhouse gases. Additional yearly reports from the Finance Minister to the Parliament consider the evolution of these indicators in the light of the latest Budget Law. Finally, the Ministry of Environment is mandated to publish every year a ‘Catalogue of harmful and favourable subsidies to the environment’ and a report on the state of natural capital.

The reform of fiscal relations between the central, regional and local governments (*“fiscal federalism”*) has not been completed. The reform, launched in 2009 (Law 42/2009), aims at allocating resources to subnational governments based on objective criteria, while encouraging efficiency in public spending. Revenue-sharing systems would ensure full financing of the “essential levels of services” provided by subnational governments, based on “standard needs”. Dedicated funds would provide partial financing of the other functions, to which subnational authorities should also contribute with own taxes and through greater efficiency. However, the key parameters have not been defined yet for metropolitan cities, provinces and regional functions other than healthcare, and the completion of the reform has been systematically postponed and is currently planned for 2021.

In their current form, proposals for regional differentiated autonomy may have an impact on regional disparities. In 2017, three regions started negotiations with the central government to acquire additional competencies, as allowed by Italy’s Constitution following the 2001 reform. The negotiations led to two subsequent sets of draft agreements in 2018 and 2019. However, the corresponding financial arrangements might have implied higher costs for the central government or

fewer resources for the other regions in the medium term. The central government is currently envisaging adopting a framework law before continuing the negotiations. However, the draft law discussed with the regions in November 2019 does little to ensure the budget neutrality of the reform, including with respect to other regions, and does not set common criteria to grant additional autonomy. Moreover, any additional regional autonomy should not be considered before having set the standard financing of regions, as designed by the fiscal federalism reform.

4.1.3. TAXATION

Italy’s tax structure still weighs heavily on labour. Revenues from all the main tax categories are above the EU average as a share of GDP, resulting in a high tax-to-GDP ratio (41.8% in 2018, EU average at 39.2%). The high revenues from indirect taxes are driven by stamp taxes and the regional tax on productive activities, an Italy-specific tax which results in high yields from other taxes on production, while revenues from value-added tax (VAT) are rather low. Taxes on labour are particularly high, as confirmed by revenues above the EU average as a share of GDP (21.0% in 2018 against 19.6% in the EU), and by one of the highest implicit tax rates on labour in the EU (at 42.7% in 2018 against 36.2% in the EU). The tax wedge on labour is among the highest in the EU across income categories (Graph 4.1.3). For low-income earners, this is due to the relatively strong weight of social security contributions. At the same time, social security contributions are capped only at a high income level, ensuring an effective progressivity of the tax system.

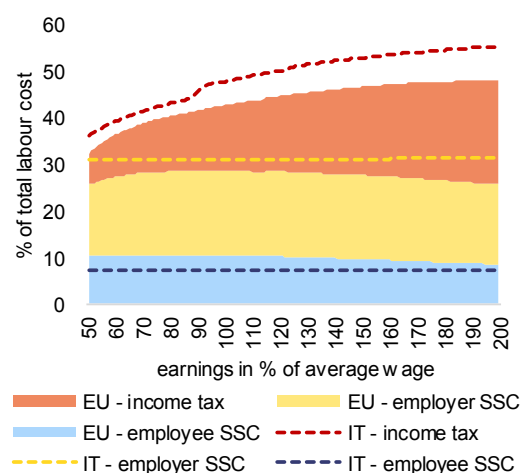
The value-added tax is underexploited due to the extended use of reduced rates. VAT revenues are comparatively low, at 6.2% of GDP in 2018 against an EU average of 7.1%. This is due to the high level of tax evasion (resulting in a VAT compliance gap of 23.8% in 2017, far above the EU arithmetic average of 11.2%) and to the extended use of reduced rates and exemptions (reflected in high rate and actionable exemption gaps, at 12.8% and 8.4% in 2017 versus 9.6% and 3.4% in the EU, respectively) (CASE, 2019). In fact, while the standard VAT rate (22%) is slightly above the EU average (21.5%), a comparatively large basket of goods and services is taxed at the

super reduced rate (4-5%) or reduced rate (10%), although such reductions do not always appear justified on economic, social or environmental grounds. This results in an effective tax rate among the lowest in the EU, at 10.2% (CASE, 2019).

There is scope to increase revenues from recurrent property taxes and to update the corresponding tax base. Recurrent taxes on properties used as main residence were dropped in 2014, leading to a substantial revenue-loss. This exemption is not justified on efficiency grounds, as recurrent property taxes are a more growth-friendly source of revenue compared to taxes on labour. Simulations show that a tax shift from labour to property would provide stronger incentives to work with a positive impact on economic growth (Box 4.1.1). In order to ensure a fair taxation, cadastral values should be systematically reviewed and updated. Given that the last evaluation of properties for tax purposes occurred in the 1970s, cadastral values today bear little link to their market values. The linear increase of cadastral values implemented in 2012 did not correct distortions, as values have evolved very differently since the last evaluation depending on the geographical area, the building typology and degree of urbanisation. Despite creating a digital platform with necessary information to update cadastral values, there are currently no plans to reform the cadastral system.

The 2020 budget reduces labour taxes and income tax expenditures. The 2020 budget includes a fund to reduce the tax wedge on labour by around 0.2% of GDP in 2020 and 0.3% of GDP from 2021. Based on decree-law n. 3 from February 2020, the additional resources will be used to increase the employees' income tax credit introduced in 2014 (MEF, 2020). In its current form, the tax credit amounts to €80 per month for workers with a yearly income between €8,000 and 24,600, and gradually declines reaching zero for incomes of €26,600 or more. Under the announced new system, the bonus will increase to €100 per month for workers with yearly income between €8,000 and 28,000, will gradually decline to €80 per month for workers with yearly income of €35,000 and then to zero for yearly incomes above €40,000. As for tax expenditures, the 2020 budget introduces a progressive limit on personal income tax deductions above a specific income threshold.

Graph 4.1.3: Tax wedge across income levels



Source: OECD, European Commission

Note: Figures refer to a single earner without children in 2018

The higher income tax credit provides positive work incentives, but a comprehensive reform to shift taxes away from labour is still needed. According to the government, the reform will increase the number of beneficiaries of the tax credit from 11.7 million to about 16 million. Based on an EUROMOD ⁽²⁰⁾ simulation, the reform would lower the median effective marginal tax rate from the current 75% to 39% for incomes between €24,600 and €26,600. However, in the higher phase-out income range (between €35,000 and €40,000) it would reach 63%, 14 pps higher compared to the baseline ⁽²¹⁾. Based on the labour supply model described in Box 4.1.1, participation rates would rise by 2.3% for women and 0.9% for men, and total hours worked by 2.6% and 0.9% for women and men, respectively. The simulation suggests that gains in disposable income would mainly affect households between the third and the ninth income decile, with no impact on income inequality as measured by the Gini index.

The design of energy taxes in Italy does not promote the transition to clean technologies. Revenues from environmental taxes in Italy are above the EU average (3.3% of GDP in 2018, as against 2.4% in the EU), driven by taxes on energy (2.6% of GDP, 1.9% in the EU). However, taxes and levies on electricity are currently higher per

⁽²⁰⁾ For details on EUROMOD see Box 4.1.1.

⁽²¹⁾ The median effective marginal tax rate is computed on the whole population, as represented in EU-SILC. For more information on EU-SILC and EUROMOD see Box 4.1.1.

unit of energy compared to other energy carriers such as natural gas and heating oil. Among fossil fuels, there is still a favourable tax treatment of diesel compared to petrol. Overall, the government estimates that environmentally harmful subsidies amounted to €19.3 billion in 2017 (1.1% of GDP). The 2020 budget progressively reduces tax incentives on the most polluting company cars and on transport diesel for the most polluting vehicles.

Corporate taxation continues to be subject to frequent changes. The 2020 budget extends temporary tax incentives for new equipment investment until 2022 and reintroduces the allowance for corporate equity (“ACE”). However, several other measures affecting corporate taxation have been adopted but then withdrawn before being implemented. This concerns the harmonisation of taxation between self-employed workers and small firms, for which first a specific tax regime and then a flat-rate regime were both planned and then abrogated before entering into force. Similarly, ACE was replaced in 2019 by two subsequent tax regimes providing structural incentives to investment, which were abolished before entering into force, when the 2020 budget re-introduced ACE. Half of the companies surveyed in 2017 considered the lack of stability of the tax legislation as a major obstacle to investment in Italy (Eurobarometer 2018).

Tax evasion is still widespread in Italy. In its annual report (MEF, 2019b), the government estimates the total tax gap at €109.1 billion in 2016 (9.4% of GDP), with relatively small fluctuations recorded in recent years. The categories most affected are income taxes paid by self-employed workers and corporations (2% of GDP), VAT (2.1% of GDP) and employer social security contributions (0.5% of GDP). Most of the gap is related to undeclared income (83% of the average propensity to evade over 2012-2017), while only a small part concerns mistakes or omitted payments for declared income (17%). The share of value added which remained undeclared in 2016 is particularly high in professional services (16.3%), retail, wholesale, transports, warehouses, hotels and restaurants (12.4%) and constructions (11.9%).

Several measures have been taken to encourage tax compliance. Electronic invoicing and the electronic transmission of receipts have become compulsory for all transactions since 2019 and 2020 respectively. These measures will improve the quality and timing of the information available to the tax administration, discouraging in particular omitted payments for declared income.

The 2020 budget pursues the fight against tax evasion, including by encouraging electronic payments. The 2020 budget includes several measures to fight omitted declarations, including encouraging traceable means of payment, particularly important in light of the high share of cash transactions in Italy. A fund (0.2% of GDP from 2021) has been created to reward consumers who pay via electronic means. However, an efficient use of resources needs incentives to be targeted at the sectors most exposed to tax evasion. Other measures encouraging electronic payments include lower limits for cash payments⁽²²⁾, a special lottery for consumers paying with electronic means and the possibility to deduct expenditures from personal income taxes only if they have been paid with traceable means. The 2020 budget also introduces disincentives to undue compensation of tax credits, shifts VAT and social security liabilities (“reverse charge”) from subcontractors to the main contractors and several measures against excise duties and VAT fraud in the fuel sector. Furthermore, Tax Agency staff was increased to be able to intensify tax audits.

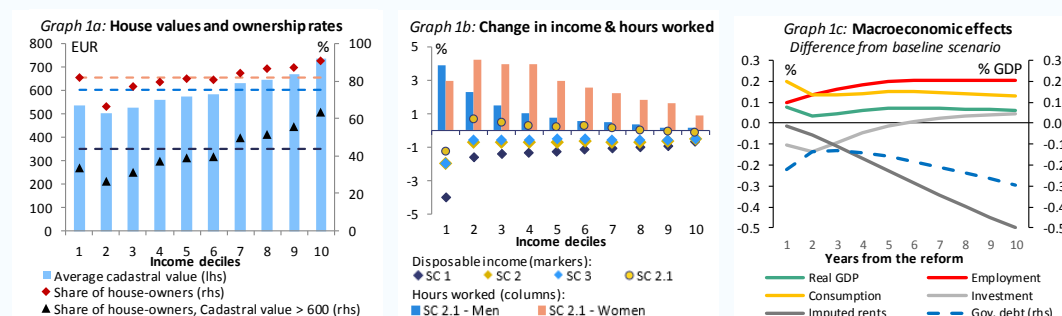
The 2020 budget increases taxes on gambling and introduces a tax on digital services. After the increase implemented in 2019, the 2020 budget streamlines and further raises taxes on gambling, including by increasing the withholding tax on the winnings. Control mechanisms are also strengthened in order to prevent illegal gambling and tax fraud. While taxes on gambling provide positive disincentives, it is also important that additional mechanisms be put in place to avoid addiction and compulsive gambling. The 2020 budget also introduces a new tax on beverages with a high content of added-sugar.

⁽²²⁾ The limit will be reduced from €3,000 to €2,000 from July 2020 and to €1,000 from January 2022.

Box 4.1.1: EUROMOD-QUEST simulation - Shifting taxes from labour to property in Italy

Reintroducing property taxes on owner-occupied properties could raise substantial revenues in Italy, even if low-value properties and low-income pensioners were exempted. The reintroduction of the property tax (IMU) has been simulated in three different scenarios using EUROMOD ⁽¹⁾. All scenarios apply the rates currently used for non-exempted owner-occupied properties (luxurious properties). In scenario 1 (SC1), IMU is reintroduced on all residential properties; in scenario 2 (SC2), properties with annual cadastral income below €600⁽²⁾ are exempted; in scenario 3 (SC3), the exemption also applies to pensioners with a yearly taxable income below €24,600⁽³⁾. The additional revenues would amount to €8.6 billion (0.5% of GDP), 5.2 billion (0.3% of GDP) and 4.1 billion (0.2% of GDP), respectively.

Using the additional revenues for reducing taxes on labour would improve distributional outcomes and increase incentives to work, supporting economic growth. The share of house-owners and the average cadastral values are relatively high at the bottom of the income distribution and increase only mildly with income (Graph 1a). Therefore, although reintroducing taxes on all residences (SC1) would imply a bigger tax increase for high-income households in absolute terms, low-income households would lose a higher share of their disposable income, causing a small increase in income inequality. Exempting low-value properties (SC2) and eventually low-income pensioners (SC3) would almost neutralise this effect ⁽⁴⁾. Furthermore, using the additional fiscal space to reduce the tax burden on labour could produce positive results. As an example, the additional revenue from scenario 2 is used to reduce social security contributions paid by employees with yearly income below €24,600 (SC2.1). Such a tax shift would have a slightly positive distributional effect, with a marginal decrease in the Gini index by 0.05%. Furthermore, the labour force participation rate would rise by 1.6% and total hours worked by 2.3% for women and 0.8% for men on average, with stronger increases for low-income workers (Graph 1b) ⁽⁵⁾. Based on a QUEST analysis (see Box 3.1 on the model), 5 years after the tax shift real GDP would be higher by almost 0.1% compared to the baseline, thanks to higher employment and private consumption. Despite a decline in housing investment due to the property tax increase, the effect on investment would be overall positive after 7 years (Graph 1c). Thanks to higher revenues, the government debt-to-GDP ratio would be 0.3 percentage points lower compared to the baseline after 10 years. After 10 years, the positive impact on GDP would be double without considering the statistical impact from lower imputed rents, which are recorded as part of GDP.



Source: European Commission Joint Research Centre and DG ECFIN, based on EUROMOD / EU-SILC and QUEST.

⁽¹⁾ EUROMOD is the tax-benefit microsimulation model for the EU. It simulates individuals' and households' benefit entitlements and tax liabilities according to the rules in place in each Member State, based on representative survey data from the European Statistics on Income and Living Conditions (2017 Italian SILC, which refers to 2016 incomes, updated to 2019 through uprating factors). The baseline scenario uses tax-benefit policies as of 30 June 2019.

⁽²⁾ The threshold broadly corresponds to the average cadastral value of residential properties in Italy.

⁽³⁾ The exemption applies to households exclusively composed of pensioners. The threshold is doubled for pensioner couples, and corresponds to the income threshold above which the existing 80-euro bonus starts to phase out.

⁽⁴⁾ The Gini index would increase compared to the baseline by 0.23% in SC1, 0.07% in SC2 and 0.05% in SC3.

⁽⁵⁾ Labour supply effects are estimated with a structural discrete choice labour supply model, based on Aaberge et al. (1995) and Van Soest (1995) and on a sample of wage-employed, unemployed or inactive households aged 20-60.

4.2. FINANCIAL SECTOR

Recent banking sector developments

Following sustained efforts to de-risk balance sheets, asset quality has significantly improved.

Banks have continued cleaning up their balance sheets by disposing of a large amount of NPLs (roughly €20 billion in the first 10 months of 2019, mostly bad loans) through outright sales and securitisations⁽²³⁾. The further development of the secondary NPL market is also evident in terms of pricing, especially for uncollateralised positions. As a result, the stock of gross NPLs stood at €177 billion in June 2019, 21% less than in June 2018, with an NPL coverage ratio of 52.5% (euro-area average: 47.7%). Banks have also continued strengthening their internal workout capacities, while the inflow of new NPLs stood at 1.2% at end-September 2019, below pre-crisis levels.

Pockets of vulnerability remain, as asset quality improvements are not homogeneous among banks.

The system-wide gross NPL ratio fell to 8.1% in June 2019, down from 10% a year earlier and from 16.8% at the peak level in Q3-2015. However, the gross NPL ratio is still significantly above the euro area average of 3.4%, and many banks still exhibit double-digit gross NPL ratios, in particular second-tier banks and less significant institutions, which had gross NPL ratios of 10.3% in June 2019. While past market volatility did not have a significant negative impact on NPL outright sales, including on pricing, downside risks for disposal of NPLs remain, given the weakening economic cycle. Furthermore, the potential re-emergence of heightened market volatility could make the use of the Guarantee on Securitisation of Bank NPLs scheme less attractive for credit institutions due to higher fees on State guarantees.

The resolution of unlikely-to-pay loans has gradually gained momentum in recent years.

So far, most of the decrease in the legacy NPL stock has been due to disposals of bad loans (*sofferenze*). The more complex unlikely-to-pay (UTP) asset class requires restructuring of the underlying asset, which may entail, among other things, granting operating and financial support to borrowers during the turnaround. Due to the significant volume of UTPs in bank balance sheets (some 43% of the total NPL stock in June 2019), the

secondary market for distressed debt has margin to further develop in terms of transactions, specialised asset servicing companies and IT platforms. The fact that the divestments (€5 billion) and special servicing of UTP loans recorded an upward trend in 2018, is encouraging. Yet banks would need to reinforce their internal workout capacities for UTP loans.

The decline in sovereign spreads has taken pressure off Italian banks' capital and funding.

Lower sovereign yields since November 2018, coupled with measures to mitigate the impact of sovereign spread volatility, have enabled banks to contain the erosion of their capital buffers. However, Italian banks continue to hold a significant amount of government bonds. The recovery in government bond prices has allowed banks to reverse the trend observed since mid-2018. Meanwhile, banks slightly reduced their holdings of Italian government securities to €334 billion (9.7% of total assets) in September 2019 compared to April. However, this share exceeds markedly the euro-area average (3.2%), with smaller banks often being more exposed than larger ones.

Banks have taken measures to reduce the sensitivity of their capital to changes in the value of domestic sovereign bonds.

To shield their capital buffers, credit institutions have largely rebalanced their portfolios of government securities towards the held-to-collect category (valued at amortised cost), which reached 62% of total holdings at the end of September 2019. Still, the Bank of Italy estimates that an upward shift in the government yield curve (by 100 basis points as of the June 2019 level) would reduce the common equity Tier 1 (CET1) ratio of banks (both significant and less significant) on average by 30 basis points. After an erosion in the first half of 2018, Italian banks' capital buffers recovered as of the first half of 2019, with the average CET1 standing at 13.5%, up by 70 basis points relative to Q2-2018 but still some way off the 14.8% average CET1 ratio of euro-area peers.

Renewed market volatility could affect banks' cost of funding and credit provision to the economy.

Beyond capital losses, this impact could materialise through higher funding costs, impaired market access, and lower collateral valuation or credit ratings. Moreover, the impact of higher

⁽²³⁾ The Guarantee on Securitization of Bank Non Performing Loans (GACSL) was extended in May 2019 for another 24 months.

sovereign spreads on banks' funding cost tends to be passed on to households through a rise in the pricing of new loans. Heightened market volatility throughout 2018 resulted in a 30 basis points rise in the margin on fixed-rate mortgage loans from September 2018 to January 2019, with the cost gap between them and variable-rate loans also going up by 10 basis points over the same period. By contrast, this transmission mechanism has been less pronounced for the new loans granted to firms, due to the increased competition among banks.

Improving profitability in a low interest rate environment remains challenging. Profitability in the first half of 2019 was up year-on-year, with an annualised return-on-equity of 8.3%, mostly supported by lower provisions and operating costs for loan loss. Moreover, in the first half of 2019 the contribution of net fees and commission income to banks' total income was well above the euro area average (37.2% and 30.1%). Despite cost-cutting efforts and the observed improvement in Q2-2019, some banks are still struggling with high cost-to-income ratios. Therefore, they need to make further progress downsizing their branch networks and headcount, while maintaining the above-average contribution of net fees and commissions to total income.

The liquidity position of banks has remained adequate, supported by significant Eurosystem financing. The system-wide liquidity coverage ratio reached 176.5% in September 2019, up by 20.5 pps from end-June 2018. In June 2019, the net stable funding ratio averaged 114% for the significant banks, with none below the minimum 100% requirement. This liquidity position is largely supported by the Eurosystem financing, which amounted to €220 billion in December 2019 (corresponding to 7.17% of total bank liabilities and 35.3% of total Eurosystem financing for euro area banks). The high reliance on Eurosystem financing, mainly through the previous round of targeted long-term refinancing operations (TLTRO-II), emphasises the role played by the TLTRO-III to replace outstanding financing. Nevertheless, due to the large debt rollover needs in 2020, some banks are still exposed to a hike in funding costs. For instance, households are holding some € 27 billion in bonds maturing in 2020. Households gradually substituted their bond holdings with current account deposits, so that

banks' retail bonds fell from €422 billion in 2011 to €87 billion in 2018.

In the medium-term, Italy's banks will need to be more active in issuing bail-in-able debt. Further efforts are needed to meet the minimum requirement for own funds and eligible liabilities, including through the issuance of subordinated liabilities. Although constrained by past heightened market volatility, some banks started issuing senior non-preferred notes in 2018-2019, but most have so far issued senior preferred debt or outright Tier 2 capital instruments. Despite the amount of debt securities issued under UK law in their portfolios, banks appear to face a manageable impact from Brexit.

Recent developments regarding some State-aided banks warrant oversight. After the completion of a large NPL securitisation in 2018, Banca Monte dei Paschi di Siena has continued to implement its restructuring plan as required under State aid rules and commitments. Its NPL ratio fell to 12.4% in Q4-2019, on the back of disposals of €4.9 billion of NPL since the end of 2018. However, its NPL ratio is higher than that of domestic peers, while the Tier 2 bond issuances at yields of 10.5% and later 8% show that the bank is still exposed to a significant, albeit diminishing funding cost, particularly at times of market stress. The group further reduced its staff costs, but recorded negative results at the end of 2019, mainly due to the impact of the revised amount of deferred tax assets. Although TLTRO-III will play a significant role in facilitating the rollover of the TLTRO-II financing and of government guaranteed bonds maturing in 2020, the evolution of the bank's funding costs will require close monitoring.

The compensation scheme for shareholders and retail bondholders of gone-concern banks is operational. The 2019 budget set up a new mis-selling compensation fund for bank shareholders and subordinated bondholders with retail client and individual entrepreneur profiles, who suffered losses during the compulsory administrative liquidations of banks between 16 November 2015 and end-2017. The provisions on the access to savers' compensation were detailed in the 2019 *Decreto Crescita* and in its implementing decree. As a rule, compensation is granted following the decision of an independent technical commission,

which assesses compensation requests submitted by the mis-sold shareholders and bondholders.

Balance sheet repair remains a priority for second-tier banks. These banks have continued disposing of NPLs through outright sales and securitisations and have upgraded the management of impaired assets also due to supervisory pressure. Despite progress with balance sheet de-risking, asset quality remains a concern for the second-tier banks, which still have NPL ratios above the system average and need to further strengthen their capital buffers and capacity to withstand shocks. Their funding and liquidity has remained adequate, with TLTRO-III allowing them to replace the large contribution of TLTRO-II without pressures on funding costs. Compliance with MREL targets, in particular the issuance of subordinated liabilities, may put pressure on bank's profitability, which may be mitigated to a large extent by the current ECB quantitative easing.

Plans to recapitalise Banca Carige and Banca Popolare di Bari (BPB) are underway. Carige was placed under temporary administration by the ECB in January 2019, following the shareholders' rejection of an initial capital-raising plan in December 2018. Eventually, a new private capital-plan was approved by shareholders in September 2019. The plan foresees the disposal of the bank's NPLs and a €700 million capital increase, coupled with the issuance of €200 million of Tier 2 subordinated bonds, with the participation of the Interbank Deposit Protection Fund (FITD) and Cassa Centrale Banca. The capital position of BPB markedly deteriorated in December 2019 and the bank was placed under special administration by Bank of Italy. The government approved a decree law to grant a capital increase to the state-owned lender Mediocredito Centrale. This capital increase may be used to finance an investment at market terms in BPB, which needs a capital increase of up to €1.4 billion. FITD committed to contribute up to €700 million, of which €310 million were approved as early intervention. As part of its new business plan, preceded by a due diligence of assets and liabilities, BPB is expected to proceed with NPL disposals and streamlining of operations.

Corporate governance and insolvency reforms

The reform of the large cooperative banks has not been fully implemented yet, unlike the

reform of small mutual banks. Following several delays, the full implementation of the 2015 reform of large cooperative banks (*banche popolari*) was suspended again in late 2018, when the Italian State Council referred this reform to the European Court of Justice. Further consolidation of these banks would allow them to reap benefits from operational synergies and better market access. Furthermore, at the end of 2018 the Italian Parliament modified the 2016 reform of small mutual banks (BCCs) by allowing the BCCs in the Bolzano and Trento provinces (Raiffeisen banks) to participate in institutional protection schemes. The BCCs reform thus led to the emergence of only two cooperative groups with national coverage, ICCREA and Cassa Centrale Banca, subject to a comprehensive assessment by the Single Supervisory Mechanism in spring 2020.

In early 2019, the government finalised the reform of the insolvency framework. The new provisions included in the Crisis and Insolvency Code (*Codice della Crisi d'impresa e dell'insolvenza*) will enter into force in August 2020. The provisions promote out-of-court agreements between debtors and creditors, simplified bankruptcy procedures and a pre-emptive mechanism for corporate insolvencies. A timely implementation of the Code is key to accelerate the slow foreclosure and collateral enforcement procedures. Previous measures to accelerate out-of-court collateral enforcement (Patto Marciano) have not been significantly used so far.

Insurance sector developments

Similar to banks, insurers remain largely exposed to sovereign spread movements. As of September 2019, public sector securities accounted for 52% of the total investment of insurers in Italy (European average below 30%). According to the Bank of Italy, a parallel upward shift of 100 basis points in the overall bond yield curve would reduce on average the value of assets net of liabilities by 20%. Valuation adjustments on government securities in the life business also led to volatility in terms of return-on-equity in 2018-2019 (down to 6.4% from 9% in 2018 and up again to 11% in June 2019). Nonetheless, the average solvency ratio of insurance undertakings stabilised at 228% in September 2019, while the

2018 EU-wide EIOPA ⁽²⁴⁾ stress test indicated that the main insurance groups can withstand the impact of severe shocks.

Access to finance

Despite improvements, bank credit remains subdued, especially for SMEs, and the capital market underdeveloped. The rejection rate for bank loan applications declined from 9% in 2009 to 6% in 2019 (2 pps up from 2018), supported by lower interest rates and better credit conditions. However, the percentage of SMEs not receiving the full amount requested is over three times higher (19%) and on the rise ⁽²⁵⁾. As of June 2019, lending to households rose at a modest pace (+2.4% year-on-year), while lending to non-financial corporations (NFCs), especially smaller ones with comparable risk levels (Bank of Italy, 2019a), ground to a halt to -0.7% year-on-year. Meanwhile, credit demand declined, as firms reduced leverage, while boosting their equity and self-financing capacity.

The SME Guarantee Fund continues to support access to credit and opened up to market finance. In 2019, SME access was further simplified, mainly for investments in tangible assets, while opening up to transactions via crowdfunding platforms and mini-bonds issuances. Furthermore, the EU's COSME Loan Guarantee Facility is expected to provide the SME Guarantee Fund with additional counter-guarantees.

The use of initial public offerings showed signs of recovery. The number of listed companies on the alternative investment market rose in 2018, partly due to government initiatives like the introduction of special purpose acquisition companies. Raising the threshold from €5 to €8 million to be exempt from the obligation to publish a prospectus is likely to further boost initial public offerings.

Measures to increase the use of venture capital are still pending. Italy ranks below the EU average in venture capital investment as a share of GDP ⁽²⁶⁾. In early 2019, the government created the National Fund for Innovation to boost venture

capital. In early 2020, a vehicle (CDP Venture Capital) has been set up to manage this National Fund for Innovation.

Recent measures to support access to non-bank finance are gradually kicking in. From 2012 to end-2018, the mini-bond market raised €25.2 billion (18% by SMEs). The volume in 2018 (€4.3 billion) was lower than in 2017 (€6.6 billion), due to a drop in mean size, but not in number ⁽²⁷⁾. The set-up of PIR (individual savings plans through collective investment schemes) was successful, as over half of the assets managed by PIR funds are invested in securities issued by resident NFCs (compared to 2% for other funds). Although a 2019 reform slowed down new PIR subscriptions, a recent decree addressed the issues.

New measures to boost market-based financing are in place, but demand is still weak. The CONSOB crowdfunding regulation was expanded to shares issued by all SMEs and asset managers. The 2019 budget extended the scope of crowdfunding to offers of bonds issued by SMEs. The reintroduction of ACE may also help address corporate undercapitalisation. Moreover, the 2019 Decreto Crescita introduced 'società di investimento semplice', a vehicle company that can invest in unlisted SMEs at an early stage. A regulatory sandbox is under preparation to foster the development of the Fintech sector.

Sustainable finance is growing, but there is still large scope for development. In 2018, the National Observatory on Sustainable Finance and the Financial Centre for Sustainability were created. Borsa Italiana has shown growing commitment to sustainability issues, as evidenced by the segment on its ExtraMOT PRO market green and social bonds. In 2019, the Bank of Italy changed its investment portfolio strategy in favour of firms with higher social and environmental credentials, while the Green New Deal also aims to push Italy's green finance sector.

⁽²⁴⁾ European Insurance and Occupational Pensions Authority.

⁽²⁵⁾ Based on 2019 SAFE data.

⁽²⁶⁾ InvestEurope, 2018 European Private Equity Activity.

⁽²⁷⁾ Politecnico di Milano, Osservatorio Mini-Bond (2019).

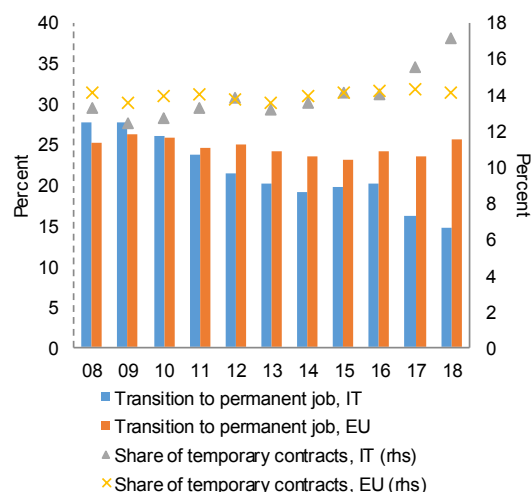
4.3. LABOUR MARKET, EDUCATION AND SOCIAL POLICIES

4.3.1. LABOUR MARKET

Despite the economic slowdown, labour market conditions continued to improve in 2019. In 2019, employment grew for the sixth consecutive year and the employment rate reached 63.8% in Q3-2019. This is the highest rate ever recorded but still significantly below the EU average (74.1%). Employment growth was entirely driven by employees, while self-employment continued to decline. Gains were stronger in the services sector, driven by central and northern regions and by older cohorts. However, employment expressed in full-time equivalents is still below (-3.5%) its level in early 2008, given the relatively slow pick-up in hours worked. The unemployment rate fell below 10% in 2019, but participation in the labour market remains low. Youth unemployment (ages 15-24) remains among the highest in the EU but continued to fall (28.3%) in Q3-2019, down from 31.9% a year earlier).

Since mid-2018, job creation has been driven by permanent contracts. Overall, since the second half of 2018 the number of permanent jobs has grown much faster than the number of temporary jobs. This shift has been supported by hiring incentives for permanent positions and by the “Decreto Dignità”, which, since November 2018, sets more stringent conditions for fixed-term employment, including a reduced maximum duration of temporary contracts. The associated rising number of contract transformations into permanent positions might also be due to the large number of fixed-term contracts concluded in 2017 and 2018. Since the beginning of 2019, the number of permanent employees has risen by 1.1%, while the number of temporary positions has grown by 0.6%. Over the medium term, the share of temporary employees rose from 13.1% of total employees in 2013 to 17.1% in 2018. Over the same period, the probability of a transition from a temporary to a permanent contract has declined (Graph 4.3.1). Moreover, contract duration has been steadily declining and almost half of temporary employees have a contract shorter than 6 months.

Graph 4.3.1: Transition rates and share of temporary employment



Source: Eurostat.

Broader indicators of labour market slack point to persisting challenges. In 2018, the stock of part-timers remained broadly stable (18.6% of total employment), but the share of involuntary part-timers increased. The increase in involuntary part-time and temporary employment has been particularly marked in the South (Fellini and Reyneri, 2019). In 2018, in addition to the 2.7 million unemployed, close to 3 million of the labour force were partially attached to the labour market (a measure including discouraged workers and people looking for a job but not available). Underemployed part-timers amounted to 668,000, leading to a total slack of 6.4 million. As a result, in 2018, this broad measure of labour market slack stood at 22.3% of the labour force (13.7% in the EU). Since 2013, total slack fell at a slower pace than unemployment. In particular, the incidence of those “partially attached to the labour market” (mostly discouraged workers) on the extended labour force, at 10.4% in 2018, is among the highest in the EU. Women, young and low-skilled people are more likely to belong to this category. Italy is also characterised by the highest regional dispersion in the EU for the broadest indicator of slack (LS4). The composition of slack also varies across regions. In particular, the weight of the “partially attached” labour force is much higher in the South (Table 4.3.1).

Table 4.3.1: **Labour market slack LS4 (Nuts2) composition, 2018**

	« Partially attached »	Underemployed	Unemployed
IT	46,9	10,4	42,8
Abruzzo	46,9	11,7	41,4
Basilicata	59,7	8,6	31,7
Calabria	53,5	5,5	40,9
Campania	54,6	5,3	40,1
Emilia-Romag	36,9	19,1	44,0
Friuli-Venezia	39,2	16,4	44,4
Lazio	39,9	10,3	49,8
Liguria	33,6	18,2	48,2
Lombardia	37,9	18,3	43,8
Marche	40,1	12,0	47,9
Molise	54,2	6,1	39,7
Piemonte	32,8	15,9	51,3
Prov_BZ	40,0	15,1	44,9
Prov_TN	44,5	12,8	42,7
Puglia	54,2	6,4	39,3
Sardegna	47,3	11,2	41,5
Sicilia	57,5	4,8	37,7
Toscana	38,8	17,9	43,4
Umbria	35,7	14,6	49,8
Valle d'Aosta	35,0	12,6	52,4
Veneto	37,1	14,3	48,6

Source: European Commission calculations based on Labour Force Survey micro data.

Wages continue to grow at a very moderate pace. In 2019, hourly negotiated wages grew on average by 1.0%, with higher increases in the public sector (+1.8%), in particular for fire brigades, the army and security forces. In the private sector, the highest wage growth was recorded in agriculture (+1.8%), mining (1.6%), and chemistry and pharmaceuticals (+1.5%). In 2019, along with a slowdown in the pace of growth of negotiated wages, the share of employees with negotiations ongoing on the renewal of national sectoral collective contracts stood at 46%. The average length of wage contracts in Italy is 3 years, but the effective duration is much longer, given substantial delays in contract renewals. National contracts for which renewal negotiations are still pending had on average expired for 20 months. Overall, real wage growth remains close to zero, and wages in real terms still lag well below pre-crisis levels.

The recent agreement between social partners may support bargaining at the firm or local level. In September 2019, the National Institute for

Social Security (INPS), the Labour Inspectorate and the main representatives of trade unions and employers (CGIL, CISL, UIL and Confindustria) signed an agreement on the procedures for collecting, processing and publishing data on union membership and elections. This is a step towards the implementation of past framework agreements on measuring the representativeness of different organisations. Clear rules on representativeness are also a precondition for promoting bargaining at the firm or local level and avoiding uncoordinated decentralisation, by, among other things, limiting the proliferation of contracts that set less favourable conditions compared to the most representative national contracts. Firm-level contracts distributing “productivity premiums” to workers can help better align wages with regional and firm-level conditions. However, they remain limited in scope (around 50,000 collective contracts, mainly concentrated in Lombardy, Emilia-Romagna, Veneto and Piedmont), despite fiscal incentives.

Several proposals to introduce a statutory minimum wage have been made. The main features of the proposals submitted to Parliament⁽²⁸⁾ include the possibility to extend the wage floors agreed through collective contracts for all workers, the possibility to apply minimum wage floors to some categories of self-employed or the setting of a national minimum wage in the absence of a collective agreement. Estimates on the impact of the measure vary in terms of costs for employers, reduction of in-work poverty and overall impact on employment and they crucially depend on the exact wage level and the wage-setting mechanism. According to early studies⁽²⁹⁾, a gross minimum wage set at €9 per hour would concern more than 20% of employees, mainly in small firms and in firms located in the South.

The gender gap in the employment rate is among the highest in the EU. The gap was 19.8 pps. in 2018, unchanged compared to 2017. Women’s participation in the labour market (53.1%) is one of the lowest in the EU and significantly below the EU average (67.4%). Regional differences are major. Five southern

⁽²⁸⁾ See resolutions (*Risoluzioni*) 7-00012 (Rizzetto), 7-00215 (Serracchiani), 7-00216 (Segneri) and 7-00234 (Murelli).

⁽²⁹⁾ For a more detailed assessment of the potential impact of a statutory minimum wage, see INAPP (2019), ISTAT (2019a) and INPS (2019).

regions (Basilicata, Calabria, Campania, Apulia and Sicily) are among the 10 EU regions with the lowest female employment rates. The gap extends also to the share of part-time work (32.4% for women against 7.9% for men). Finally, the inactivity rate of women due to caring responsibilities has continued to grow since 2010 and remains above the EU average (35.7% against 31.8%). A comprehensive work-life balance strategy, including access to services and provision of benefits, is missing (Section 4.4.3). Such a strategy would also help Italy advancing towards SDG 5 – gender equality.

Stepping up efforts to tackle youth unemployment remains crucial. The rate of young people not in employment, education or training (NEET) remains one of the highest in the EU (19.2% in 2018 versus an EU average of 10.5%). NEETs registered in the Youth Guarantee (YG) scheme amount to more than 1.5 million persons (42.1% of which in the South), and about 1.2 million have been taken care of by public employment services (PES). Around 60% of the selected NEETs completed at least one of the YG measures, with an average placement rate of 54.9%. Cases with a more difficult profile are more frequent in the South (63.9%, against 40.3% in the North). While apprenticeships could be further developed, traineeships are the most implemented measure. Close monitoring could help to minimise the risk of misuses as an alternative to employment contracts. A new measure (Plan 1D) for outreach and activation for the most vulnerable young people has been recently introduced. Fiscal hiring incentives for young people (such as the *Incentivo Occupazione NEET*) are being extensively used, but their effectiveness and efficiency has not yet been evaluated. More can be done to tap into the potential of apprenticeships. Overall, EU funds help tackling youth unemployment, especially in the South, with more than €1.8 billion allocated to Italy.

Reforms of active labour market policies remain at an early stage of implementation. First steps have been taken to strengthen public employment services and reduce regional disparities. However, active labour market policies (ALMP) remain barely integrated and coordinated with other related policies (e.g. social services, adult learning, vocational training). Further

specific efforts in ALMP are needed to increase women's employment as part of a comprehensive gender equality strategy. The national agency's (ANPAL) coordination role for ALMP, which is managed by the regions, continues to be weaker than originally intended. The main challenges for implementing the reform remain better coordination, the exchange of data and the standardisation of services provided. As part of the new minimum income scheme up to €1 billion per year has been budgeted in 2019 and 2020 to strengthen PES and implement the activation component of the reform. In 2019, Italian regions hired almost 3,000 new employees with fixed-term contracts for their PES.

Investing in public employment services' (PES) staff, including in training and upskilling, is key to improve service quality. Monitoring indicators and minimum standards were set at the national level by decree in January 2018, but strengthening coordination between ANPAL and the regions remains a major challenge. Significant efforts are needed to reinforce PES, whose placement capacity remains low: the resources allocated are still insufficient, while monitoring and evaluation are very limited. The involvement of employers has also been marginal so far and the PES strategy for employers has not been adopted yet. The PES network can now count on a newly developed national IT system. Following the 2016 Council Recommendation on long-term unemployed, there have been improvements in the information provided to non-registered people, the online registration of jobseekers and the procedures related to individual in-depth assessments. However, case-management and the provision of individual assessment plans would benefit from more training of PES employees. The development of a qualitative profiling tool, as a complement to the already existing statistical profiling methodology, is a promising step. Take-up rates of the re-placement voucher experimental scheme launched in May 2018 are still low, suggesting that further efforts are needed to better reach potential beneficiaries.

Training opportunities for unemployed, underemployed and inactive people are particularly low in Italy. In 2018, only 7.2% of individuals who were either unemployed, underemployed or inactive received a training measure in the 4 weeks before an interview

(against 16.9% in the EU on average). Continuous vocational training provided by employers is a key instrument to increase competitiveness and productivity and to enable workers to adapt to changing patterns of production and work organisation⁽³⁰⁾. The probability of receiving training is higher in firms with collective bargaining or other forms of staff representation.

Undeclared work remains a serious concern.

The shadow economy is estimated at 12.1% of GDP in 2017 (ISTAT, 2019b), accounting for 3.7 million irregular job positions (+0.7% compared to 2016), with especially critical sector conditions in services to persons, agriculture, construction, trade, transport, housing and food services. Around 162,000 workers were found to be irregular and around 42,000 were totally undeclared. INPS is developing a statistical programme to tackle the phenomenon of “fictitious contracts”, i.e. simulated contracts signed with the aim of receiving undue social security benefits. This practice is spreading in the agriculture, construction and part of the services sector. The national working group on illegal recruitment of underpaid farm workers (*‘caporalato’*) set up at the end of 2018 to fight labour exploitation in the agriculture sector, is working on defining a three-year policy strategy. According to a Eurobarometer survey carried out in September 2019, 12% of the respondents in Italy said they have purchased goods or services where they had a good reason to assume that they included undeclared work. The majority of respondents tend not to trust tax and social security authorities and labour inspectorates.

4.3.2. EDUCATION AND SKILLS

Investing in education and skills is key to reviving Italy’s economic performance.

Effective investment in human capital to make the most of people’s potential requires a comprehensive approach to the whole cycle of education, transition to the labour market and

training (CEDEFOP, 2019). Challenges persist in all these phases. The general government expenditure on education was among the lowest in the EU in 2017, both as a proportion of GDP (3.8%) and total general government expenditure (7.9%)⁽³¹⁾, particularly due to low spending on tertiary education. The early school leaving rate, at 14.5% in 2018, remains well above the EU average (10.6%) and worsened compared to 2017. Almost 20% of all 15-24-year-olds are neither in employment, education nor training, the highest rate in the EU. The gap in early school leaving rates between non-EU born and native students is also among the highest in the EU, and it significantly increased in 2018 (to 24.3 pps. compared to the EU average of 11.2 pps.). The tertiary educational attainment rate is among the lowest in the EU, in particular for scientific or technical studies (Section 4.4.1). Entry into the labour market for young people remains a challenge, including for the high-skilled.

Pre-primary, primary and secondary education

Demand for early childhood education and care is held back by low coverage, uneven geographical distribution and high cost.

While participation in early childhood education and care for 3-6-year-olds is almost universal, the share of children under 3 in formal childcare was only 25.7% in 2018, with major disparities across regions⁽³²⁾. The implementation of the “*integrated education system from 0 to 6*” envisaged by the 2015 school reform is expected to improve the coverage and reduce the geographical disparities. The 2020 Budget Law strengthens financial support for families with children aged 0 to 3 enrolled in ECEC, but additional efforts are needed to increase the supply of the service.

School education in Italy produces mixed outcomes in terms of basic skills attainment.

Compared to 2015, Italy’s results in the 2018 OECD Programme for International Student Assessment (PISA) remained broadly stable in mathematics and reading, but worsened in science. The percentage of low achievers in Italy is close to

⁽³⁰⁾ In Italy, in 2015, 60.2% of active firms (with at least 10 employees) provided some form of professional training, below the EU average (72.6%) but a significant increase from 2010 (55.6%). The share of the workforce involved in CVT was 46%. Professional training is provided by 52.3% of the firms. The probability that a given firm is providing CVT is much lower in smaller firms (10-49 employees).

⁽³¹⁾ Eurostat, General government expenditure by function (COFOG).

⁽³²⁾ In 2017/2018 coverage ranged from 9% of eligible children in Campania to 4.7% in Valle D’Aosta (ISTAT 2019a and EUROSTAT).

the EU average in reading and maths, and higher in science. Results vary according to type of school, with students in upper general education (*licei*) scoring significantly higher than those in vocational education. Socioeconomic background has a limited influence on learning achievement, explaining a difference of 75 score points in reading compared to an EU average of 95. However, when it comes to career expectations, only 59.5% of high-achieving disadvantaged students expect to complete tertiary education, against 88% of their advantaged counterparts. Overall, performance is above the EU average in the North and significantly worse in the South.

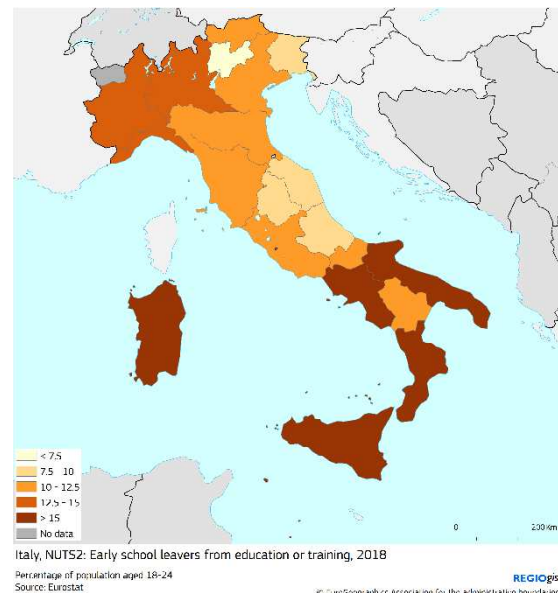
Regional differences in learning achievements are marked and increase with education levels.

Despite the share of GDP allocated to pre-primary, primary and secondary education (ISCED levels 0-3) being broadly in line with the EU average, educational outcomes are below that of peers' and subject to big geographical disparities. In line with the 2018 PISA results, the 2019 standardised student tests by the National Agency for School Evaluation (INVALSI) show northern regions consistently and significantly outperforming southern ones in Italian, maths and English⁽³³⁾. This adds up to the higher rates of early school leaving in southern regions (Graph 4.3.2). Differences in students' socioeconomic background and different returns to education between regions contribute to these results. However, the fact that gaps, negligible in early primary school, grow steadily over the years of education suggests that differences in the quality of education exist. Addressing such disparities would contribute to advancing towards SDG 4 quality education.

Progress in promoting quality evaluation in the education system is slow. In 2019, a final competence test for grade 13 was finally introduced, but on a voluntary basis only. In 2020, the same test will become a mandatory requirement for admission to the final exam, as originally envisaged by the 2015 school reform. In this context, preserving the autonomy of the national evaluation agencies, INVALSI and ANVUR, is of particular importance.

⁽³³⁾ Student testing is currently mandatory in grades 2,5, 8, 10. Tests in grade 13 were conducted for the first time in 2019 on a voluntary basis. Source: INVALSI 2019.

Graph 4.3.2: Early school leavers by NUTS 2 region (%)



Source: Eurostat

Teacher shortages are a major challenge. At the start of the 2019/20 school year, only 50% of vacancies were filled. The remaining posts were covered by supply teachers, accounting now for almost 12% of the teaching posts. The shortages are more acute in some regions and subjects, particularly science. Despite several reform attempts, the procedures for selecting and hiring teachers do not ensure a reliable supply of qualified and well-trained teachers. Moreover, low salaries and limited career prospects make it difficult to attract the best-qualified graduates (European Commission, 2019e). The national contract does not include any performance-based component (envisaged by the 2015 school reform). Finally, more investment in the skills and professional competences of teachers would also benefit the integration of students with disabilities.

Tertiary education

Despite improvements, Italy's tertiary education system remains underfinanced and the attainment rate continues to lag behind. Completion rates and the average duration of studies are improving, although expenditure on tertiary education, at 0.3% of GDP in 2017, is well below the EU average (0.7%). In 2018, the share of 30-34 year-olds with a tertiary educational attainment was also below the EU average (27.8% against 40.7%). This gap is higher for the foreign-

born population. Family background is still a determining factor for educational attainment: in 2018, 30% of graduates have at least one tertiary-educated parent, a proportion that rises to 43% for five-year degree courses (e.g. medicine, engineering and law) (AlmaLaurea, 2019).

The employment rate of tertiary graduates remains low, while non-academic tertiary education performs better. The employment rate of recent tertiary graduates has been slowly recovering since the 2008 crisis but remains well below the EU average (respectively 62.8% and 85.5%). Non-academic tertiary education institutes (*Istituti Tecnici Superiori*) offer much better employment prospects: 80% of graduates find employment within a year⁽³⁴⁾. Still, they remain a niche education provider, covering only 2% of the student population⁽³⁵⁾. To boost them, a new type of vocational tertiary degree (*lauree professionalizzanti*) is being piloted in universities as of 2018/19. In close cooperation with professional associations, tertiary-educated highly specialised professionals are trained in construction and environment, engineering, energy and transport. Opening new paths into tertiary education, particularly for graduates of upper secondary VET, could help lower Italy's early school leaving rate and raise the tertiary educational attainment rate. The overall limited prospect of employment is prompting a growing number of university graduates to leave the country (up by 41.8% since 2013). The outflow of highly skilled people is not offset by a comparable influx from abroad, leading to a net brain drain.

Enrolment in higher education will also depend on the capacity to foster turn-over in the teaching body. The decline in academic staffing levels shows no sign of reversal. Over a fifth of academic staff was 60 years or older in 2017 and only 14% under 40⁽³⁶⁾. In 2019, the government allocated additional funding for 1,500 tenure-track positions for assistant professors (*ricercatore universitario di tipo B*), to be distributed among public universities based on size and quality of research. In this respect, the next ANVUR evaluation round of scientific research, whose results influence almost one third of the funding

allocation, has been postponed. The new round, covering 2014-2019, will take at least 1 year. Therefore, until 2021, funds will still be allocated on the outdated results of the 2010-2014 round.

Vocational education, adult learning and digital skills

Investment in upskilling and reskilling are key for Italy's growth and competitiveness. The share of adults without an upper secondary qualification is high and participation in adult learning remains low. In 2018, 38.3% of Italian adults aged 25-64 had at most a lower secondary qualification (21.9% in the EU) and only 8.1% of adults aged 25-64 had a recent learning experience (11.1% in the EU). The low participation rate of low-qualified adults in training (2%) is a matter of concern, given the increasing mismatch between the number of jobs requiring low qualifications (2.5 million in 2017) and the number of low-qualified adults (over 12 million). Effective guidance would be necessary but the share of adults who used free guidance services (around 10%) is less than half of the European average.

Several measures on vocational training are in place but their implementation remains sluggish. In August 2019, the State-Regions Conference adopted the National Repository of Education and Training Qualifications and Professional Qualifications, covering qualifications from general education, higher education and VET qualifications. A ministerial decree is expected to follow soon. A new national network of professional schools is planned, aiming to improve VET governance, regional vocational centres and their link with the labour market. The recently revised system of work-based learning needs close monitoring.

Shortcomings in basic digital skills persist, with the risk of digital divide widening. In 2019, 41.5% of Italian population had at least basic digital skills (below the EU average of 58.3%) and only 22% had more advanced (i.e. above basic) digital skills (EU average is 33.3%)⁽³⁷⁾. The recently launched project "Repubblica Digitale"

⁽³⁴⁾ Monitoraggio Nazionale sul Sistema ITS Miur-Indire 2019.

⁽³⁵⁾ *ibid.*

⁽³⁶⁾ Online data code: educ_uoe_perp01

⁽³⁷⁾ Eurostat - Community survey on ICT usage in Households and by Individuals.

⁽³⁸⁾ represents a positive step. However, Italy has no comprehensive digital skills strategy targeting the digital literacy of the population at large, apart from the National Plan for Digital Schools. Investment in this field is needed to speed up digitisation of the whole economy, including the public administration (Section 4.4.2), and to prevent a widening digital divide and risks of new forms of social exclusion.

Investment in technical, scientific and digital skills is crucial for innovation but remains low.

Compared to the EU average, Italy reports a lower share of graduates in science and engineering (12.2% against 15.5%) ⁽³⁹⁾. According to Confindustria⁽⁴⁰⁾, the lack of STEM⁽⁴¹⁾ graduates could become critical in the near future being ICT, Chemical and Machinery the sectors creating the most new jobs in coming years. ICT specialists account for only 2.8% of the workforce (EU average of 3.9%)⁽⁴²⁾, while ICT graduates are only 1% of total graduates against 3.6% at EU level⁽⁴³⁾. Also, Italian enterprises invest less in ICT trainings for employees than firms in the EU on average⁽⁴⁴⁾. In a context of increasing automatisisation, 53.9% of Italian enterprises experienced difficulties in recruiting personnel for jobs requiring ICT specialist skills in 2019⁽⁴⁵⁾. This adds up to the low levels of digitisation of Italian firms (section 4.4) and the limited attractiveness for digital specialists. According to JRC, Italy is among the countries likely to be most exposed to future mismatches in advanced digital skills ⁽⁴⁶⁾.

Investing in skills can also help to harness the employment potential of the green transition.

The number of people employed in environment-related sectors has been growing at a fast pace in Italy. Eurofound (2019) estimates that adopting the

policies needed to implement the Paris Agreement on climate would generate an additional 0.5% growth in employment. At the same time, labour reallocation across sectors will be significant (European Commission, 2019f). Investing in upskilling and reskilling policies and devising strategies that anticipate skills are crucial to equip workers with new competencies.

4.3.3. SOCIAL POLICY AND DEMOGRAPHY

The risk of poverty is diminishing but remains high and marked by large regional differences.

In 2018, the share of people at risk of poverty or social exclusion declined from 28.9% to 27.3%, the lowest level since 2011. However, it remains above the pre-crisis level (25.5% in 2008) and the EU average (21.7%). In 2018, the severe material deprivation rate ranged from 3.2% in the North-East to 15.9% in the South and 18.3% on the Islands. The risk is also higher in cities (10.7%) than in towns and suburbs (7.7%) and rural areas (7.0%). The redistributive role of social transfers is weak and the capacity of social transfers (other than pensions) to reduce poverty remains low.

Income inequality is among the highest in the EU.

In 2018, the total income of the richest 20% of the population (top quintile) was more than six times higher than that of the poorest 20% of the population (bottom quintile). This ratio (S80/S20) has increased since the beginning of the crisis (5.2 in 2008) and it is well above the EU average (5.2 in 2018). The income share of the poorest 40% of the population has also been declining and stood at 19.3% in 2018 (compared to 20.3% in 2009). Income inequalities are higher in southern regions. The S80/S20 ratio varies from 4.0 in Bolzano and 4.1 in Friuli-Venezia-Giulia to 7.4 in Campania and Sicily.

The risk of poverty is higher for families with children.

In 2018, the *at-risk-of-poverty or social exclusion* (AROPE) rate for children (aged 0-18) was significantly higher in Italy (30.6%) than in the EU on average (24.0%). The gap widens further when only considering children aged 0-5 (30.6% against 22.0%). This rate is also higher for households composed of a single adult and one dependent child (41.0%) and for households with at least three dependent children (38.3%).

⁽³⁸⁾ Project launched by the Digital Transformation Team (<https://teamdigitale.governo.it/it/repubblica-digitale>) and mobilizing stakeholders to undertake actions promoting digital skills.

⁽³⁹⁾ European Commission, DG R&I, 2019

⁽⁴⁰⁾ For bibliography: Confindustria, The Factory, Fabbisogni 2019-2021

⁽⁴¹⁾ STEM stands for Science, Technology, Engineering and Mathematics

⁽⁴²⁾ Eurostat – labour Force Survey.

⁽⁴³⁾ Eurostat (table educ_uoegrad03, using selection ISCED11=ED5-8).

⁽⁴⁴⁾ Eurostat - Community survey on ICT usage and eCommerce in Enterprises.

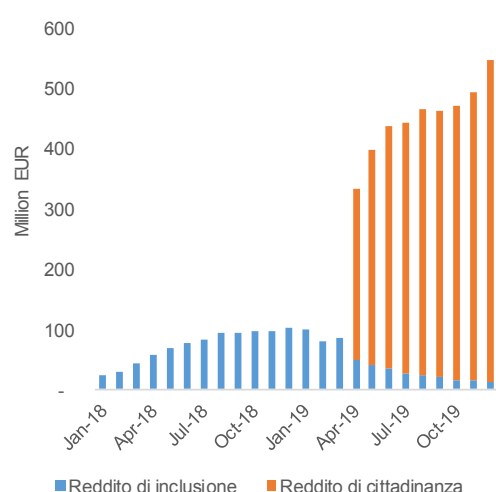
⁽⁴⁵⁾ Ibid.

⁽⁴⁶⁾ The changing nature of work and skills in the digital age, Luxembourg, 2019.

Moreover, children with non-Italian-born parents suffer from higher poverty (40.2% against 22%).

In 2019, the government introduced a minimum income scheme as a measure against poverty, inequality and social exclusion. The “citizenship income” (*Reddito di cittadinanza*, RdC) replaced the REI (*Reddito d’inclusione*) with a considerable increase in allocated resources. The estimated cost of the minimum income scheme amounts to €6.1 billion and €8.1 billion for 2019 and 2020 respectively (Graph 4.3.3). The RdC has three pillars: income support, labour activation measures and support from social services. The scheme targets households (including pensioners) with an *ISEE* - indicator of the equivalent economic situation that is lower than €9,360 and who have been residing in Italy for at least 10 years, of which the last 2 in a continuous way. According to the latest data up to December 2019 provided by the National Social Security Institute (INPS, 2020), one million households received benefits as part of the minimum income scheme, of which 125,860 households were pensioners. The benefit per household averaged €532 for working age households and €222 for pensioners).

Graph 4.3.3: Public spending on anti-poverty schemes



Source: INPS.

The minimum income scheme is an important step in fighting poverty, but more job integration and social inclusion is needed. The difference between the average monthly benefit per household with minors (€579) or without (€426) is relatively limited. The low effective

reach-out to vulnerable groups, including non-Italian citizens and larger households, may reduce the measure’s impact on poverty reduction. At the same time, the weakness of active labour market policies (Section 4.3.1) may hamper the job integration component of the measure.

Adequacy and access to quality social services remains a challenge. Social services lack resources and their availability in remote and rural areas is a major concern that can drive depopulation. The strengthening of social services is key for the success of the minimum income scheme. However, in the absence of additional resources the implementation of the new scheme risks overburdening social services, which are now required to provide coverage to a larger number of beneficiaries. Other groups of vulnerable persons who depend on social services but who may not be among the beneficiaries of the minimum income, such as the elderly or people with disabilities, may be particularly affected.

The risk of in-work poverty remains above the EU average. In 2018, 12.2% of persons employed faced the risk of poverty (above the EU average of 9.5%). The risk is higher for households with dependent children (15.5%) and workers in non-standard employment. In particular, part-time workers are more likely to be poor than full-time workers (19.5% against 10.9%). The divergence is even greater between workers with a fixed-term contract and workers with a permanent contract (22.8% against 8.6%). Empirical evidence suggests that the high share of households with low work intensity contributes to the high incidence of in-work poverty in Italy ⁽⁴⁷⁾.

Despite some progress, social protection for the self-employed remains limited. Italy has the second highest rate of self-employment in the EU (22% in 2018, against 14% in the EU on average). The Decree Law 101/2019 introduces a regulatory framework for working conditions and social protection for workers on digital platforms. It defines the work performed through digital platforms as subordinated work and introduces a minimum standard of protection for platform workers. It further stipulates that criteria for determining the total remuneration of workers may be defined by collective agreements.

⁽⁴⁷⁾ See also Peña-Casas et al. (2019).

Expenditure on old-age pensions accounts for almost half of total social spending. In 2017, the percentage of old-age pension expenditure over total social spending was 47% (EU average: 38.9%). While overall social spending is around the EU average, the expenditure on pensions stood at 15.9% of GDP in 2017, against an EU average of 12.6%. This percentage is expected to further increase following the introduction of the “Quota 100” reform in 2019, which lowers the minimum retirement age for certain categories of older workers. In 2018, the ratio between the median disposable income of people older than 65 and those younger was 1.01, against 0.92 for the EU average. Despite the overall high spending, the provision of pension benefits is uneven and traditionally focused on preserving income levels rather than on protecting against poverty. Following the 2019 reform, the latter goal should be pursued through the “*Pensione di Cittadinanza*” (citizenship pension) which is directly financed by the budget.

Access to affordable and adequate housing remains challenging due to the limited public investment in the housing sector. As a result, the stock of social and public housing is one of the lowest in Europe. The proportion of people living in overcrowded households is estimated at 27.8%, well above the EU average (15.3%). Moreover, the share of the population unable to keep their home adequately warm is very high (14.1% vs EU 7.3%). A policy strategy to promote affordable housing is missing, and in practice, third sector organisations often replace the public administration in providing housing services. The new minimum income scheme includes a rent contribution, up to €3,360 per year. However, the strict eligibility criteria of the minimum income scheme often exclude the homeless and particularly foreigners, who represent the majority of homeless people in Italy, from receiving housing benefits ⁽⁴⁸⁾.

Health

The access to and quality of health services are overall good despite below-average spending. Public expenditure on healthcare stood at 6.3% of GDP in 2016 (EU average: 6.8%) and universal and largely free health coverage contributes to

good health outcomes ⁽⁴⁹⁾. Long-term care spending in terms of GDP is slightly above the EU average (1.7% compared with 1.6%). Life expectancy is among the highest in the EU, but life expectancy in good health at the age of 65 is slightly below the EU average. Cancer care following diagnosis is effective and timely for patients (survival rates above the EU average). Potential challenges for public health include the impact of socioeconomic and educational disparities on health outcomes, the rising obesity rates for children and the risks related to anti-microbial resistance ⁽⁵⁰⁾. An ageing health workforce is likely to create skills shortages in the future, which are further exacerbated by admission restrictions to medical schools and by the emigration of an increasing number of medical school graduates. The number of nurses remains limited and the range of their professional tasks and responsibilities could be widened. Investment in medical infrastructure has decreased in the last decade and medical equipment is on average relatively old and unevenly distributed across hospitals and regions.

Regional disparities in health services remain significant. While overall low, self-reported unmet needs were three times higher in the South and on the Islands compared to the North-East in 2018. The number of hospital beds per inhabitants has been declining for the last decade and is below the EU average, with big differences across regions. While the level of standard health services is set at the central level, uneven fiscal capacity across regions and vague national guidelines favour disparities in the provision of health services and different levels of out-of-pocket payments. As a result, inter-regional mobility of patients is high. The margin for efficiency gains would be considerable, for instance by developing innovative models for health service provision, including digital solutions, and co-ordinated patient-centred responses (a set of standards, a smarter payment system and a stronger focus on prevention). According to the 2020 budget law, the government plans to increase funding for the National Health System by €240 million and in

⁽⁴⁸⁾ Jessoula, M. et al. (2019).

⁽⁴⁹⁾ The Italian national health service (“*Servizio sanitario nazionale*”) is second and fourth-best performer in the EU for preventable and treatable causes of deaths.

⁽⁵⁰⁾ For an overview of health challenges faced by Italy, see OECD/European Observatory on Health Systems and Policies (2019).

return abolish co-payments on consultations and examinations starting from September 2020.

Demographic trends

In 2018, Italy's birth rate reached an all-time low. With the EU's lowest birth rate, 7.3 children per 1 000 residents, Italy recorded for the tenth consecutive year a negative natural demographic balance. According to ISTAT (2019c), this trend is no longer counterbalanced by the positive but declining net migration flow, resulting in a net loss of population of 0.2 % in 2018, especially in the South. Correspondingly, the population is ageing quickly, with an old-age dependency ratio standing at 35.2 % in 2018 (up from 31.2 % in 2010). These demographic trends, together with the ongoing brain drain, could hinder both the short- and long-run economic outlook, including through a higher burden on government finances and potential adverse effects on productivity.

The effectiveness of family-supporting measures is low. Public spending on family and child mainly consists of cash benefits. Depending on their income and composition, families receive allowances such as the *Bonus Bebè* (up to €192 per month) and *Assegno per il nucleo familiare*. The 2020 budget increased the yearly voucher for pre-school attendance (*Bonus Nido*)⁽⁵¹⁾ by an additional €1,500 for lower income families (now at €3,000). However, available pre-school places covered on average only 24% of children under three years of age in the 2016/17 school year, with big regional variations (ISTAT, 2019d). This figure is far below the target of 33% set by the Council in its employment guidelines (2008-10). The different family-related social policy measures are often not coordinated and a comprehensive strategy is missing. The government has started to take action to enhance the system of child-related welfare transfers by facilitating access to childcare services for children aged 0-3, also through economic support. Compulsory paternity leave has been increased (from 5 to 7 days).

⁽⁵¹⁾ The *Bonus Nido* finances tuition fees related to nursery attendance. Fees can also be related to home support for children under three suffering from serious chronic diseases.

Mobility from southern to northern regions remains high. In 2018, more than 1.35 million inhabitants relocated within Italy. The South showed a negative internal migration rate varying from -5.2 per 1000 inhabitants in Calabria to -0.6 in Abruzzo. By contrast, the North registered population inflows. In particular, according to ISTAT, more than 240,000 young people with medium-high education level relocated from southern regions to northern ones between 2008 and 2017, worsening the brain drain in the former while mitigating it in the latter. Overall, since 2000, almost 2 million people left southern regions, mainly in search of work (SVIMEZ 2019).

Integrating people with a migrant background and attracting skilled workers are important challenges. The number of non-EU nationals remained constant in 2019. The number of new permits of stay decreased in 2018 (7.9% less than in 2017), mainly due to asylum permits (-41.9%) while permits for work and family reasons increased (19.7% and 8.2% respectively). Despite having a slightly higher employment rate than the native population (63.2% against 62.9%), non-EU citizens face a much higher risk of poverty or exclusion (47.7% against 25.2%) and in-work poverty (32.7% against 10%). The gap in early school leaving between native and migrant-background children is also one of the highest in the EU (39.4% against 12.3%). Moreover, the average skills level of migrants is lower than that of nationals⁽⁵²⁾. A comprehensive strategy for the integration of non-EU nationals, regardless of their legal status, is missing. The 2017 *Piano nazionale d'integrazione dei titolari di protezione internazionale* has not been fully implemented yet. The impact of the recent reform of the reception system for asylum seekers and the immigration and security laws on social integration needs to be further monitored. In 2019, with the aim of attracting or re-attracting workforce, indirectly including skilled migration, "Decreto Crescita" and the Fiscal Decree No. 124/2019 increased fiscal benefits for workers moving their fiscal residence to Italy.

⁽⁵²⁾ See Annex 4 in European Commission (2019) European Semester 2019/2020 Guidance Note: Integration of Migrants.

Box 4.3.1: Monitoring performance in light of the European Pillar of Social Rights

The European Pillar of Social Rights is a compass for a renewed process of upward convergence towards better working and living conditions in the European Union. It sets out twenty essential principles and rights in the areas of equal opportunities and access to the labour market; fair working conditions; and social protection and inclusion.

Social Scoreboard for ITALY						
SOCIAL SCOREBOARD					SDGs	
Equal opportunities and access to the labour market	Early leavers from education and training (% of population aged 18-24)				4 QUALITY EDUCATION 	
	Youth NEET (% of population aged 15-24)					
	Gender employment gap				5 GENDER EQUALITY 	
	Income quintile ratio (S80/S20)				10 REDUCED INEQUALITIES 	
	At risk of poverty or social exclusion (in %)					
Dynamic labour markets and fair working conditions	Employment rate (% of population aged 20-64)				8 DECENT WORK AND ECONOMIC GROWTH 	
	Unemployment rate (% active population aged 15-74)					
	Long-term unemployment rate (% active population aged 15-74)					
	GDHI per capita growth					
	Net earnings of a full-time single worker earning AW					
Social protection and inclusion	Impact of social transfers (other than pensions) on poverty reduction				1 NO POVERTY 	
	Children aged less than 3 years in formal childcare				3 GOOD HEALTH AND WELL-BEING 	
	Self-reported unmet need for medical care					
	[Individuals' level of digital skills]					
Critical situation	To watch	Weak but improving	Good but to monitor	On average	Better than average	Best performers

Members States are classified on the Social Scoreboard according to a statistical methodology agreed with the EMCO and SPC Committees. It looks jointly at levels and changes of the indicators in comparison with the respective EU averages and classifies Member States in seven categories. For methodological details, please consult the proposal for a Joint Employment Report 2020, COM(2019) 653 final; NEET: neither in employment nor in education and training; GDHI: gross disposable household income. Update of January 2020.

skilled young people also face challenges, as the employment rate of tertiary graduates remains low. Limited employment prospects are leading a growing number of graduates to emigrate abroad or from the Mezzogiorno to the northern and central regions. Fiscal incentives to hire young people are being extensively used, but their effectiveness and efficiency has not been yet sufficiently evaluated.

Actions taken through the Youth Guarantee can help to improve the labour market conditions of young people. More than 1.5 million young NEETs registered in the Youth Guarantee (YG) scheme. By the end of 2019, about 1.2 million were referred to the services. Around 60% of them completed a YG pathway, with an average placement rate of 55.5%. Personal services are being developed and individualised, thanks to a strong profiling methodology. In terms of outcomes, large disparities persist between the North and the South, where caseloads with difficult profiles are more frequent. Outreach remains a challenge, but the introduction of a new measure to reach out to the most vulnerable young people looks promising. While apprenticeships could be further developed, traineeships are the measure most implemented. Close monitoring could help to minimise the risk of traineeships being misused as an alternative to employment contracts.

The Social Scoreboard supporting the European Pillar of Social Rights points to many employment and social challenges in Italy. While improving, labour market conditions remain difficult. The unemployment rate is still high and employment and activity rates remain very low, especially for women. Young people and long-term unemployed face particular difficulties. While over the medium term the share of temporary contracts has increased, in the last year job creation has been driven by permanent contracts. The weak labour market conditions also have an impact on social outcomes. Gross disposable household income is still below pre-crisis levels. While the risk of poverty and social exclusion is declining, income inequality increased in 2018 (the S80/S20 indicator stood at 6.1). In-work poverty has been steadily increasing in recent years and stabilised at 12.2% in 2018. Access to services such as childcare and healthcare is around the EU average, though subject to large territorial differences.

Bringing young people into the labour market remains a major challenge. Youth unemployment, at 29.1% in Q3 2019, is one of the highest in the EU. Inactivity and high school drop-out rates are also a matter of concern. The rate of young people not in education, employment or training (NEET), at close to 20%, is the highest in the EU, and the share of early leavers from education and training increased to 14.5% in 2018. High-

4.4. COMPETITIVENESS, REFORMS AND INVESTMENT

4.4.1. INVESTMENT AND PRODUCTIVITY TRENDS*

Productivity

The modest evolution of aggregate productivity hides wide sectoral, firm-level and regional differences. Recent low GDP growth in Italy was driven by increases in employment rather than in productivity. Italy is one of the worst performers in terms of productivity growth among OECD countries (Eurostat data; OECD, 2019). Indeed, since 2000 labour productivity has nearly stagnated and total factor productivity (TFP) has slightly declined. Labour productivity in manufacturing has increased overall, although less than in peer countries, while it declined in services and in some southern regions. Moreover, productivity growth was concentrated among bigger exporting firms.

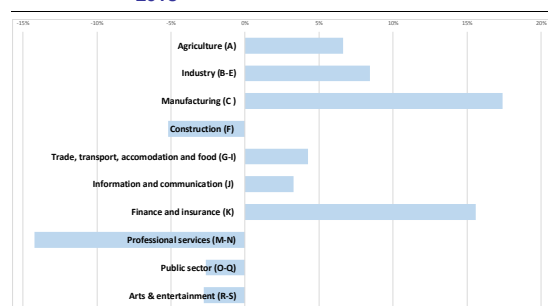
The impact on productivity of the secular shift in the economic structure was more negative in Italy than in peer countries. Between 1970 and 2016, productivity in Italian manufacturing increased on average by 2.9%, while its share in value added declined slightly from 20% to 19%. At the same time, the weight of services in Italy's value added increased from 51% to 70%, while productivity increased by only 0.16%. The poor productivity performance of services explains the gap with other EU countries (Bauer et al., 2020).

The uneven evolution of productivity across service subsectors warrants attention. Specific service sectors, accounting for a big share of gross value added (GVA), represented a major drag on long-term aggregate productivity growth⁽⁵³⁾. A breakdown of business services shows the overall negative trends of labour productivity during the 2008-2018 period in construction, professional activities and non-business services. Accommodation, food, transportation and trade, that represent a big share of Italian GVA, are among the low productivity growth subsectors (Graph 4.4.1). The analysis factors explaining this result could inform policy action.

The importance of the informal economy in services and the weak business environment help to explain their low productivity. The

informal economy reduces technical efficiency and productivity (ISTAT 2019e). Undeclared value added is estimated to amount to 11.9% of construction activities, 13.2% of trade, transport, accommodation and food and 11.3% of professional activities, while undeclared work concerns 22.7% of services to households (ISTAT 2019e). Low integration of services in the single market, regulatory barriers and other business environment issues (Section 4.4.3) help to explain poor performance in some of these subsectors.

Graph 4.4.1: **Productivity growth per hour worked, 2008-2018**



(1) NACE rev.2 categories in parenthesis.

Source: European Commission

Higher job creation in less productive sectors suggests scope for improving the overall labour allocation. Between 2008 and 2018, the share of labour slightly decreased in sectors where productivity increased, while it slightly increased in sectors with productivity losses. Between 2010 and 2017, there was a 0.4% job destruction in sectors where productivity was above average and 0.7% job creation in sectors where productivity was below average, notably accommodation and food and services to households (Eurostat data; OECD, 2019). There may be a trade-off between increases in productivity and employment, as well as between productivity and hours of work (Collwet et al., 2017; Brachet et al., 2012).

At the same time, job creation is higher among the most productive firms in the same sector. Analyses of labour reallocation within sectors between 2007 and 2013 point to ongoing improvements in allocative efficiency: firms at the top of the productivity distribution are creating more jobs and there is higher job destruction among less productive firms in both services and manufacturing (Bauer et al., 2020). Furthermore,

⁽⁵³⁾ However, the measurement of productivity in services should be interpreted with some caution.

growing firms are mostly those with higher labour productivity⁽⁵⁴⁾.

The high level of employment in small firms helps to explain the productivity gap with the EU. Productivity (both labour and TFP) of micro firms, especially in manufacturing, is systematically lower than in large firms⁽⁵⁵⁾ and over the 2000-2015 period this gap increased from 55% to almost 65% of top firms level. In services (characterised by a smaller average firm size) this gap is smaller, albeit significant, and stable over time. In services, medium sized firms often have a higher labour productivity than large firms (Compnet data 6th vintage). At the sectoral level, the higher productivity of large firms in manufacturing, retail, accommodation and food services are counterbalanced by the far higher number of smaller firms in the same sectors. The latter can also explain the negative productivity gap with the EU, particularly for construction and professional services (Bauer et al., 2020).

Framework conditions remain relatively unfavourable to firms' growth. High-tech and knowledge-intensive sectors such as computer programming, telecoms and scientific research have a particularly high share of high growth enterprises⁽⁵⁶⁾ (HGEs). In 2015-2016 these firms accounted for 64% of total employment growth (Flachenecker *et al.*, 2020). In Italy, HGE represented about 9% of all active firms (10% in the EU) and 12% of total employment in the business economy (15% in the EU) in 2016⁽⁵⁷⁾. Italian HGEs also tend to be under-represented in innovative industries relative to the EU average. This weak performance depends on a number of factors like the weak availability of entrepreneurial skills and linkages among SME innovators (Flachenecker *et al.*, 2020) and from the weak development of venture capital (Section 4.2).

Productivity growth is also limited by the modest and worsening business dynamism of Italian firms. Enterprise churn rate has been steadily decreasing since 2016 across manufacturing and services sectors, particularly for information and communication and professional services. Entry rates (without sole proprietorships) across industries show a small and widespread decrease between 2008 and 2016 (Bauer et al., 2020). Thus, stimulating business entry and business dynamism in general can help improve productivity growth (Bauer et al., 2020).

Italy's fragmented system of enterprises also lags behind in digitisation. More than half of Italian enterprises are characterised by low investment in digital technologies and very low digitisation. In 2019, 37.8% of Italian enterprises had a low digital intensity index and 41.8% a very low one (compared to EU averages of 35.6% and 38.6% respectively)⁽⁵⁸⁾. Moreover, the penetration rate of artificial intelligence is around one quarter of the EU average (Gonzalez Vazquez *et al.*, 2019). The causes include the fragmentation of the Italian productive system into small firms, the discontinuity and slow implementation of some national policies and the low level of both basic and advanced digital skills (Section 4.3). There are also delays in terms of ultrafast broadband coverage (24% of households in Italy vs 60% in the EU)⁽⁵⁹⁾ and take-up (13% in Italy, 26% in the EU) that are key elements to strengthening the digital economy⁽⁶⁰⁾. Gaps are larger in rural areas, also when it comes to fast broadband coverage (43.4% of the households vs national and EU average of 90% and 52.8%, respectively). On the other hand, Italy has completed, already in 2018, the auction for the assignment of spectrum in the 5G pioneer bands, while 5G trials have been ongoing since 2017⁽⁶¹⁾.

Heterogeneity across firms and sectors calls for tailored policy action. Poor performance by smaller firms confirms the need for policies to help

⁽⁵⁴⁾ The within-sector covariance between the relative productivity and firm size proxies to what extent resources are allocated to the most productive firms in a given sector. Estimates of this variable based on firm level data (Compnet) show an improvement in allocative efficiency.

⁽⁵⁵⁾ Micro and large firms refer respectively to those employing less than 10 or more than 249 people.

⁽⁵⁶⁾ Firms with at least 10 employees in the beginning of their growth and average annualised growth in number of employees greater than 10% per annum over a 3-year period.

⁽⁵⁷⁾ The share of HGEs is based on the number of firms' employees (and not sales growth).

⁽⁵⁸⁾ The Eurostat Digital Intensity Index (DII) 2018 measures the availability at firm level of 12 different digital technologies.

⁽⁵⁹⁾ Digital Economy and Society Index (DESI) 2019, Italy Country report, Telecoms Chapters (<https://ec.europa.eu/digital-single-market/en/scoreboard/italy>). Data is referred to 2018.

⁽⁶⁰⁾ European Commission, Digital Scoreboard 2020. Data on take-up refers to 2019.

⁽⁶¹⁾ Digital Economy and Society Index (DESI) 2019, Ibid.

businesses grow and adopt productivity-enhancing solutions (e.g. digital innovations accompanied by suitable human capital), increase knowledge exchange, exploit synergies and overcome fragmentation along the value chain that remains a main weakness in the process of digitalisation in manufacturing ((ISTAT 2019g; Confindustria 2018, 2019). In addition, the low performance of specific sectors points to the need to remove major obstacles to productivity including administrative burden and regulatory restrictions (Section 4.4.2).

Current policy measures are sustaining the digitalisation and innovation of firms, but there is room for improvement. Digital innovation hubs promote awareness of digital investment opportunities among SMEs, and the National Competence Centres support industrial research and experimental development, relevant training and technology transfer. The outreach, coordination and evaluation of these initiatives are key to strengthening innovation performance. Implementation delays (e.g. in setting up competence centres) reduce the impact of these measures. To ensure their relevance and effectiveness, the measures need to be more selective ⁽⁶²⁾. The weight of large firms among beneficiaries of policy measures remains high (ISTAT 2019g). A cost-efficiency assessment of these measures could help streamline tax incentives, but is not available yet.

The discontinuity of policies to support knowledge transfer and innovation ecosystems hampers innovation performance. In 2019, only 2% of Italy's publications were public-private co-publications (a proxy for research-business collaboration), compared to 4% for the EU. Moreover, the share is below the EU average in fields such as life, medical and engineering sciences. However, recent initiatives, such as technology clusters and private public partnerships, have been discontinuous and fragmented, thus engendering uncertainty.

⁽⁶²⁾ For instance during its first year of application the “super-ammortamento” had a positive impact on firm investment. However, its impact on adoption of high technology / knowledge intensive capital was more nuanced (ISTAT 2019g) and thus triggered the exclusion of transport equipment.

Investment

As investment is key to boosting productivity, the positive developments in private and, more recently, public investment are encouraging.

Public investment continued declining, to 2.1% of GDP in 2018, from 2.2% in 2017 (and 3% in 2008). However, data on the number of projects and investment-related payments from local administrations suggest a change in trend since the end of 2018. Moreover, new additional funds have been set up in the 2020 Budget Law to fund public investment at central and local level and for green investment. On the other hand, limited progress has been achieved in improving administrative capacity (Section 4.4.2). Business investment reached 10.2% of GDP in 2018, slightly below its 2008 value (10.7%). More specifically, the investment rate of non-financial corporation has been increasing since 2014 and reached 21.8% in 2018, still below the 2007 value (23.5%).

Fixed investment is recovering slowly after the crisis, while the intellectual property rights (IPR) share has increased.

After the 2014 dip, investment has been consistently growing and amounted to almost €300 billion in 2018 (17.7% of GDP), still almost 60 billion below pre-crisis levels, when it stood at 21% of GDP. The long lasting reduction concerns in particular construction, notably in its non-residential component, while the recovery in machinery and transport equipment— supported by Impresa 4.0 policy measures, among other things - is roughly complete. IPR increased to 17.3% of total investment in 2018, almost 5 pps more than in 2000. This places Italy in the medium range among OECD countries, but below EU peers like France and Germany (OECD 2019).

Non-national accounts (non-NA) intangible investment lags behind.

While Italy ranks above average among EU-15 countries in terms of the intangible investment-to-capital ratio, it appears to lag behind in terms of non-NA intangible investment (33% of investment-to-capital ratio versus an average of 36% in 2015) (Bauer et al., 2020). The investment rate in brands has been especially low. As non-NA intangibles have a major role in production, the contribution from intangible capital growth to productivity growth is quite weak in Italy (less than 0.1%, about half the EU average).

Box 4.4.1: Investment Challenges

Since 2015, private investment is moderately recovering, mostly for equipment, but it remains substantially below the pre-crisis level and euro area average. The weakness of investment is related, among other things, to weak demand, an inefficient credit market, a relatively low share of tertiary educated people and an insufficiently supportive business environment. Public investment declined steadily and only recently started to show signs of recovery. The high stock of general government debt continues to weigh on public investment. Regional disparities particularly in innovative investment persist.

Table 4.3.1a: Assessment of barriers to investment and ongoing reforms

Assessment of barriers to investment and ongoing reforms	Regulatory/ administrative burden		Financial Sector / Taxation	Taxation	CSR
	Public administration	CSR		Access to finance	CSR
	Public procurement / PPPs			Cooperation btw academia, research and business	
	Judicial system	CSR		Financing of R&D&I	CSR
	Insolvency framework			Business services / Regulated professions	CSR
	Competition and regulatory framework	CSR		Retail	
Labour market/ Education	EPL & framework for labour contracts		Sector specific regulation	Construction	
	Wages & wage setting			Digital Economy / Telecom	
	Education, skills, lifelong learning	CSR		Energy	
				Transport	

Legend:	
	No barrier to investment identified
CSR	Investment barriers that are also subject to a CSR
	No progress
	Limited progress
	Some progress
	Substantial progress
	Fully addressed

Source: European Commission

Several factors play a role in holding back investment and productivity growth. Inefficiencies in the public sector remain a barrier to investment, particularly for public investment at local level (Section 4.4), because of weak administrative capacity. The over-reliance of firms on bank credit and the weaknesses of several banks constraints on access to finance, especially for smaller and innovative firms (Section 4.3). Weak human capital and skills mismatches, an insufficiently supportive business environment, the high tax burden on firms and the uncertainty of the policy framework also play a role to holding back investment (Section 4.4).

Selected barriers to investment and priority actions underway

1. Italy's public sector's weak administrative capacity, including inadequate human capital, continues to represent an investment barrier, especially at local level, and prevents for the implementation of EU funds. Specialised profiles and technical assistance to central and local administrations could help unlock public investment. Two public agencies (*Struttura per la progettazione* and *Investitalia*), set-up in early 2019 to assist central and local administrations with the planning and implementation of investment projects, are not operational yet (Section 4.4.2).

2. The availability of tertiary graduates, particularly in fields such as computing, science and engineering, is relatively low and represents a barrier especially for innovative investment. Undereducated employees and managers play a role in limiting the potential for investment and innovation. Tertiary education remains under-financed and biased towards non-scientific and non-technical fields.

R&D expenditure remains relatively low. Public R&D expenditure reached 0.5% of GDP in 2018, the second lowest level among EU15 countries, and on a declining trend since 2013. While business R&D expenditure has been increasing in the last years reaching 0.86% of GDP in 2018, its level remains significantly below the EU average (1.41%). As a consequence, the number of researchers per thousand in the active population employed by business is only half the EU average (2.3% against 4.3% in 2017). Since 2017 most of the R&D growth is due to the activity of new firms investing in R&D, while firms that were already R&D performers recorded stable expenditure. Preliminary data for 2019 show an increase of private R&D expenditure.

The lack of Science, Technology, Engineering and Mathematics graduates risks being critical in the near future. Confindustria's forecast (forthcoming) shows that ICT, chemical and machinery are sectors in which new jobs will be created in the coming years. The interface with the Smart Specialisation Strategies can help to address the skills and education mismatch. Some pilots are taking place in Emilia Romagna Region and Trento Province to connect secondary and tertiary curricula to the regional smart specialisation strategies' domains.

The contribution of small firms to investment shrank after the crisis. In 2008, micro-firms and firms with less than 20 employees accounted for 38% of private investment in industry, construction, trade and services. By 2017, the share had gone down by 10 pps. due to factors linked to firm demography but also to higher barriers smaller firms face in access to finance (Bank of Italy, 2019a).

Distressed firms weigh negatively on investment and productivity. The share of distressed firms is estimated at around 8 % in 2014, with the share slightly higher in services than in manufacturing. In 2013, these firms absorbed about 10% of the capital stock (Bank of Italy, 2019a). By withholding resources, distressed firms have the potential of affecting employment growth and the investment rates of other more productive firms, thus reducing aggregate productivity. For Italy, Bauer et al. (2020) find a negative impact on employment growth and the investment rate,

although effects on labour productivity and TFP appear smaller than in other Member States.

The government recently improved the focus of the measures to support investment and competitiveness. The previous plan Impresa 4.0 has been renamed Transizione 4.0, to signal the new focus on green investment (Section 4.5) in addition to innovation. Investment in green technology can also lower material's costs. Tax incentives to promote investment in physical and intangible capital have been extended for the next years and transformed into a tax credit, which could increase the number of beneficiary firms by up to 40% ⁽⁶³⁾. The new tax credit also intends to support the circular economy and environmental sustainability, and spending in skills enabling the digital transition. Investment in key technologies, such as Artificial Intelligence and cybersecurity, has been announced in the National Innovation Plan 2025, next to key initiatives in the field of High Performance Computing. The Plan also stresses the role that the public administration and governance could play as drivers of the country's digital transition. Investment in digital infrastructure and R&D would contribute in achieving SDG 9 – Industry, Innovation and Infrastructure.

4.4.2. REGULATORY ENVIRONMENT AND INSTITUTIONAL QUALITY*

Public administration and business environment

The overall business environment has improved over the last decade, but important challenges persist. The 2020 Doing business indicators confirm that Italy's business environment slowly improved over the last decade but still lags behind peer countries (graph 4.4.2). Getting credit and enforcing contracts has one of the lowest scores (below 50). Paying taxes and resolving insolvency also have relatively low scores (about 63-64) but at the same time registered higher than average improvements (up from about 51 in 2010). SMEs are among those most affected by the non-supportive business environment. According to the European Commission's SME Performance

⁽⁶³⁾ Letter of the Minister of Economic Development Patuanelli to "Il Sole 24 ore", 18 December 2019.

review, Italy has one of the lowest scores in the EU for responsive administration, state aid & public procurement.

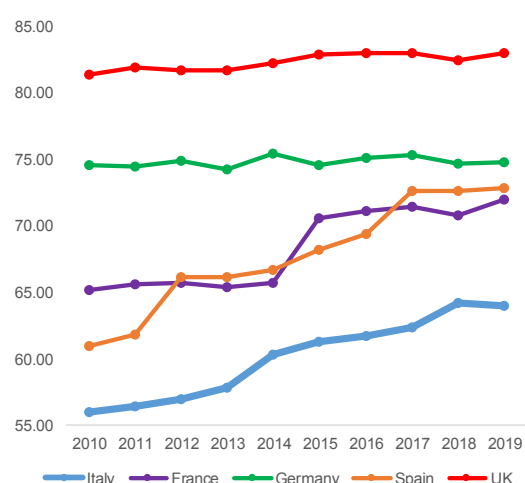
Payment performance between private firms is deteriorating. Delays in payments create financial constraints for suppliers, worsening their liquidity management. Only 35.5% of payments are executed within the contractual deadline while excessive delays (beyond 30 days) have more than doubled since 2010⁽⁶⁴⁾. This is particularly true for larger firms: only 12% of larger businesses (vs 36% of micro SMEs) pay their invoices on time. The construction sector is particularly affected, by late payments both by other businesses (B2B) and by public administration which, among other challenges ⁽⁶⁵⁾, contribute to its low performance (Section 4.4.1).

New policy initiatives have been put forward to improve the business environment. Following the 2015-2017 simplification agenda, a new agenda (2018-2020) is being implemented to support firms by simplifying the authorisation processes. However, an assessment of the actual impact of the first agenda is still missing. Moreover, the ICT plan for public administration and the online portal for national incentives are meant to further simplify the procedures and increase public administration's (PA) responsiveness to business.

Measures to improve public administration are ongoing. While the public administration reform of 2015 is being operationalised, the “concretezza” bill was adopted in June 2019 establishing a support group to help administrations with the actual enforcement of the reforms and allowing the complete turnover of public employment. Moreover, in 2019 two draft laws were announced to simplify and codify the current legislation, and to improve public employment, including at management level. These measures complement those adopted with the 2015 reform on recruitment procedures, the planning of competence needs, skills and performance evaluation and whose operationalisation is still ongoing. The new set of measures, if properly and swiftly enforced, could

be beneficial in terms of efficiency and effectiveness of the public employment.

Graph 4.4.2: Evolution of the “ease of doing business indicator” (100=top performer)



(1) The indicators have been recalculated taking into account only EU Member States' performance
(2) The methodology was changed in 2015

Source: European Commission calculations on World bank - Doing Business data

The digitisation of public services is progressing. Italy is slowly improving its performance in offering digital public services for the public and firms⁽⁶⁶⁾. However, in 2019, online interactions between public authorities and the public were still low: only 32.3% of Italian internet users opted for online forms and procedures (EU average: 67.3%)⁽⁶⁷⁾. The creation of a new Ministry of Technological Innovation and Digitisation might support digitisation by better coordinating the digital transformations of the PAs, especially at local level. Moreover, in 2020 the government will launch the *IO.it* smartphone app. It is expected to make some public services, both at national and local level, easily accessible through mobile devices and in doing so increase the uptake. To be successful it will need to be quickly extended to other services so that it acts as a proper gateway. Finally, the adoption in March 2019 of the new three-year plan for information

⁽⁶⁴⁾ Osservatorio Pagamenti CRIBIS 2019 <https://www.cribis.com/media/80596/studio-pagamenti-italia-q1-2019.pdf>

⁽⁶⁵⁾ Add reference OSSERVATORIO

⁽⁶⁶⁾ In 2019, Italy's ranking went up from 19th to 18th in the digital public services dimension of the Digital Economy and Society Index (DESI).

⁽⁶⁷⁾ Eurostat, ICT usage in households and by individuals.

technology in public administration 2019-2021⁽⁶⁸⁾ represents another important development.

An integrated strategy to strengthen administrative capacity is needed. The government and stakeholders⁽⁶⁹⁾ identified the weak administrative capacity, especially at local level, as one of the main challenge for the PA, especially when dealing with investment, implementing public procurement rules and absorbing EU funds⁽⁷⁰⁾. Most Italian public employees have a legal-administrative background but lack economic and technical skills. Moreover, almost 30 % of public employees said they do not have access to supporting material (less than 10 % in all peer countries European (European Commission 2016). To tackle this issue, two public agencies (“Struttura per la progettazione” and “Investitalia”) were set-up in early 2019 to assist central and local administrations with the planning and implementation of investment projects. Moreover, a number of training initiatives have been launched by various ministries and public bodies based on their different priorities. However, the agencies are not operational yet, although personnel selection is progressing, while trainings are only for a small portion of employees and are not centrally coordinated.

Italy has not yet completed key reforms to tackle inefficiencies in the public procurement system. The numerous attempts to reform the system generated uncertainty for local administrations and firms alike, while only marginally countering fragmentation. Following two stakeholder consultations in 2018 and 2019, the government will reintroduce a single regulation. This implies significantly scaling down the role of the anti-corruption’s guidelines. The government also announced its intention to review the code again in 2020. There has been no progress in the coordination of public procurement policy (European Commission, 2019a). These issues prevent Italy from going further in streamlining and rationalising its procurement as well as

making it transparent, despite significant efforts in recent years by both the central and local authorities (e.g. initiatives to improve aggregation, the creation of a contract register and technical work to build a coherent e-procurement system). An efficient public procurement system could also help preventing the infiltrations of organised crime, which are a serious concern in various regions, also to the detriment of overall institutional quality.⁽⁷¹⁾

Administrative capacity also affects the correct implementation of the single market framework. In 2018, the number of notifications of draft technical regulations in Italy (82) was much lower than in peer countries (e.g. 199 in France and 182 in Germany). Public administration’s limited awareness of the obligations under the Single Market Transparency Directive⁽⁷²⁾ and the lack of coordination might play a role. Knowledge gaps affect in particular the Ministry of Infrastructure and Transport, the agencies for communication, digital affairs, aviation and railway security. Lack of notifications of new rules may generate technical barriers to trade, by preventing their preliminary screening by the Commission and other Member States. Moreover, poor coordination and resource constraints continue to limit the effectiveness of market surveillance of goods and the number of non-compliance findings shared with other Member States remains low, affecting the whole single market (European Commission 2019a).

Justice and corruption

Despite recent improvements, the low efficiency of Italy's civil justice system remains a challenge. The time to resolve civil and commercial litigious cases in Italy remains the highest in the EU at higher instances⁽⁷³⁾. Lengthy civil proceedings can hinder entrepreneurial activity and foreign direct investment (Lorenzani

⁽⁶⁸⁾ It follows and updates the previous plan for 2017-2019.

⁽⁶⁹⁾ Several ministries (including the Ministry of Finance, Ministry of Infrastructure, Ministry of the South) and stakeholders (Confindustria, Bank of Italy, SVIMEZ)

⁽⁷⁰⁾ As of December 2019, only 29% of European structural funds (against an EU average of 39%) and 2.8% of the national Development and Cohesion Fund programmed for 2014-2020 had actually been spent in Italy

⁽⁷¹⁾ In 2018, 23 municipalities body were dissolved for the infiltration of organised crime (mafia), of which 11 in Calabria, 5 in Sicily, 4 in Puglia and 3 in Campania. In 2017, 21 municipalities body were dissolved for the infiltration of organised crime (mafia), of which 12 in Calabria, 4 in Campania, 2 in Puglia, 2 in Sicily and 1 in Liguria (Yearbook of official statistics of Interior Ministry, 2019, and 2018; DNA National Report 2019, pp.230ff).

⁽⁷²⁾ Dir. (EU) 2015/1535.

⁽⁷³⁾ Namely, 863 days in second instance and 1266 days in third instance in 2018.

and Lucidi, 2014). During 2018, disposition time decreased by 4% at first instance (Ministry of Justice), 3.4% at second instance and 2.5% at the Court of Cassation (European Commission, 2020c). In second instance, that was mainly due to clearance rates above 100%, despite a steady increase in appeal rates for civil cases from 19% in 2014 to 24% in 2018. At the Court of Cassation, the recently observed positive trend may soon be reversed by a marked rise in incoming cases in the field of international protection (+450% in one year) and tax disputes (+10% in one year), with very high rates of inadmissibility and rejection.⁽⁷⁴⁾ Concerns thus remain about the quality of Italy's tax justice system at first and second instance, and the Court of Cassation managed to maintain a clearance rate around 100%, mainly by employing additional judges in its tax section. Reforms are under discussion to restructure and further specialise the first and second instance tax courts. Concerns also remain regarding the differences in performance between courts and the high number of vacancies for administrative staff. Overall, some civil justice reforms passed in recent years and organisational measures are starting to translate into efficiency gains in terms of lower backlog and trial length. Nevertheless, in order to reduce trial length there is still ample room to ensure a more efficient management of cases and limit unfounded appeals, including to the Court of Cassation.

A comprehensive draft reform to streamline the civil procedure is under discussion. Adequate enforcement of simpler procedural rules, coupled with a greater use of effective case management practices, could help to decisively speed up civil trials. A draft law⁽⁷⁵⁾ enabling the government to substantially streamline the civil procedure was approved by the Council of Ministers in December 2019 and now has to be passed by Parliament. The proposal extends the use of simplified procedures and the range of cases where a single judge is competent to adjudicate. It also removes the admissibility filter for appeals, as it failed to attain the expected result of reducing litigation in higher

instances; reforms the rules for real estate expropriation and the division of community property; and makes further progress in digitalising civil proceedings. Moreover, the 2020 draft budget allows the hiring of new judges as of 2020, which, coupled with more flexibility in the allocation of judges where most needed through 'flexible task forces', could reduce the backlog in courts with a high number of pending cases, especially at second instance.

Italy's anti-corruption framework is improving but needs to be completed. Italy has recently improved its anti-corruption system by, among other things, adopting a new framework to protect whistleblowers, giving the National Anti-corruption Authority (ANAC) a stronger role, and passing an anti-corruption law in January 2019. Influence peddling has been criminalised in line with international standards and, given the rising contiguity of corruption with organised crime unveiled by the prosecution service, the applicability of investigative tools for the fight against organised crime has been extended to corruption cases. Nonetheless, embezzlement in the private sector remains only partly criminalised; provisions against lobbying do not apply to government and parliament members; and there is no regulation sanctioning conflict of interest for elected public officials. ANAC has continued its efforts to prevent corruption, also via its 2019 guidelines to regulate conflict of interest. There has been a rise in whistleblowing, but its implementation in the private sector remains problematic due to the voluntary nature of a compliance programme.⁽⁷⁶⁾ Finally, amendments to the Public Procurement Code may increase the degree of discretion in procurement proceedings, by raising the ceiling for direct awards from €40,000 to €150,000. It is also worth noting that the recent improvements in Italy's anti-corruption framework mentioned above are still only to a limited extent reflected by perception indicators. Italy ranked 62nd in the Worldwide Governance 2019 indicator of control of corruption and received a score of 53% in Transparency International's 2020 corruption perception index, both among the worst in the EU and with only a marginal improvement compared to the year before. Moreover, in 2018, 91% of firms consider corruption to be widespread in the country (EU

⁽⁷⁴⁾ As a result, around 19% of all civil appeals to the Supreme Court were declared inadmissible in 2019, and around 50% of the others were rejected (Court of Cassation, 2020). The share of tax-related matters on the pending cases at the Supreme Court steadily increased from 44% in 2014 to 56% in 2018.

⁽⁷⁵⁾ Atto Senato n. 1662. "Delega al Governo per l'efficienza del processo civile e per la revisione della disciplina degli strumenti di risoluzione alternativa delle controversie".

⁽⁷⁶⁾ ANAC's 2019 report on whistleblowing.

average: 63%). In this regard, 81% and 77% of firms believe that it affects public procurement managed by national and local authorities respectively (EU average: 53% and 54%); and 54% still regard it as a hindrance to doing business (EU average: 37%), which is 2 percentage points higher than in 2017 ⁽⁷⁷⁾.

The low efficiency of criminal justice at the appeal level continues to hinder the prosecution of corruption, in the absence of an urgent reform of criminal trials. Italy's long disposition time for criminal cases continues to raise concerns at the appeal level (860 days), despite a decrease by around 6% over 2017-2018. Instead, positive results in containing trial length have recently been recorded by first instance courts (382 days) and the Court of Cassation (156 days) despite higher than EU average litigation. A welcome reform stopping the statute of limitations after a first-instance ruling, which is in line with a long-standing country-specific recommendation, entered into force in January 2020. As a result, measures to increase efficiency will be needed especially at the appeal level, ⁽⁷⁸⁾ where still around 25% of cases were declared time-barred in 2018. The government has been discussing for some time now a much-needed reform of criminal procedure, including a revision of the notification system; a broader use of simplified procedures; a limitation to the possibility of appealing by requiring a new power of attorney for lawyers; the introduction of a single judge in second instance for direct summons; a broader use of e-tools for filing documents; and simplified rules on evidence. Swift adoption of these measures, coupled with others to tackle the large number of cases at appeal courts, could improve the efficiency of criminal justice and the effectiveness of the fight against corruption. Instead, the possible introduction of new cases of judges' disciplinary liability should be carefully monitored as regards their impact on the functioning of the judiciary.

⁽⁷⁷⁾ Flash Eurobarometer 482 on "Businesses' attitudes towards corruption in the EU" of 9 December 2019.

⁽⁷⁸⁾ Clearance rates have been steadily hovering around unity in the past 10 years.

4.4.3. SINGLE MARKET INTEGRATION AND SECTORAL PERFORMANCE*

Intra EU trade for goods represents the biggest share of Italian imports and exports, but the share of overall intra-EU trade is shrinking. In 2018 trade within the single market accounted respectively for 56% of total exports and 59% of total imports (€261 and 250 million, i.e. 32% of GDP overall). While Italy remains one of the Member States with the highest intra-EU trade share⁽⁷⁹⁾, its relative weight on overall EU exports went down from 8.4% to 7.4% and the share of EU imports from 8.3% to 7.3%.

Participation in the single market for goods has proven beneficial for Italy but challenges with the enforcement persist. Estimates show that integration in the single market for goods led to an average 6.5% increase in intra-EU trade for Italy (WIFO 2019). The impact was particularly high in the textiles, leather products, transport equipment, food and beverages sectors and slightly negative for rubber, machinery or basic metal industries. WIFO also estimates there is a significant potential for additional increases if Italy were to fully comply with the single market legal framework. However, the transposition deficit, although still moderate, doubled from 2018, and most of the indicators (in particular the handling of infringements) remain below EU average performance. The ineffective enforcement of single market rules increases uncertainty and reduces incentives for foreign and domestic investment.

Participation in the single market for services is much less developed. Italy has one of the lowest shares in the EU of total import/export of service over GDP (around 6% in 2018). Exports and imports of services amounted respectively to €59 and 69 million in 2018 and have been growing at a much slower pace than the EU average.

Italy has relatively low integration in the EU value chain, despite its potential to increase the country's productivity. Looking at the share of regional value-added, Italy ranks 19th among Member States for services, 12th for manufacturing and 22nd for utilities (European Commission

⁽⁷⁹⁾ The Member States' contribution (in value and %) to the intra-EU trade.

2019i). The finding suggests that Italian firms may not be fully exploiting the opportunity offered by the single market to reorganise the production process in order to maximise productivity. For Italy, participating in intra-EU value chains tends to translate into an higher domestic added value than participating in extra-EU ones (ISTAT 2019g), confirming the relevance of single market integration as a tool to increase productivity.

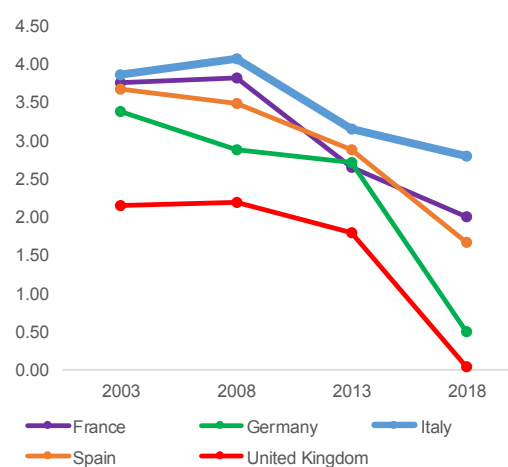
Removing restrictions to competition and easing regulation in the service sector would benefit the economy as a whole. Services account for 70.9% of value added, 69.9% of employment and represent 40% of the manufacturing value chain (ECSIP 2014). Yet productivity growth is very low in most service sectors (Section 4.4.1). Increasing competition and easing the entry of new firms would benefit consumers and boost productivity – AGCM 2019 and European Commission⁽⁸⁰⁾. Nevertheless, unnecessary regulatory hurdles weigh on business activity and competitiveness (World Economic Forum 2019).

The 2015 Competition Law was the last attempt to remove restrictions, and its implementation is still ongoing. Since the law's adoption of the law in August 2017, no more pro-competition efforts have been made. Implementation is still ongoing while some backtracking measures have been adopted. Beyond a number of implementing decrees still pending, the phasing out of regulated tariffs in the energy sector has again been postponed until 2022 (they were supposed to enter into force mid-2020, following another postponement from mid-2019). Moreover, restrictions on prices were re-introduced in 2018 for regulated professions (equo compenso) and backtracking measures on the retail sector are under discussion. The government so far has not announced any new initiatives on competition policy.

Market access restrictions remain high for regulated professions and the retail sector. According to the European Commission⁽⁸¹⁾, the level of restrictiveness in Italy is higher than the EU average for engineers, architects, accountants, real estate agents, tourist guides and patent attorneys. The 2018 OECD PMR indicator broadly

confirms this result⁽⁸²⁾. It also identifies Italy as one of the most restrictive countries in the EU for the retail sector (double the EU average). The European Commission's retail restrictiveness indicator also places Italy among the most restrictive Member States, particularly for its regulations on the opening of new shops⁽⁸³⁾.

Graph 4.4.3: OECD Product Market regulation indicator evolution



(1) The methodology changed in 2018 edition

Source: OECD

Overregulation affects market dynamics and may weigh on the retail sector's performance. Even though the 2012⁽⁸⁴⁾ reform removed significant territorial and quantitative restrictions, regional and local regulations still impose strict conditions in the authorisation process for the opening of new shops. Restrictions remain for sales promotions and the distribution of some products, including non-prescription drugs. Even for shops' opening hours, fully liberalised in 2012, draft legislation bringing back limits on Sunday trading is pending in Parliament. These regulations might make it difficult for retailers to develop new business models, adjust to changing consumer'

⁽⁸²⁾ The OECD sector Product Market Regulation indicators measure regulatory barriers to firm entry and competition at the level of individual sectors, with a focus on network industries, professional services, and retail distribution. Available at: <https://www.oecd.org/economy/reform/indicators-of-product-market-regulation/>.

⁽⁸³⁾ Italy is the most restrictive Member States for the regulations on the establishment of new shops and second most restrictive in the overall score, covering both retail establishments and the daily operations of retailers.

⁽⁸⁴⁾ Decree Law 201/2011, <https://www.normattiva.it/uri-res/N2Ls?urn:nir:stato:decreto:legge:2011;201>

⁽⁸⁰⁾ SWD(2019) 444 final

⁽⁸¹⁾ COM(2016) 820 final; SWD(2016) 436 final).

preferences and compete in an increasingly digitalised environment (European Commission 2018b). Backtracking on the liberalisation could have negative economic effects on the sector. Between 2006 and 2016, municipalities where shops are allowed to stay open 24/7 registered higher growth rates in the retail sector's employment and in the number of shops (Bank of Italy, *forthcoming*). Restricting Sunday trading could also make it more difficult for offline retailers to compete with e-commerce.

Italy still lacks a comprehensive regulatory approach for the collaborative economy. Despite the growth potential, regulatory initiatives for the collaborative economy have been fragmented and non-supportive for the sector's development. For collaborative transport, within the 2015 Annual Competition Law, the government was delegated to adopt a comprehensive revision of the rules for private hire vehicles (PHVs) to promote competition, increase the quality of the service and let the offer adapt to the new technologies/modalities connecting passengers and drivers. However, the delegation expired and no legislative decrees were adopted. Furthermore, recently adopted legislation has ultimately introduced restrictions for PHVs (in force since 2008 but suspended until 2018) and provides that rules for online intermediaries in the area of transport are to be adopted through a separate decree⁽⁸⁵⁾. In the accommodation sector, some provisions adopted recently⁽⁸⁶⁾, including the obligation for online platforms to collect taxes on behalf of non-professional stakeholders, have increased legal uncertainty.

The system for granting limited authorisations does not follow pro-competition and transparency principles. "Concessions" to use public areas for providing a wide range of services (including retail and tourism) are still not being granted on the basis of open selection procedures. This implies potential negative effects on the proper market evaluation and the quality of the service. Also, existing concessions are being repeatedly extended by the legislator, contrary to EU and national case law⁽⁸⁷⁾. For example, the

legislator extended prior beach concessions for 15 more years, renewed street trade concessions until the end of 2020 and even excluded the street trade sector from the application of Directive 2006/123⁽⁸⁸⁾.

4.4.4. REGIONAL DISPARITIES

The regional divide between the North and South continues to widen. The partial recovery of 2015-2017 also touched the less developed regions but did not reduce the high level of regional disparities. In 2018, growth was sluggish and regional disparities between northern and southern regions widened again. As a result, southern regions continue to substantially lag behind, with GDP per head below 75% of the EU average. In the two poorest regions, Calabria and Sicily, GDP per head is below 60% of the EU average.

Public investment decreased in the South. Between 2008 and 2018, public spending increased in the Centre-North (+1.4%) and decreased significantly in the South (-8.6%) (SVIMEZ, 2019). Public investment in Italy fell from 2.9% of GDP in 2007 to 2.1% of GDP in 2018, mainly due to a decrease of investments at local level, particularly in less developed regions. In 2018, investment in public works in the South (€102 per capita) was less than 40% of the level in the Centre-North (€278 per capita) and the share of public investment dedicated to the South was 29.6% (down from 39.2% in 2000) (SVIMEZ 2019). With reference to Italy's commitment for national public investments in the South over 2014-2020 set in the Partnership Agreement⁽⁸⁹⁾, concerns were raised about the country capacity to comply with the additionality requirement for European Structural and Investment Funds, together with recalling the decisive importance of stepping up public investment to meet the needs of its less developed regions.

Recent measures are expected to boost investment in the South. The 2020 budget strengthens the "34% investment clause for the South", which aims to reduce regional disparities in the allocation of public capital expenditure. The

⁽⁸⁵⁾ Decree 135/2018, as modified by Law 12/2019.

⁽⁸⁶⁾ Law Decree No. 50/2017

⁽⁸⁷⁾ See C-458/14 –Promoimpresa srl and Others v Consorzio dei comuni della Sponda Bresciana del Lago di Garda e del Lago di Idro and Others.

⁽⁸⁸⁾ Law 205/2017 and Law 145/2018

⁽⁸⁹⁾ In compliance with article 15.1.B.ii of Regulation 1303/2013 of the European Parliament and of the Council.

possibility, since January 2019, for local governments to spend their surpluses without prior authorisation is producing positive effects in municipalities that experienced budgetary surpluses in past years. Moreover, in 2019, there was an increase in tenders for public works in the South and this might produce an increase in public investment spending in the next years (Bank of Italy, 2019b).

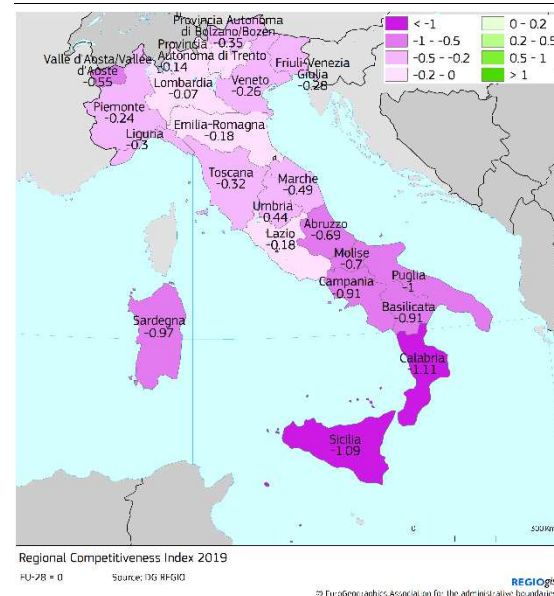
The low institutional quality of the southern regions reduces the effectiveness of public spending. The implementation of EU and national funds continue to suffer from substantial delays in the South, although Italy has reached the financial targets set under cohesion policy funds at the end of 2019. Investment in the South is particularly constrained by a fragmentation of initiatives, the low technical capacity of local administrations, overlapping responsibilities, weak monitoring and delayed project implementation and the lack of a result-oriented approach. Gaps in institutional quality areas are clear in the management of some public services (box 4.5.1), and in the business environment. For instance, in Reggio Calabria building permits for SMEs are issued in 320 days compared to 100 days in Milan (World Bank, 2019).

Southern regions generally have lower levels of productivity and are less competitive. Since the economic crisis, gaps in productivity between the least performing regions in Italy and the EU average have steadily increased. In 2017, labour productivity in the most productive areas (Lombardy, autonomous province of Bolzano and Trento) was around 30% higher than in the three least productive regions (Calabria, Apulia and Sardinia). The lowest competitiveness scores can be found in Calabria, Sicily and Sardinia (Graph 4.4.3). The quality of governance also affects regional productivity (European Commission, 2019a). Bringing the efficiency of the municipalities in the 25th percentile to the level of those in the 75th percentile could bring about a sizeable impact on productivity (OECD 2019b). The lack of adequate transport infrastructure also weighs on the lower internationalisation of southern firms (SVIMEZ, 2019).

The ability to grow fast distinguishes companies enduring in Italian regions. HGEs are mostly clustered in Lombardy, differing widely from other

areas, particularly the South. By contrast, of all the active enterprises in a given region, the highest share of HGEs is concentrated in the South, particularly Basilicata and Molise (Flachenecker et al., 2020). 'High-Growth' therefore appears as a signal of enterprise resilience in such regions, which are characterised by an overall lower number of firms. Compared to the North, southern HGEs are more active in manufacturing-related industries than in services and human capital-intensive industries. The difficulty of accessing risk capital is a persistent limitation for the scaling-up of southern firms (Nascia et al., 2020).

Graph 4.4.4: **Regional Competitiveness Index in Italy, 2019**



(1) The index measures the ability of a region to offer an attractive and sustainable environment for firms and residents to live and work.

Source: European Commission

The South lags behind in R&D and innovation. R&D expenditure in percentages of GDP is highest in northern Italy. The best performing regions (Piedmont, Emilia-Romagna, and the Autonomous Province of Trento) spend more than three times as much on R&D as the lowest performing, Calabria (0.52% of GDP). Italian regions also differ widely for employment in high-tech sectors. In 2017, more than 1 out of 2 employers in high-tech sectors was located in the North of Italy, while 28.4% were working in the Centre of Italy and only 15.2% in the South.

National policies to boost research and innovation tend to benefit the North. Indeed, in

these regions the potential for research and innovation is stronger (Nascia et al., 2020). In 2017, the hyper-depreciation was used mostly in the North, in particular in Lombardy (34.8%). Research and innovation (R&I) in the southern regions are mainly supported by programmes co-financed through EU Structural Funds, but they are not able to reverse the gap in R&I. This is mainly because the enterprise base in the South is weak and its demand for innovation is scarce. No significant measures have been taken to address this challenge. So far, the potential of the smart specialisation strategies to foster innovation has not been fully exploited in the South.

Regions with high rates of unemployment are losing population and high-skilled people. An increasing share of the population in the South, often young and highly-educated, is migrating to the North of Italy or abroad, mainly to other European countries (section 4.3). As a whole, over 2 million people left Italy's southern regions between 2002 and 2017. In 2017 alone, more than 132,000 people left the South, including 66,557 young people, 33% of whom were graduates (SVIMEZ, 2019). Incentives to keep and attract people in the South (such as “Resto al Sud”) do not seem to be very effective. The loss of population concerns is a critical issue in rural areas, not only in the South, and is creating growing problems with basic services and land management.

The green sector can be an economic opportunity for the South. For instance, in the South about two thirds of agricultural land is being organically farmed. In addition, the South captures about 50% of the overall electricity production from renewable sources (SVIMEZ, 2019). Apulia is Italy's leading region in terms of installed photovoltaic and wind capacity, accounting for 13.2% and 24.5% of Italy's total production. In the wind sector, Sicily with 18.3% and Campania with 14.2% of the total production, are respectively the second and third leading Italian regions for installed capacity. Despite this, the energy local value chain in the South is not well developed, as technology and most firms come from other parts of Italy or Europe.

(Sustainable) tourism could represent a development opportunity for rural areas. Over a fifth of the tourist presence in Italy is recorded in rural municipalities. In these territories, tourism

represents an important resource, as it employs 15.6% of the employees of local industry and services, compared to a national average of 2.1% (ISTAT, 2019g). EU Cohesion funds are supporting this industry (Box 2.1).

4.5. ENVIRONMENTAL SUSTAINABILITY

Italy performs well in a number of key environmental sustainability parameters. Italy is making good progress in most of the indexes related to Sustainable Development Goal (SDG) 13 (climate change). For instance, between 2005 and 2018, Italy has decreased by 18% its average greenhouse gas (GHG) emissions, in sectors not covered by EU emissions trading system (ETS), and its total GHG emissions per capita, expressed in tons equivalent, are significantly below the EU average. However, while firms seem to have taken more measures to address environmental concerns, improving energy efficiency of households will be key. Italy is above the EU average for SDG12 on resource productivity⁽⁹⁰⁾ (EUR 3.2/kg versus EUR 2.04 in 2018) and for investment in the circular economy.

The Italian government is supporting the green transition. Italy is quite advanced in integrating environmental considerations in the budget and in monitoring the progress towards environmental sustainability (Section 4.1). New initiatives as part of Italy's integrated National Energy and Climate Plan (NECP) and the Italian Green Deal are a positive step to support the green transition in a structural way. Italy is also revising its 2013 action plan on green public procurement⁽⁹¹⁾. Other measures, such as the Transizione 4.0 plan and 'Sustainable Industry'⁽⁹²⁾, can further support firms in green investment (Section 4.4.1). A dedicated fund will support investment in the green economy, including through public guarantees. Moreover, the new additional fund for investment of the central administration (around 20 billion euros over the period 2020-2034) can promote the green economy, particularly to decarbonise it, reduce emissions, and promote energy efficiency and environmental sustainability. The new additional fund for the local administrations can also contribute to this end. However, better exploiting synergies across sectors and policies and promoting a cost-effective use of public resources is key. In this regard, the highly decentralised governance system in Italy remains a challenge.

Italian firms are becoming 'greener'. In 2017, 56% of manufacturing firms took some type of environmental protection measures. However, only 15.7% of them planned to internalise environmental costs and 13.4% to continue investing in the circular economy (ISTAT, 2018). Between 2015 and 2016, investment in environmental protection by firms increased by 2.3%, mainly thanks to SMEs (where it grew by 12.9%), while among large firms it decreased slightly (-0.4%) (ISTAT, 2019f). In 2017, the share of SMEs offering green products and services was lower than the EU average (16% versus 25%) (European Commission, 2019g). Eco-investment helps export performance, as 51% of companies investing in eco-innovation increased exports in 2018 against 38% of those that did not (Symbola and UnionCamera, 2019).

The green transition can have positive social impacts, if adequately supported. Eco-industries and jobs are increasing in Italy. In 2017, they represented 2.3% of GDP. The value-added of eco-industries is the highest in the energy sector (60%), followed by waste (around 20%) and water (around 8%). Since 2015, the highest growth rate (+28%) has been recorded for organic agriculture and waste management (ISTAT, 2019g). The number of people working in the environmental goods and services sector has been growing at a fast pace and stood at 386,000 people in 2016. While the green transition is expected to lead to positive net job creation, labour reallocation across sectors will likely be significant. Therefore, investment in upskilling and skills anticipation strategies will be crucial to equip workers with new competencies (Section 4.3.2). Measures to promote energy efficiency could also improve access to affordable energy (SDG7), as the share of the population unable to keep homes adequately warm remains very high (14.1% in 2018).

The Just Transition Fund can support industrial transitions away from coal. Coal-related activities are very limited in Italy. However, they are a significant source of GHG emission and are concentrated in a few areas. Sardinia has the only coal resources exploited (by Carbonsulcis SpA), located in a poor socioeconomic context. In Apulia, there is a steel mill (ILVA) employing 10,000 employees (double if considering ancillary firms). In the same area, there is also one of the biggest coal power plants in

⁽⁹⁰⁾ How efficiently the economy uses material resources to produce wealth.

⁽⁹¹⁾ Minimum environmental criteria have been published for 18 product groups.

⁽⁹²⁾ Decreto ministeriale 2 agosto 2019 - Bandi grandi progetti R&S a valere sulle risorse FRI.

Italy. This area is economically strongly dependent on coal power plants and iron/steel production, which are significant sources of GHG emissions. Measures could support SMEs and reskilling, in an integrated local strategy including decontamination and urban regeneration.

Improving energy efficiency in the building sector, promoting sustainable transport, circular economy in lagging regions and climate risk prevention is key for Italy's green transition. Investments in energy efficiency in (residential) real estate are needed to achieve climate change targets. Investment in sustainable transport can contribute to reduce GHG emissions and improve air quality. The development of the circular economy varies widely across regions, with some paying fines for infringements of EU regulations. Finally, Italy could reduce emergency expenditure for natural disasters by strengthening risk prevention.

Energy efficiency

Italy is on track to achieve its 2020 climate and energy targets. In 2018, Italy has fully met its 12% interim target of reduction of GHG emissions (in sectors not covered by the EU ETS). By 2020, Italy is expected to overachieve its 13% target by 7 percentage points. However, progress has recently slowed down, in particular regarding the 2020 renewable target, due to the economic situation and the overall reduction of support schemes.

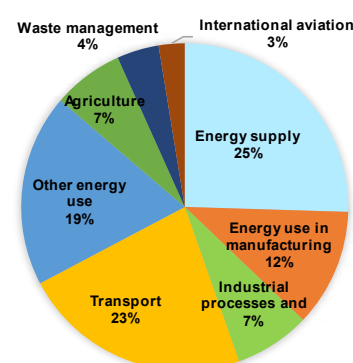
Further efforts are needed to achieve the 2030 targets. Existing policies are expected to reduce GHG emission by only 27% against the binding target of 33%. Additional policy measures already planned could help further decrease emissions by up to 36% by 2030. Italy has also decided to raise the share of renewable energy to 30% of the national gross final consumption of energy in 2030 and reduce energy consumption by 9.3 Mtoe/year until 2030. In its draft NECP⁽⁹³⁾, Italy is aiming to phase out coal for electricity generation by 2025 and full decarbonisation for 2050. Given the reduction in the cost of renewable energy technologies, administrative costs will play a key role. In addition, there is an untapped potential for repowering of existing renewable energy projects,

⁽⁹³⁾ The Commission will assess, in the course of 2020, the final NECP submitted by Italy in December 2019.

including for wind power, which is not promoted by the existing policy framework.

The building sector has a central role in fulfilling the 2030 energy efficiency target. While the share of SMEs adopting energy efficiency measures in 2017 is slightly higher in Italy than in the EU as a whole (91% versus 89%) (European Commission, 2019y), the residential sector is responsible for more than one third of total energy consumption. Indeed, most of the 14.5 million Italian buildings (ISTAT, 2015) were built before criteria for energy savings and corresponding legislation were adopted. However, existing and planned measures do not seem sufficient to achieve the objectives proposed in the draft Italian draft NECP. For instance, the new tax incentive to renovate facades is not linked to energy efficiency.

Graph 4.5.1: Green-house gas emissions by sector, 2017



Source: Eurostat

Private, public and EU funds can all help to support the investment needed to achieve the 2030 EU energy and climate targets. For 2014-2020, more than €230 million in cohesion funds for Italy have been planned for renewables projects (45% of which in solar), more than €1.37 billion for energy efficiency projects (including almost €1 billion to renovate public buildings) and almost €400 million to finance smart electricity and gas distribution, storage and transmission systems projects (including smart grids and ICT systems). The Italian government estimates that an additional €186 billion investment in the national energy system is needed between 2017 and 2030⁽⁹⁴⁾. New

⁽⁹⁴⁾ In particular, the changes planned in the Italian energy mix in the next decade need to be accompanied by measures which compensate for the conventional (load-based) capacity that is phased out and which provide flexibility to the system.

investment needs can be partly covered by EU funds such as the European Energy Efficiency Fund. Private investment will contribute considerably to this effort. In this respect, measures to support sustainable finance (Section 4.2) will be important. The EIB is providing financial support to firms⁽⁹⁵⁾. The central government is supporting municipalities in promoting energy efficiency⁽⁹⁶⁾.

Sustainable transport

Three infringements are open for air pollution against Italy. It is estimated that 3.3% of the Italian population (2.0 million inhabitants) lives in areas where EU air quality standards are exceeded. Particularly severe concerns are raised about significant negative health impacts of fine particulate matter levels⁽⁹⁷⁾ but the health burden (in terms of years of life lost) for other indicators (O₃, NO₂) is also above the EU average. Air pollution also affects soils, vegetation surfaces and waters, with the Po Valley having some of the highest exceedances in 2016.

Decarbonising transport is key to reducing greenhouse gas emissions. It is estimated that the cost of transport externalities amounted to 6.8% of Italy's GDP in 2016⁽⁹⁸⁾. In 2017, transport accounted for 23% of these emissions (Graph 4.5.1), due to road traffic (over 80 % of trips made by private car) and inefficient combustion. Italy has one of the oldest vehicle fleets in Western Europe, with the most polluting vehicles (with EURO 0-EURO 3 standard) making up around 45% of the total fleet and 59% in public transport in 2018 (Transport and Environment, 2019). Of the less polluting buses (EURO 5-6), 73% are in the Centre-North. The policy landscape is slowly evolving. For example, Italy has recently set a target of 6 million electric cars by 2030.

Increasing rail freight can help decarbonise transport. The modal share of rail freight (12.8%) is below the EU average (16.5%), half of which is international. To improve it, Italy intends to invest in the technical adaptation of its railway network, in rail links to all core seaports and in cross-border

alpine connections (to eliminate bottlenecks such as in the Brenner Base Tunnel). The Turin-Lyon high-speed line is expected to boost rail freight volumes. Results will depend on Italy's ability to complete key TEN-T projects in time.

Ports can play a key role in making Italy a sustainable logistics hub. This requires linking them to rail connections and digital cargo clearance. However, the growth of Italian ports remains sluggish, with only the port of Genoa demonstrating resilience after the collapse of the Morandi bridge. EU funds are supporting port infrastructure and intermodal last-mile links (€642.4 million). €60 million are available to digitalise and speed up cargo clearance procedures and deliver a one-stop shop. Italy has also earmarked €180 million for ports and dry ports. However, fast implementation is needed to meet the deadlines of the 2014-2020 programming period.

There is a potential for developing sustainable urban mobility. Italy has started adopting urban sustainable mobility plans (PUMS)⁽⁹⁹⁾. Their approval by October 2020 is a pre-requisite for accessing national funds and loans. By the end of 2019, 35 PUMS were approved (with only two metropolitan cities — Bologna and Genoa), 35 were finalised but not yet approved and 88 were under preparation. Recent measures on company cars (Section 4.1.3) could help reducing congestion and air pollution. The 'Clima' law-decree⁽¹⁰⁰⁾ is a positive example of instruments promoting air quality. The national strategy plan for sustainable mobility adopted in 2019 allocates €3.7 billion to the renewal of the local public bus fleet.

Circular economy

Italy performs relatively well in the circular economy, but outcomes vary across regions. In 2016, Italy was one of the EU's top performers in the circular economy, including for implementation (Circular Economy Network, 2019), with a secondary circular-material use-rate (SDG12) of 17.1%. Gross value added and jobs related to circular economy sectors (1.1% of GDP

⁽⁹⁵⁾ See for instance the InnovFin Energy Demo Projects.

⁽⁹⁶⁾ Decreto direttoriale 14 maggio 2019.

⁽⁹⁷⁾ 9.1 years of life lost per 1.000 inhabitants in 2016 ([EEA Air Quality in Europe - 2019 Report](#)).

⁽⁹⁸⁾ Handbook on the external costs of transport, 2019, p.128.

⁽⁹⁹⁾ Ministerial Decree for "Identification of the guidelines pursuant to article 3, paragraph 7, of the legislative decree 16 December 2016, n. 257".

⁽¹⁰⁰⁾ Decreto-legge 14 ottobre 2019, n. 111.

and 2.06% of total jobs) were slightly above the EU average (1% and 1.69%, respectively). The Ministries of Environment and of Economic Development have developed a monitoring framework for the circular economy. EU funds are also supporting a project (under the CReIAMO project) on models and instruments for achieving the circular economy⁽¹⁰¹⁾. Supporting the circular economy can be an opportunity to relaunch the development of the southern regions (Section 4.4.4).

The recycling rate in Italy is above the EU average but varies widely across regions. The recycling rate of municipal waste (SDG11) is above the EU average (49.8% in 2018 versus 47%) and considerably improving (it was 38.4% in 2012). Nevertheless, there are two infringements of EU waste legislation open against Italy, for non-compliant landfills and past inadequate waste management in Campania, for which fines are being paid⁽¹⁰²⁾ (box 4.5.1). The government is planning to update its national waste prevention strategy. The 2020 budget law includes a tax for single-use plastics.

Italy is underperforming in wastewater treatment and in the efficiency of water distribution. Despite recent improvements, only 59.6% of the population was connected to at least secondary wastewater treatment in 2015. However, 913 agglomerations have been found to be in breach of the collection and/or treatment requirements of the EU Urban Waste Water Treatment Directive, and a fine is being paid for one of the four open infringements (see box)⁽¹⁰³⁾. Average concentrations of nitrates in groundwater⁽¹⁰⁴⁾ have increased between 2010 and 2015, but are still below the EU average (10.4 NO₃/L versus 18.3). Moreover, the efficiency of the drinking water distribution network is worsening, as the share of water introduced into the network that reaches end-users has fallen from 62.6% in 2012 to 58.6% in 2015 (ISTAT, 2019h). Only 87% of the water withdrawn for drinking use was introduced into the municipal water

distribution network and only 52% was finally supplied to users.

Climate adaptation and risk prevention

Italy is heavily affected by climate-related events. According to the European Environment Agency⁽¹⁰⁵⁾, Italy is the second most affected country in the EU by hydrogeological disasters, extreme weather, droughts and forest fires, with around €65 billion of economic losses and over 20,600 fatalities between 1980 and 2017. However, only 5% of losses were insured (one of the lowest levels in the EU), meaning that either the State, as an insurer of last instance, or the victims had to absorb those losses.

Further efforts are needed for a comprehensive climate adaptation strategy. A prompt finalisation and adoption of the National Adaptation Plan is needed, in light of Italy's vulnerability to natural disasters. The assessment of climate risks needs to be taken into account when developing policies. It is therefore important to consider climate change drivers in the National Disaster Risk Assessment. Italy's National Strategy for Disaster Risk Reduction, due in 2020, can be an opportunity for strengthening this integration.

Investment in prevention can reduce emergency expenditures, notably for hydrogeological and seismic risks. In 2018, there were 19 incidents of flooding. The population exposed to this risk is higher in the Centre (10.9%) and North (15.6%) than in the South (3.2%) with the exception of landslides (ISTAT, 2019i). In 2019, the Italian government agreed⁽¹⁰⁶⁾ to allocate €315 million to this aim, in addition to increasing flexibility in the use of the national cohesion and development fund. Furthermore, the regions can use the European Regional Development Fund and national funds to address hydrogeological risks, with up to €700 million per year available in 2019-2021. The Parliament is currently deliberating a law on soil consumption. Strong engagement in climate change mitigation will help Italy reaching SDG 13 – Climate Action.

⁽¹⁰¹⁾ Supported by the ERDF-ESF National OP Governance e Capacità Istituzionale 2014-2020.

⁽¹⁰²⁾ As of 31.01.2020, fines paid are for: non-complaint landfills €224 million; Campania waste €195 million.

⁽¹⁰³⁾ As of 31.01.2020, Italy had paid a fine of €77 million.

⁽¹⁰⁴⁾ In 2015, Lombardy and Piedmont received derogations from the EU Nitrates Directive until the end of 2019.

⁽¹⁰⁵⁾ <https://www.eea.europa.eu/data-and-maps/indicators/direct-losses-from-weather-disasters-3/assessment-2>

⁽¹⁰⁶⁾ 'Proteggitalia' plan.

Box 4.5.1: Policies related to water and waste management in Calabria, Campania and Sicily

Analyses of regional performance of the Sustainable Development Goals and the Equitable and Sustainable Well-being Indicators (BES) show large differences between the North & Centre and South of Italy in terms of environmental performance. There is also heterogeneity within the South in terms of specific issues, policy response and performance. Waste and water management remain the main environmental problems in Calabria and Sicily, while in Campania it is soil consumption and illegal building (ISTAT 2019h, 2019i; ASVIS, 2019).

Table 1 shows that disposal in landfills and separate collection varies widely within the three regions under examination. Campania presents a similar separate collection rate to the national average, and one of the lowest landfilling rates in the country. Calabria, and especially Sicily, have instead low separate collection and high disposal in landfills. These regions account for more than half of the 45 non-compliant landfills: 16 of them are in Calabria, 5 in Sicily and 4 in Campania.

Table 1: Waste production and management in selected regions (2018)

	Municipal waste generated – kg/inhabitant/year	Municipal Waste in compliant landfills (%)	Separate collection of municipal waste (%)	Incineration (%)	Landfill tax (EUR/tonne)
Calabria	403.4	52.4%	45.2%	5%	25.40
Campania	448.6	2.8%*	52.7%	28%	25.40
Sicily	457.9	69.1%	29.5%	0%	12.36
Italy	499.7	21.5%	58.1%	18%	-

* Regione Campania informed the Commission that around 11.3% of the remaining waste is exported outside of the region to be incinerated or disposed in landfills and the other 5.4% is “other” waste (metals etc).

Source: ISPRA & MATM 2019

Regarding water management, the share of water introduced into the network that reaches end users has fallen in all three regions between 2012-2015. The amount of water leaked in 2015 reached 41.1% in Calabria, 46.7% in Campania and 50% in Sicily (Italian average in 2015 41.4%); nevertheless, it should be noted that these are not worst levels in Italy (ISTAT, 2019i). Of the 913 agglomerations covered by infringement procedures for urban wastewater treatment 245 are in Sicily, 174 in Calabria, and 116 in Campania.

One reason for the “implementation gap” in providing adequate environmental infrastructure in Italy and in particular in the South is the complex governance structure in place. Responsibility for environmental policy and legislation is split between the central government and other levels (including regions and municipalities). This leads to fragmentation of responsibilities, weak coordination and lack of synergies, heightening corruption risk (OECD 2019c, p.50 citing ANAC). It is coupled with the inability of small municipalities to spend public funds allocated by the European Regional Development Fund and the national Cohesion and Development Fund. In Calabria, Campania and Sicily there is evidence of involvement of organized crime (Section 4.4.2) in waste trafficking from other parts of Italy and Europe (DNA report, 2019). Environmental projects are also often too small to exploit economies of scale and municipalities do not have the capacity or technical knowhow to design and deliver them. As a result, tendering procedures are slow or cancelled. Furthermore, service contracts are awarded in an inconsistent manner across regions and in ways that often contravene laws. The scale of this “implementation gap” in Southern Italy acts as a barrier to attract private investment. Resources available for infrastructure through tariffs for water are also lower in the South at €131 per inhabitant, compared to the national average of €166 per inhabitant 2016-19 (ARERA, 2018).

The inability to properly manage waste and wastewater leads to harmful substances being released into the soil, groundwater and surface water, having an impact on the environment and on health. Currently Italy is subject to financial penalties for non-compliant landfills, past inadequate waste management in Campania and for urban wastewater treatment. These penalties have almost reached a sum of €500 million since 2015. The

fact that Italy had years to address these problems since they were reported by the Commission, but failed to do so before fines applied, further raises questions about the governance and accountability of the authorities responsible for these matters. The main solution has been to appoint emergency commissioners for water and waste, suspending the functioning of the ordinary administration. However, this has had limited success, as persistent breaches remain, especially for urban wastewater. The government replaced the emergency commissioners with sole commissioners in 2019 (fiscal decree law) but it is too early to see their impact.

According to a study funded by the European Commission (Eunomia & COWI, 2019), the capital investments required to reach EU recycling targets are estimated at €4,679 million for the period 2021-35 for Italy as a whole. In this regard, landfill tax rates are set at regional level in Italy and are lower compared to other EU countries. If rates were set higher this could increase revenues to invest and potentially reduce the amount of waste in landfilling, as long as illegal landfilling is addressed too.

Investment needs to comply with urban wastewater treatment requirements have been estimated by the OECD (OECD, 2020) at €34,215 million until 2030 for Italy as a whole. The EIB has provided € 200 million under the Juncker Plan to reduce leakage and improve water quality from the *Acquedotto Pugliese* running between Campania and Puglia. There is also a National Intervention Plan in the water sector, the first step (Piano Stralcio) of which was approved in September 2019.

In conclusion, the lack of adequate environmental infrastructure for waste management and wastewater treatment in Calabria, Campania and Sicily highlights deeper governance issues with how policy is managed and raises several concerns. This includes environmental damages caused; health and hygiene risks; and revenues lost due to fines paid to the European Court of Justice. It also hints to opportunities lost in terms of green jobs and revenues (e.g. circular economy).

ANNEX A: OVERVIEW TABLE

Summary assessment	
2019 country-specific recommendations (CSRs)	
<p>CSR 1: 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. Shift taxation away from labour, including by reducing tax expenditure and reforming the outdated cadastral values. 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. 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.</p>	<p>Italy has made Some Progress in addressing CSR 1</p>
<p>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.</p>	<p>The compliance assessment with the Stability and Growth Pact will be included in Spring when final data for 2019 will be available.</p>
<p>Shift taxation away from labour, including by reducing tax expenditure and reforming the outdated cadastral values.</p>	<p>Limited Progress The 2020 budget includes a fund to reduce the tax wedge on labour by around 0.2% of GDP in 2020 and 0.3% of GDP from 2021. The 2020 budget also includes several provisions limiting tax expenditures on personal income taxes, with a limited budgetary impact. No steps were taken to reduce the large tax expenditures in value-added taxes, nor to reform the outdated cadastral values. Overall, some progress was made in reducing taxes on labour, but no progress in shifting taxes to other revenue sources (only limited progress in reducing tax expenditures and no progress in updating cadastral values). On average, limited progress has been made.</p>
<p>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.</p>	<p>Substantial Progress The 2020 budget includes several measures to fight tax evasion related to omitted income declarations, including by encouraging electronic payments: (i) a new fund (0.2% of GDP from 2021) to reward consumers that pay via electronic means; (ii) lower limits to cash payments; (iii) a new special lottery for consumers paying with electronic means; (iv) the possibility to deduct expenditures from personal income taxes only if paid with traceable means. Additional new measures against tax evasion include disincentives to the undue compensation of tax credits, the shift of</p>

<p>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.</p>	<p>VAT and social security liabilities from the subcontractor onto the main contractor of tax liabilities and several measures against excise duties and VAT fraud in the fuel sector. These measures are relevant and in line with the 2019 CSR. However, the size of the challenge represented by tax evasion in Italy warrants a thorough implementation and a continuous and increasingly ambitious reform effort. For an efficient use of resources, it is also important that the financial incentives for consumers paying electronically are targeted to the sectors most exposed to tax evasion.</p> <p>No Progress The 2019 budget introduced several provisions which partially reversed past pension reform by broadening possibilities for early retirement, including by creating a new early retirement scheme ("quota 100") and suspending the indexation to life expectancy of the minimum contribution requirement needed to retire under the existing early retirement scheme. The 2020 budget law confirmed the new pension measures implemented in 2019 and even extended to 2020 the temporary early retirement schemes for women and for employees recently dismissed or performing heavy works ("APE sociale"), further increasing pension expenditure.</p>
<p>CSR 2: Step up efforts to tackle undeclared work. Ensure that active labour market and social policies are effectively integrated and reach out notably to young people and vulnerable groups. Support women's participation in the labour market through a comprehensive strategy, including through access to quality childcare and long-term care. Improve educational outcomes, also through adequate and targeted investment, and foster upskilling, including by strengthening digital skills.</p> <p>Step up efforts to tackle undeclared work.</p> <p>Ensure that active labour market and social policies are effectively integrated and reach out notably to young people and vulnerable groups.</p>	<p>Italy has made Limited Progress in addressing CSR 2</p> <p>Limited Progress The national labour inspectorate launched a recruitment competition, together with other services, to hire more labour inspectors. The total number of firms inspected has declined in 2018.</p> <p>Some Progress 3000 "navigators" have been hired to reinforce public employment centres. However, active labour market policies (ALMP) remain barely integrated and coordinated with other related policies (e.g. social services, adult learning, vocational training). The coordination role for the national agency (ANPAL) is still weaker than originally intended. The main challenges for the</p>

<p>Support women's participation in the labour market through a comprehensive strategy, including through access to quality childcare and long-term care.</p>	<p>implementation of the reform remain improving the coordination, the exchange of data and the standardisation of services provided.</p>
<p>Improve educational outcomes, also through adequate and targeted investment, and foster upskilling, including by strengthening digital skills.</p>	<p>Limited Progress The different family-related social policy measures are often not coordinated and a comprehensive strategy, including access to services and provision of benefits, is missing. The government The government took some action to facilitate access to childcare through financial support to families, but has no plans to increase the supply of childcare. Available pre-school places covered on average only 24% of children under three years of age in the school year 2016/17, with big regional variations.</p> <p>Limited Progress No significant measures have been adopted to address the CSR beyond hiring new teachers (with an extremely small effort on digital-expert teachers hiring).</p>
<p>CSR 3: Focus investment-related economic policy on research and innovation, and the quality of infrastructure, taking into account regional disparities. Improve the effectiveness of public administration, including by investing in the skills of public employees, by accelerating digitalisation, and by increasing the efficiency and quality of local public services. Address restrictions to competition, particularly in the retail sector and in business services, also through a new annual competition law.</p>	<p>Italy has made Some Progress in addressing CSR 3</p>
<p>Focus investment-related economic policy on research and innovation, and the quality of infrastructure, taking into account regional disparities.</p>	<p>Some Progress Public investment remains subdued, but the strengthening of the budgetary autonomy of local governments is showing positive signs. Other measures to unlock public investment were adopted in 2019 ("Sblocca cantieri" decree). Moreover, funds for public investment at central and local level have been increased and the new fund for green investment created, although administrative capacity to plan and implement investment projects remains weak. Transizione 4.0 plan (extending measures of the Impresa 4.0 plan) support private investment and better focuses on innovation and green investment, while aiming at enlarging the number of beneficiaries firms. However, R&D expenditure remains low and unequal across Italian regions. There is still scope for further streamlining and stabilisation of the most efficient incentives. The Fund for Innovation was set but is not yet operational. Public investment in Southern regions remains low and their weak eco-systems makes them</p>

<p>Improve the effectiveness of public administration, including by investing in the skills of public employees, by accelerating digitalisation, and by increasing the efficiency and quality of local public services.</p>	<p>benefit less from national measures. The planned strengthening of the 34% investment clause could help reducing regional disparities.</p> <p>Some Progress Efforts to simplification administrative procedures go on, although overall burden remains high. Two agencies were set-up in 2019 to strengthen administrative capacity of public administration capacity to plan and manage public investment but are not yet operational. The reform intended to address inefficiencies in public procurement remains unachieved. Some progress has been recorded in increasing the effectiveness and digitisation level of the PA (Decreto Concretezza, draft law on public employment, creation of the ministry for innovation and digitisation, IO app launch, etc). However no progress has been registered on the local public services side.</p>
<p>Address restrictions to competition, particularly in the retail sector and in business services, also through a new annual competition law.</p>	<p>No Progress No progress has been registered on competition policies. No new initiatives have been announced and few backtracking measures are still being discussed.</p>
<p>CSR 4: Reduce the length of civil trials at all instances by enforcing and streamlining procedural rules, including those under consideration by the legislator. Improve the effectiveness of the fight against corruption by reforming procedural rules to reduce the length of criminal trials.</p> <p>Reduce the length of civil trials at all instances by enforcing and streamlining procedural rules, including those under consideration by the legislator.</p>	<p>Italy has made Limited Progress in addressing CSR 4</p> <p>Limited Progress Despite recent improvements, the low efficiency of Italy's civil justice system remains a source of concern. The time to resolve civil and commercial litigious cases in Italy remains the highest in the EU at higher instances. A draft law enabling the government to substantially streamline the civil procedure has been adopted by the Council of Ministers in December 2019 and has now to be passed by the national parliament.</p>
<p>Improve the effectiveness of the fight against corruption by reforming procedural rules to reduce the length of criminal trials.</p>	<p>Limited Progress As regards the length of criminal trials, Italy's long disposition time for criminal cases continues to raise concerns in particular at the appeal level. Positive results in containing trial length have recently been recorded by first instance courts and the Court of Cassation. The recent reform stopping the statute of limitations after a first-instance ruling, in line with a long-standing country-specific recommendation, entered into force as of 2020. The government has been discussing a much needed reform of the criminal procedure. Swift adoption of</p>

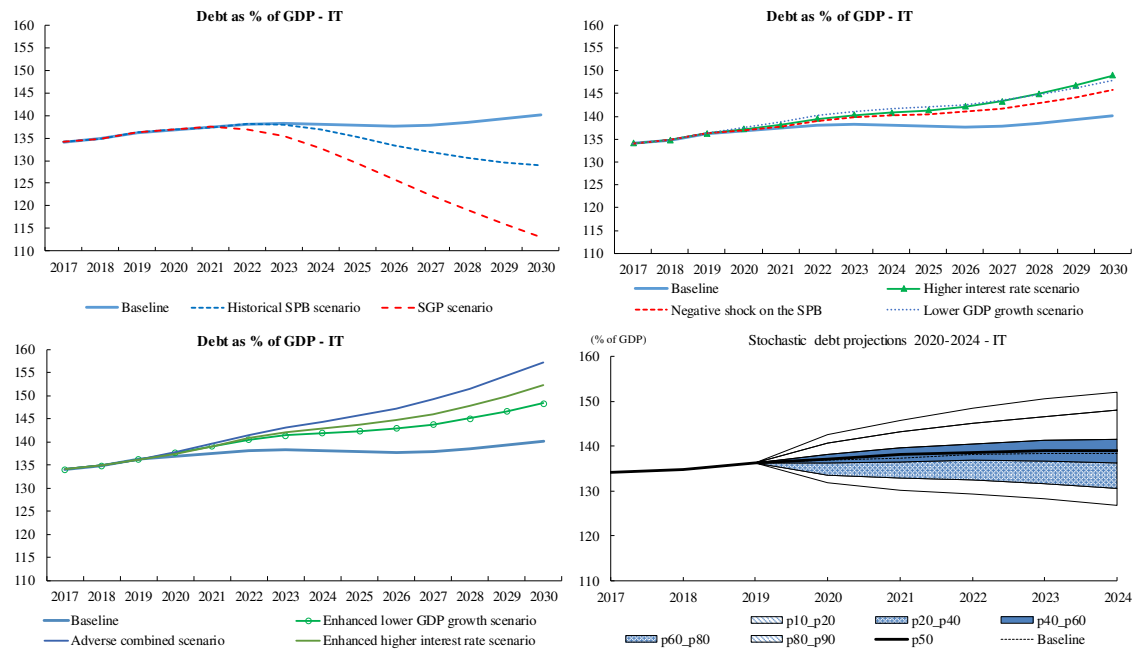
	these measures, coupled with others to tackle the large number of pending cases at appeal courts, could improve the efficiency of the criminal justice system and the effectiveness of the fight against corruption. However, in the absence of an urgent reform of criminal trials, the low efficiency of criminal justice at the appeal level continues to hinder the prosecution of corruption.
<p>CSR 5: Foster bank balance sheet restructuring, in particular for small and medium-sized banks, by improving efficiency and asset quality, continuing the reduction of non-performing loans, and diversifying funding. Improve non-bank financing for smaller and innovative firms.</p> <p>Foster bank balance sheet restructuring, in particular for small and medium-sized banks, by improving efficiency and asset quality, continuing the reduction of non-performing loans, and diversifying funding.</p> <p>Improve non-bank financing for smaller and</p>	<p>Italy has made Some Progress in addressing CSR 5</p> <p>Some Progress Banks' balance sheet repair including non-performing loans disposals through outright sales and securitisations with Guarantee on Securitization of Bank Non Performing Loans (GACS) has substantially progressed. The GACS was prolonged in May 2019 for another period of two years. Currently, the relatively low yields on Italian government bonds are expected to support banks in Italy to shore up their capital positions and to improve access to wholesale funding. At the same time, Italian banks continued to rebalance their domestic government bond portfolios to the held-to-collect category, in order to shield their capital positions from the volatility of domestic sovereign bond prices. Despite recent improvements, profitability remains challenging for Italian banks amid the current low interest rate environment. Some of the banks are still exhibiting high cost-to-income ratios. The reform of the large cooperative banks is not yet fully implemented, unlike the reform of small mutual banks which was essentially concluded. Moreover, the Government finalised in early 2019 the reform of the insolvency framework. However, Italian banks are still substantially exposed to their sovereign, implying the risk of adverse feedback loops. A rebound in sovereign yields could put banks under pressure and renew strain on funding costs. Despite the achieved progress as regards banks' balance sheet de-risking, the stock of NPL at system level remains comparatively high vis-à-vis euro area peers. Moreover, some of the second tier banks are still suffering under NPL-levels that are markedly above the average.</p> <p>Some Progress While firms' financing remains predominantly bank-based, measures aimed at</p>

innovative firms.	increasing access of firms to capital markets adopted in previous years have had some positive impact. The use of initial public offerings on the AIM showed signs of recovery in 2018, partly as a result of government initiatives like the introduction of Special Purpose Acquisition Companies (SPACs). The relevance of the mini-bond market for SMEs is also growing, despite its relative small size. However, measures to improve the weak recourse to venture capital have not yet been implemented. New measures adopted in 2019 (extension of the scope of crowdfunding to bonds issued by SMEs, reintroduction of ACE, so-called Società di Investimento Semplice) are expected to help address the undercapitalisation of the corporate sector.
Europe 2020 (national targets and progress)	
Employment rate target set in the NRP: 67-69 %.	The employment rate has increased to 63.6% in Q32019, still lower than the national target and substantially below the EU average (73.8 %).
R&D target set in the NRP: 1.53 % of GDP	Italy has achieved limited progress in the last years, and it is not on track to meet its target. In 2018 R&D intensity corresponds to 1.39% of GDP.
National greenhouse gas (GHG) emissions target: -13 % in 2020 compared with 2005 (in sectors not included in the EU emissions trading scheme)	Italy is on track to meet its 2020 greenhouse gas (GHG) emission target. According to the projections submitted in 2019, by 2020 Italy will have reduced its emissions by 20 %, therefore overachieving its target by 7 percentage points. Already in 2018, according to preliminary data, emissions were reduced by 18 % as compared to an interim target of 12 % (i.e. with a 6 percentage points margin).
2020 renewable energy target: 17 %	With a renewable energy share of 17,78% in 2018, Italy remains above its 2020 renewable energy target. However compared to last year, the share of renewables decreased for the first time since 2004. Only the share of renewables in transport slightly increased over this period. Further efforts are therefore needed across all sectors in view of

	ensuring a steady growth of renewables and the achievement of the 2020 and 2030 objectives.
Energy efficiency, 2020 energy consumption targets: Italy's 2020 energy efficiency target is 158 Mtoe expressed in primary energy consumption (124 Mtoe expressed in final energy consumption)	The target was set at a level that would allow energy consumption to grow in the coming years. After the growth of both primary and final energy consumption in the period 2013-2014, energy consumption in the country decreased between 2015 and 2016. In the last year, primary energy consumption registered again a small decrease, moving from 148,94 Mtoe in 2017 to 147.5 Mtoe in 2018. However, final energy consumption increased slightly from 115.2 Mtoe in 2017 to 116.5 Mtoe in 2018. In light of the possible economic recovery in Italy and of the recent upward trend in final energy consumption, further efforts are needed both to remain within the levels set for the 2020 energy efficiency target and in view of the new 2030 objectives.
Early school/training leaving target: 16 %.	The early school leaving rate in 2018 was 14.5%, below Italy's Europe2020 target, but above the EU average of 10.6%
Tertiary education target: 26-27 % of population aged 30-34.	At 26.9% in 2018, the share of 30-34 year-olds with tertiary educational attainment was in line with the national target, but was the second-lowest in the EU (EU average: 39.9%).
Target for reducing the number of people at risk of poverty or social exclusion, expressed as an absolute number of people: -2.2 million (base year 2010: 15.1 million).	With an increase of more than 1.3 million people at risk of poverty or social exclusion (AROPE) compared to 2008, Italy has not met this target. In 2018, the AROPE rate declined to 27.3 %, down from 28.9 % in 2017. However, it remains well above both pre-crisis levels (25.5 % in 2008) and the EU average (21.9 %).

ANNEX B: COMMISSION DEBT SUSTAINABILITY ANALYSIS AND FISCAL RISKS

General government debt projections under baseline, alternative scenarios and sensitivity tests													
IT - Debt projections baseline scenario													
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross debt ratio	134.8	136.2	136.8	137.4	138.1	138.3	138.1	137.8	137.7	137.9	138.4	139.2	140.2
Changes in the ratio (-1+2+3) of which	0.7	1.4	0.6	0.6	0.7	0.2	-0.2	-0.3	-0.1	0.2	0.6	0.8	1.0
(1) Primary balance (1.1+1.2+1.3)	1.5	1.3	0.9	0.4	0.0	0.0	-0.1	-0.1	-0.2	-0.3	-0.5	-0.6	-0.8
(1.1) Structural primary balance (1.1.1-1.1.2+1.1.3)	1.3	1.3	0.8	0.1	0.0	0.0	-0.1	-0.1	-0.2	-0.3	-0.5	-0.6	-0.8
(1.1.1) Structural primary balance (bef. CoA)	1.3	1.3	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
(1.1.2) Cost of ageing					0.2	0.2	0.3	0.4	0.5	0.6	0.8	0.9	1.2
(1.1.3) Others (taxes and property incomes)					0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
(1.2) Cyclical component	0.1	-0.1	-0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(1.3) One-off and other temporary measures	0.1	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2) Snowball effect (2.1+2.2+2.3)	1.5	2.6	1.5	0.7	0.8	0.2	-0.3	-0.4	-0.3	-0.2	0.1	0.2	0.1
(2.1) Interest expenditure	3.7	3.5	3.3	3.1	3.1	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.1
(2.2) Growth effect	-1.0	-0.1	-0.6	-1.0	-0.4	-0.6	-0.6	-0.7	-0.6	-0.5	-0.3	-0.2	-0.3
(2.3) Inflation effect	-1.2	-0.8	-1.2	-1.4	-1.9	-2.3	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7
(3) Stock-flow adjustments	0.7	0.1	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Short term	Medium term	S1	Debt sustainability analysis (detail)						DSA	S2	Long term
			Baseline	Historical SPB	Lower GDP growth	Higher interest rate	Negative shock on SPB	Stochastic projections			
LOW (S0 = 0.3)	HIGH	HIGH (S1 = 8.8)	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	MEDIUM (S2 = 2.1)	HIGH
			Debt level (2030)	140.2	128.9	148.0	148.9	145.8			
			Debt peak year	2030	2022	2030	2030	2030			
			Percentile rank	55.0%	31.0%						
			Probability debt higher					60.4%			
			Dif. between percentiles					25.2			

Note: For further information, see the European Commission Debt Sustainability Monitor (DSM) 2019.

[1] The first table presents the baseline no-fiscal policy change scenario projections. It shows the projected government debt dynamics and its decomposition between the primary balance, snowball effects and stock-flow adjustments. Snowball effects measure the net impact of the counteracting effects of interest rates, inflation, real GDP growth (and exchange rates in some countries). Stock-flow adjustments include differences in cash and accrual accounting, net accumulation of assets, as well as valuation and other residual effects.

[2] The charts present a series of sensitivity tests around the baseline scenario, as well as alternative policy scenarios, in particular: the historical structural primary balance (SPB) scenario (where the SPB is set at its historical average), the Stability and Growth Pact (SGP) scenario (where fiscal policy is assumed to evolve in line with the main provisions of the SGP), a higher interest rate scenario (+1 pp. compared to the baseline), a lower GDP growth scenario (-0.5 pp. compared to the baseline) and a negative shock on the SPB (calibrated on the basis of the forecasted change). An adverse combined scenario and enhanced sensitivity tests (on the interest rate and growth) are also included, as well as stochastic projections. Detailed information on the design of these projections can be found in the FSR 2018 and the DSM 2019.

[3] The second table presents the overall fiscal risk classification over the short, medium and long term.

- For the short-term, the risk category (low/high) is based on the S0 indicator. S0 is an early-detection indicator of fiscal stress in the upcoming year, based on 25 fiscal and financial-competitiveness variables that have proven in the past to be leading indicators of fiscal stress. The critical threshold beyond which fiscal distress is signalled is 0.46.
- For the medium term, the risk category (low/medium/high) is based on the joint use of the S1 indicator and of the DSA results. The S1 indicator measures the fiscal adjustment required (cumulated over the 5 years following the forecast horizon and sustained after that) to bring the debt-to-GDP ratio to 60 % by 2034. The critical values used are 0 and 2.5 pps of GDP. The DSA classification is based on the results of five deterministic scenarios (baseline, historical SPB, higher interest rate, lower GDP growth and negative shock on the SPB scenarios) and the stochastic projections. Different criteria are used such as the projected debt level, the debt path, the realism of fiscal assumptions, the probability of debt stabilisation, and the size of uncertainties.
- For the long term, the risk category (low/medium/high) is based on the joint use of the S2 indicator and the DSA results. The S2 indicator measures the upfront and permanent fiscal adjustment required to stabilise the debt-to-GDP ratio over the infinite horizon, including the costs of ageing. The critical values used are 2 and 6 pps of GDP. The DSA results are used to further qualify the long term risk classification, in particular in cases when debt vulnerabilities are identified (a medium / high DSA risk category).

ANNEX C: STANDARD TABLES

Table C.1: **Financial Market Indicators**

	2014	2015	2016	2017	2018	2019
Total assets of the banking sector (% of GDP) ⁽¹⁾	247.1	236.8	231.5	214.0	207.8	216.2
Share of assets of the five largest banks (% of total assets)	41.0	41.0	43.0	43.4	45.6	-
Foreign ownership of banking system (% of total assets) ⁽²⁾	8.3	7.8	8.6	8.0	8.2	7.0
Financial soundness indicators: ⁽²⁾						
- non-performing loans (% of total loans)	16.5	16.5	15.0	11.2	8.4	8.1
- capital adequacy ratio (%)	14.2	14.8	13.9	16.8	16.1	16.6
- return on equity (%) ⁽³⁾	-2.8	3.1	-7.7	7.1	5.8	8.3
Bank loans to the private sector (year-on-year % change) ⁽¹⁾	-0.8	-0.6	-0.2	-1.6	-2.0	-1.0
Lending for house purchase (year-on-year % change) ⁽¹⁾	-0.9	0.4	1.7	2.1	1.7	1.8
Loan-to-deposit ratio ⁽²⁾	109.2	105.8	101.2	102.1	97.1	94.9
Central bank liquidity as % of liabilities ⁽¹⁾	6.2	5.1	6.5	8.4	8.1	7.6
Private debt (% of GDP)	118.9	115.1	111.7	108.8	107.0	-
Gross external debt (% of GDP) ⁽²⁾ - public	50.5	51.5	48.0	46.2	40.9	44.5
- private	30.5	29.3	27.0	24.9	27.1	26.4
Long-term interest rate spread versus Bund (basis points)*	172.9	121.8	139.8	179.4	221.3	225.1
Credit default swap spreads for sovereign securities (5-year)*	101.6	92.2	107.8	86.8	87.1	88.8

(1) Latest data Q3 2019. Includes not only banks but all monetary financial institutions excluding central banks.

(2) Latest data Q2 2019.

(3) Quarterly values are annualized.

* Measured in basis points.

Source: European Commission (long-term interest rates); World Bank (gross external debt); Eurostat (private debt); ECB (all other indicators).

Table C.2: **Headline social scoreboard indicators**

	2014	2015	2016	2017	2018	2019 ⁵
Equal opportunities and access to the labour market						
Early leavers from education and training (% of population aged 18-24)	15.0	14.7	13.8	14.0	14.5	:
Gender employment gap (pps)	19.4	20.0	20.1	19.8	19.8	19.4
Income inequality, measured as quintile share ratio (S80/S20)	5.8	5.8	6.3	5.9	6.1	:
At-risk-of-poverty or social exclusion rate ⁽¹⁾ (AROPE)	28.3	28.7	30.0	28.9	27.3	:
Young people neither in employment nor in education and training (% of population aged 15-24)	22.1	21.4	19.9	20.1	19.2	:
Dynamic labour markets and fair working conditions						
Employment rate (20-64 years)	59.9	60.5	61.6	62.3	63.0	63.5
Unemployment rate ⁽²⁾ (15-74 years)	12.7	11.9	11.7	11.2	10.6	10.1
Long-term unemployment rate (as % of active population)	7.7	6.9	6.7	6.5	6.2	5.8
Gross disposable income of households in real terms per capita ⁽³⁾ (Index 2008=100)	88.6	89.6	90.7	91.6	92.1	:
Annual net earnings of a full-time single worker without children earning an average wage (levels in PPS, three-year average)	20597	20762	21070	:	:	:
Annual net earnings of a full-time single worker without children earning an average wage (percentage change, real terms, three-year average)	-0.70	0.05	0.66	:	:	:
Public support / Social protection and inclusion						
Impact of social transfers (excluding pensions) on poverty reduction ⁽⁴⁾	21.5	21.7	21.4	19.4	21.6	:
Children aged less than 3 years in formal childcare	22.9	27.3	34.4	28.6	25.7	:
Self-reported unmet need for medical care	7.0	7.2	5.5	1.8	2.4	:
Individuals who have basic or above basic overall digital skills (% of population aged 16-74)	:	43.0	44.0	:	:	:

Notes:

(1) People at risk of poverty or social exclusion (AROPE): individuals who are at risk of poverty (AROP) and/or suffering from severe material deprivation (SMD) and/or living in households with zero or very low work intensity (LWI).

(2) Unemployed persons are all those who were not employed but had actively sought work and were ready to begin working immediately or within two weeks.

(3) Gross disposable household income is defined in unadjusted terms, according to the draft Joint Employment Report 2019.

(4) Reduction in percentage of the risk of poverty rate, due to social transfers (calculated comparing at-risk-of poverty rates before social transfers with those after transfers; pensions are not considered as social transfers in the calculation).

(5) Average of first three quarters of 2019 for the employment rate, unemployment rate and gender employment gap.

Source: Eurostat

Table C.3: Labour market and education indicators

Labour market indicators	2014	2015	2016	2017	2018	2019 ⁵
Activity rate (15-64)	63.9	64.0	64.9	65.4	65.6	65.7
Employment in current job by duration						
From 0 to 11 months	9.3	10.0	10.3	10.5	10.6	:
From 12 to 23 months	5.6	6.1	7.0	7.0	7.1	:
From 24 to 59 months	13.3	12.4	12.4	12.6	13.8	:
60 months or over	71.8	71.5	70.3	69.8	68.5	:
Employment growth*						
(% change from previous year)	0.1	0.7	1.4	1.2	0.9	0.5
Employment rate of women						
(% of female population aged 20-64)	50.3	50.6	51.6	52.5	53.1	53.8
Employment rate of men						
(% of male population aged 20-64)	69.7	70.6	71.7	72.3	72.9	73.2
Employment rate of older workers*						
(% of population aged 55-64)	46.2	48.2	50.3	52.2	53.7	54.2
Part-time employment*						
(% of total employment, aged 15-64)	18.1	18.3	18.5	18.5	18.4	18.6
Fixed-term employment*						
(% of employees with a fixed term contract, aged 15-64)	13.6	14.1	14.0	15.5	17.1	17.0
Transition rate from temporary to permanent employment (3-year average)	19.1	19.8	20.1	16.3	14.8	:
Youth unemployment rate						
(% active population aged 15-24)	42.7	40.3	37.8	34.7	32.2	30.2
Gender gap in part-time employment	24.4	24.5	24.6	24.3	24.5	24.6
Gender pay gap ⁽²⁾ (in unadjusted form)	6.1	5.5	5.3	5.0	:	:
Education and training indicators	2014	2015	2016	2017	2018	2019
Adult participation in learning						
(% of people aged 25-64 participating in education and training)	8.1	7.3	8.3	7.9	8.1	:
Underachievement in education ⁽³⁾	:	23.3	:	:	:	:
Tertiary educational attainment (% of population aged 30-34 having successfully completed tertiary education)	23.9	25.3	26.2	26.9	27.8	:
Variation in performance explained by students' socio-economic status ⁽⁴⁾	:	9.6	:	:	:	:

Notes:

* Non-scoreboard indicator

(1) Long-term unemployed are people who have been unemployed for at least 12 months.

(2) Difference between the average gross hourly earnings of male paid employees and of female paid employees as a percentage of average gross hourly earnings of male paid employees. It is defined as "unadjusted", as it does not correct for the distribution of individual characteristics (and thus gives an overall picture of gender inequalities in terms of pay). All employees working in firms with ten or more employees, without restrictions for age and hours worked, are included.

(3) PISA (OECD) results for low achievement in mathematics for 15 year-olds.

(4) Impact of socio-economic and cultural status on PISA (OECD) scores.

(5) Average of first three quarters of 2019. Data for youth unemployment rate is seasonally adjusted.

Source: Eurostat, OECD

Table C.4: Social inclusion and health indicators

	2013	2014	2015	2016	2017	2018
Expenditure on social protection benefits* (% of GDP)						
<i>Sickness/healthcare</i>	6.7	6.7	6.6	6.5	6.5	:
<i>Disability</i>	1.7	1.7	1.7	1.7	1.6	:
<i>Old age and survivors</i>	16.9	16.7	16.8	16.4	16.2	:
<i>Family/children</i>	1.2	1.6	1.7	1.8	1.8	:
<i>Unemployment</i>	1.8	1.7	1.7	1.7	1.6	:
<i>Housing</i>	0.0	0.0	0.0	0.0	0.0	:
<i>Social exclusion n.e.c.</i>	0.2	0.2	0.2	0.3	0.3	:
<i>Total</i>	28.5	28.7	28.8	28.3	28.0	:
<i>of which: means-tested benefits</i>	1.6	2.0	2.2	2.3	2.3	:
General government expenditure by function (% of GDP)						
<i>Social protection</i>	21.0	21.2	21.3	21.0	20.9	:
<i>Health</i>	7.2	7.2	7.0	6.9	6.8	:
<i>Education</i>	4.1	4.0	3.9	3.8	3.8	:
Out-of-pocket expenditure on healthcare	21.8	22.1	23.1	22.9	23.5	:
Children at risk of poverty or social exclusion (% of people aged 0-17)*	32.0	32.1	33.5	33.2	32.1	30.6
At-risk-of-poverty rate ⁽¹⁾ (% of total population)	19.3	19.4	19.9	20.6	20.3	20.3
In-work at-risk-of-poverty rate (% of persons employed)	11.0	11.0	11.5	11.7	12.2	12.2
Severe material deprivation rate ⁽²⁾ (% of total population)	12.3	11.6	11.5	12.1	10.1	8.5
Severe housing deprivation rate ⁽³⁾ , by tenure status						
<i>Owner, with mortgage or loan</i>	9.1	8.4	9.7	6.5	5.2	5.1
<i>Tenant, rent at market price</i>	16.2	19.1	18.6	14.8	11.1	10.7
Proportion of people living in low work intensity households ⁽⁴⁾ (% of people aged 0-59)	11.3	12.1	11.7	12.8	11.8	11.3
Poverty thresholds, expressed in national currency at constant prices*	8212	8118	8147	8344	8504	8540
Healthy life years						
<i>Females</i>	7.1	7.3	7.5	10.1	9.8	:
<i>Males</i>	7.7	7.8	7.8	10.4	9.4	:
Aggregate replacement ratio for pensions ⁽⁵⁾	0.6	0.6	0.7	0.7	0.7	0.7
Connectivity dimension of the Digital Economy and Society Index (DESI) ⁽⁶⁾	:	35.6	40.2	43.5	53.8	:
GINI coefficient before taxes and transfers*	51.6	51.7	51.3	52.5	51.8	:
GINI coefficient after taxes and transfers*	32.8	32.4	32.4	33.1	32.7	:

Notes:

* Non-scoreboard indicator

(1) At-risk-of-poverty rate (AROP): proportion of people with an equivalised disposable income below 60 % of the national equivalised median income.

(2) Proportion of people who experience at least four of the following forms of deprivation: not being able to afford to i) pay their rent or utility bills, ii) keep their home adequately warm, iii) face unexpected expenses, iv) eat meat, fish or a protein equivalent every second day, v) enjoy a week of holiday away from home once a year, vi) have a car, vii) have a washing machine, viii) have a colour TV, or ix) have a telephone.

(3) Percentage of total population living in overcrowded dwellings and exhibiting housing deprivation.

(4) People living in households with very low work intensity: proportion of people aged 0-59 living in households where the adults (excluding dependent children) worked less than 20 % of their total work-time potential in the previous 12 months.

(5) Ratio of the median individual gross pensions of people aged 65-74 relative to the median individual gross earnings of people aged 50-59.

(6) Fixed broadband take up (33%), mobile broadband take up (22%), speed (33%) and affordability (11%), from the Digital Scoreboard.

Source: Eurostat, OECD

Table C.5: Product market performance and policy indicators

Performance indicators	2013	2014	2015	2016	2017	2018
Labour productivity per person ¹ growth (t/t-1) in %						
Labour productivity growth in industry	0,84	1,09	2,05	2,27	3,27	0,60
Labour productivity growth in construction	0,63	-3,87	-1,29	0,99	0,68	2,66
Labour productivity growth in market services	0,11	0,41	0,00	-0,58	-0,15	-0,51
Unit Labour Cost (ULC) index ² growth (t/t-1) in %						
ULC growth in industry	1,48	1,11	1,02	-1,10	-0,77	1,66
ULC growth in construction	-2,39	2,90	4,53	0,69	2,13	0,60
ULC growth in market services	0,67	0,12	2,09	2,13	1,78	3,21
Business environment	2013	2014	2015	2016	2017	2018
Time needed to enforce contracts ³ (days)	1185	1185	1120	1120	1120	1120
Time needed to start a business ³ (days)	12,5	11,5	11,0	11,0	11,0	11,0
Outcome of applications by SMEs for bank loans ⁴	0,95	1,06	0,58	0,51	0,33	0,38
Research and innovation	2013	2014	2015	2016	2017	2018
R&D intensity	1,30	1,34	1,34	1,37	1,37	1,39
General government expenditure on education as % of GDP	4,10	4,00	3,90	3,80	3,80	:
Employed people with tertiary education and/or people employed in S&T as % of total employment	33	33	34	34	35	35
Population having completed tertiary education ⁵	14	15	16	16	17	17
Young people with upper secondary education ⁶	78	80	80	81	82	81
Trade balance of high technology products as % of GDP	-0,43	-0,41	-0,56	-0,49	-0,44	-0,48
Product and service markets and competition	2003	2008	2013			2018*
OECD product market regulation (PMR) ⁷ , overall	1,80	1,49	1,26			1,32
OECD PMR ⁷ , retail	3,85	4,06	3,15			2,79
OECD PMR ⁷ , professional services ⁸	3,55	3,02	2,10			2,44
OECD PMR ⁷ , network industries ⁹	2,97	2,45	2,01			1,06

Notes:

*While the indicator values from 2003 to 2013 are comparable, the methodology has considerably changed in 2018. As a result, past vintages cannot be compared with the 2018 PMR indicators.

1 Value added in constant prices divided by the number of persons employed.

2 Compensation of employees in current prices divided by value added in constant prices.

3 The methodologies, including the assumptions, for this indicator are shown in detail here:

<http://www.doingbusiness.org/methodology>.

4 Average of the answer to question Q7B_a.- "[Bank loan]: If you applied and tried to negotiate for this type of financing over the past 6 months, what was the outcome?". Answers were codified as follows: zero if received everything, one if received 75% and above, two if received below 75%, three if refused or rejected and treated as missing values if the application is still pending or don't know.

5 Percentage of population aged 15-64 having completed tertiary education.

6 Percentage of population aged 20-24 having attained at least upper secondary education.

7 Index: 0 = not regulated; 6 = most regulated. The methodologies of the OECD product market regulation indicators are shown in detail here: <http://www.oecd.org/competition/reform/indicatorsofproductmarketregulationhomepage.htm>

Please be aware that the indicator values from 2003 to 2013 are comparable, however the methodology changed considerably in 2018 and therefore past vintages cannot be compared with the 2018 PMR indicators.

8 Simple average of the indicators of regulation for lawyers, accountants, architects and engineers.

9 Aggregate OECD indicators of regulation in energy, transport and communications.

Source: European Commission; World Bank — Doing Business (for enforcing contracts and time to start a business); OECD (for the product market regulation indicators); SAFE (for outcome of SMEs' applications for bank loans).

Table C.6: **Green growth**

Green growth performance		2013	2014	2015	2016	2017	2018
Macroeconomic							
Energy intensity	kgoe / €	0.10	0.10	0.10	0.10	0.10	0.09
Carbon intensity	kg / €	0.29	0.28	0.28	0.27	0.27	-
Resource intensity (reciprocal of resource productivity)	kg / €	0.32	0.31	0.32	0.31	0.31	0.31
Waste intensity	kg / €	-	0.10	-	0.10	-	-
Energy balance of trade	% GDP	-3.3	-2.6	-2.0	-1.5	-1.9	-2.3
Weighting of energy in HICP	%	10.02	9.11	9.96	9.55	8.80	9.22
Difference between energy price change and inflation	%	0.1	-3.7	-2.8	-4.7	1.4	3.7
Real unit of energy cost	% of value added	14.0	12.6	13.1	13.8	-	-
Ratio of environmental taxes to labour taxes	ratio	0.11	0.11	0.09	0.09	0.08	-
Environmental taxes	% GDP	3.4	3.6	3.4	3.5	3.3	3.3
Sectoral							
Industry energy intensity	kgoe / €	0.08	0.08	0.08	0.08	0.07	0.07
Real unit energy cost for manufacturing industry excl. refining	% of value added	17.5	16.0	17.3	19.0	-	-
Share of energy-intensive industries in the economy	% GDP	7.81	7.74	7.64	7.85	7.98	7.96
Electricity prices for medium-sized industrial users	€ / kWh	0.17	0.17	0.16	0.15	0.15	0.14
Gas prices for medium-sized industrial users	€ / kWh	0.04	0.04	0.03	0.03	0.03	0.03
Public R&D for energy	% GDP	0.02	0.02	0.02	0.02	0.02	0.02
Public R&D for environmental protection	% GDP	0.01	0.02	0.01	0.01	0.01	0.01
Municipal waste recycling rate	%	39.4	41.6	44.3	45.9	47.8	49.8
Share of GHG emissions covered by ETS*	%	37.6	36.5	36.4	36.4	36.5	34.8
Transport energy intensity	kgoe / €	0.53	0.56	0.56	0.54	0.51	0.53
Transport carbon intensity	kg / €	0.54	0.54	0.55	0.53	0.56	0.55
Security of energy supply							
Energy import dependency	%	76.7	75.8	77.0	77.7	77.0	-
Aggregated supplier concentration index	HHI	16.0	13.3	14.9	16.1	19.1	-
Diversification of energy mix	HHI	29.3	28.6	29.4	30.2	30.6	30.2

All macro intensity indicators are expressed as a ratio of a physical quantity to GDP (in 2010 prices)

Energy intensity: gross inland energy consumption (in kgoe) divided by GDP (in EUR)

Carbon intensity: greenhouse gas emissions (in kg CO₂ equivalents) divided by GDP (in EUR)

Resource intensity: domestic material consumption (in kg) divided by GDP (in EUR)

Waste intensity: waste (in kg) divided by GDP (in EUR)

Energy balance of trade: the balance of energy exports and imports, expressed as % of GDP.

Weighting of energy in HICP: the proportion of 'energy' items in the consumption basket used for the construction of the HICP.

Difference between energy price change and inflation: energy component of HICP, and total HICP inflation (annual % change).

Real unit energy cost: real energy costs as % of total value added for the economy.

Industry energy intensity: final energy consumption of industry (in kgoe) divided by gross value added of industry (in 2010 EUR).

Real unit energy costs for manufacturing industry excluding refining: real costs as % of value added for manufacturing sectors.

Share of energy-intensive industries in the economy: share of gross value added of the energy-intensive industries in GDP.

Electricity and gas prices for medium-sized industrial users: consumption band 500–20 000 MWh and 10 000–100 000 GJ; figures excl. VAT.

Recycling rate of municipal waste: ratio of recycled and composted municipal waste to total municipal waste.

Public R&D for energy or for the environment: government spending on R&D for these categories as % of GDP.

Proportion of GHG emissions covered by EU emissions trading system (ETS) (excluding aviation): based on GHG emissions.

(excl. land use, land use change and forestry) as reported by Member States to the European Environment Agency.

Transport energy intensity: final energy consumption of transport activity including international aviation (kgoe) divided by gross value added in transportation and storage sector (in 2010 EUR).

Transport carbon intensity: GHG emissions in transportation and storage sector divided by gross value added in transportation and storage sector (in 2010 EUR).

Energy import dependency: net energy imports divided by gross inland energy consumption incl. consumption of international bunker fuels.

Aggregated supplier concentration index: Herfindahl index covering oil, gas and coal. Smaller values indicate larger diversification and hence lower risk.

Diversification of the energy mix: Herfindahl index covering natural gas, total petrol products, nuclear heat, renewable energies and solid fuels. Smaller values indicate larger diversification.

* European Commission and European Environment Agency - 2018 provisional data.

Source: European Commission and European Environment Agency (Share of GHG emissions covered by ETS); European Commission (Environmental taxes over labour taxes and GDP); Eurostat (all other indicators).

ANNEX D: INVESTMENT GUIDANCE ON JUST TRANSITION FUND 2021-2027 FOR ITALY

Building on the Commission proposal, this Annex presents the preliminary Commission's views on priority investment areas and framework conditions for effective delivery for the 2021-2027 Just Transition Fund investments in Italy ⁽¹⁰⁷⁾. These priority investment areas are derived from the broader analysis of territories facing serious socio-economic challenges stemming from the transition process towards a climate-neutral economy of the Union by 2050 in Italy, assessed in the report. This Annex provides the basis for a dialogue between Italy and the Commission services as well as the relevant guidance for the Member States in preparing their territorial just transition plans, which will form the basis for programming the Just Transition Fund. The Just Transition Fund investments complement those under Cohesion Policy funding for which guidance in the form of Annex D was given in the 2019 Country Report for Italy ⁽¹⁰⁸⁾.

Italy is the EU's fourth largest producer of greenhouse gas (GHG) emissions, and its energy sector is the largest contributor to the total GHG emissions with a share of 56% in 2017. Italy's main sources of GHG emissions are coal power plants and iron/steel production ⁽¹⁰⁹⁾. Two areas deserve specific attention, Taranto and Sulcis Iglesiente (Carbonia-Iglesias, in the South-West of Sardinia).

In the functional urban area of Taranto (province of Taranto), which hosts one of Europe's largest steel mills and one of the three biggest coal-fired power plants in Italy, large industrial pollution stems from GHG, but also from other pollutants and particle matters. This area is economically heavily dependent on the steel mill, which employs ca. 10 000 employees, with a further ca. 10 000 estimated to work in ancillary companies. These jobs are at risk. The area's heavy dependence on fossil fuels poses a massive decarbonisation challenge and calls for major efforts in supporting an integrated transition strategy to accompany Taranto's long-term shift towards economic alternatives and further development of the steel cluster. Based on this preliminary assessment, it appears warranted that the Just Transition Fund concentrates its intervention on that area.

In order to tackle these challenges, priority investment needs have been identified to make the economies of this area more modern and competitive. Key actions of the Just Transition Fund could target in particular:

- investment in the deployment of technology and infrastructures for affordable clean energy, energy efficiency and renewable energy, including in industrial sites that emit high GHG with the aim to reduce emissions; ⁽¹¹⁰⁾
- investment in regeneration and decontamination of sites, land restauration and repurposing projects;
- investment in the creation of new firms , including through business incubators and consulting services, considering Smart Specialisation Strategies ⁽¹¹¹⁾;

⁽¹⁰⁷⁾ This Annex is to be considered in conjunction with the EC proposal for a Regulation of the European Parliament and of the Council on the Just Transition Fund 2021-2027 (COM(2020)22 and the EC proposal for a Regulation of the European Parliament and of the Council laying down common provisions on the European Regional Development Fund, the European Social Fund Plus, the Cohesion Fund, and the European Maritime and Fisheries Fund and financial rules for those and for the Asylum and Migration Fund, the Internal Security Fund and the Border Management and Visa Instrument (COM(2020)23)

⁽¹⁰⁸⁾ SWD(2019) 1011 final

⁽¹⁰⁹⁾ DG REGIO, 2016

⁽¹¹⁰⁾ In the area, the industrial sites, performing activities listed in Annex I to Directive 2003/87/EC, employ a substantial number of workers and their activity is at risk due to their high greenhouse gas emissions; support to investments to reduce the emissions could be considered, provided that they achieve a substantial reduction of emissions (going substantially below the relevant benchmarks used for free allocation under Directive 2003/87/EC). The Taranto area is expected to suffer from substantial job losses, which might not be entirely offset by the creation and development of SMEs; support to productive investments in large enterprises could therefore be considered and on the condition that the investments are compatible with the European Green Deal.

- productive investments in SMEs;
- upskilling and reskilling of workers;
- job-search assistance to jobseekers,
- active inclusions of jobseekers.

In Sulcis Iglesiente (province of Carbonia-Iglesias), Italy's last coal mine of Monte Sinni should gradually phase out coal production by 2025. It employs 350 staff and its production has been steadily declining. The area is already characterised by a high percentage of older inhabitants, few young graduates, high youth unemployment rate (35.7%), low per capita income and an overall low quality of life¹¹². This poses transition challenges and triggers related investment needs. Based on this preliminary assessment, it appears warranted that the Just Transition Fund also intervenes in this area.

Key actions of the Just Transition Fund could target in particular :

- investment in regeneration and decontamination of sites, land restoration and repurposing projects;
- investment in enhancing the circular economy, including through waste prevention, reduction, resource efficiency, reuse repair and recycling;
- productive investments in SMEs, including start-ups, leading to economic diversification and reconversion;
- upskilling and reskilling of workers;
- job-search assistance to jobseekers;
- active inclusions of jobseekers.

(¹¹¹) The smart specialisation strategies [as defined in Article 2(3) of Regulation EU 1303/2013 (CPR)] provide an important framework to set priorities for innovation in support of economic transformation.

(¹¹²) “Area di crisi industriale complessa - Polo Industriale Portovesme a relativo indotto”, Sardinia region, 2016.

ANNEX E: PROGRESS TOWARDS THE SUSTAINABLE DEVELOPMENT GOALS (SDGs)

Assessment of Italy's short-term progress towards the SDGs ⁽¹¹³⁾

Table E.1 shows the data for Italy and the EU-28 for the indicators included in the EU SDG indicator set used by Eurostat for [monitoring progress towards the SDGs in an EU context](#) ⁽¹¹⁴⁾. As the short-term trend at EU-level is assessed over a 5-year period, both the value at the beginning of the period and the latest available value is presented. The indicators are regularly updated on the [SDI dedicated section](#) of the Eurostat website.

Table E.1: Indicators measuring Italy's progress towards the SDGs

SDG / Sub-theme	Indicator	Unit	Italy				EU-28			
			Starting		Latest		Starting		Latest	
			year	value	year	value	year	value	year	value
SDG 1 – No poverty										
Multidimensional poverty	People at risk of poverty or social exclusion	% of population	2013	28.5	2018	27.3	2013	24.6	2018	21.9
	People at risk of income poverty after social transfers	% of population	2013	19.3	2018	20.3	2013	16.7	2018	17.1
	Severely materially deprived people	% of population	2013	12.3	2018	8.5	2013	9.6	2018	5.8
	People living in households with very low work intensity	% of population aged 0 to 59	2013	11.3	2018	11.3	2013	11.0	2018	8.8
	In-work at-risk-of-poverty rate	% of population aged 18 or over	2013	11.0	2018	12.2	2013	9.0	2018	9.5
Basic needs	Population living in a dwelling with a leaking roof, damp walls, floors or foundation or rot in window frames or floor	% of population	2013	22.9	2018	13.2	2013	15.6	2018	13.9
	Self-reported unmet need for medical care	% of population aged 16 or over	2013	7.0	2018	2.4	2013	3.7	2018	2.0
	Population having neither a bath, nor a shower, nor indoor flushing toilet in their household	% of population	2013	0.1	2018	0.3	2013	2.2	2018	1.7
	Population unable to keep home adequately warm	% of population	2013	18.8	2018	14.1	2013	10.7	2018	7.3
	Overcrowding rate	% of population	2013	27.1	2018	27.8	2013	17.0	2018	15.5
SDG 2 – Zero hunger										
Malnutrition	Obesity rate	% of population aged 18 or over	2014	10.8	2017	:	2014	15.9	2017	15.2
Sustainable agricultural production	Agricultural factor income per annual work unit (AWU)	EUR, chain linked volumes (2010)	2012	18 823	2017	19 579	2012	14 865	2017	17 304
	Government support to agricultural research and development	million EUR	2013	285.7	2018	297.8	2013	3 048.6	2018	3 242.5
	Area under organic farming	% of utilised agricultural area	2013	10.6	2018	15.2	2013	5.7	2018	7.5
	Gross nitrogen balance on agricultural land	kg per hectare	2010	59	2015	66	2010	49	2015	51
Environmental impacts of agricultural production	Ammonia emissions from agriculture	kg per ha of utilised agricultural area	2011	29	2016	28.8	2011	19.7	2016	20.3
	Nitrate in groundwater	mg NO ₃ per litre	N/A	:	N/A	:	2012	19.2	2017	19.1
	Estimated soil erosion by water	km ²	2010	67 990.9	2016	68 398.2	2010	207 232.2	2016	205 294.5
	Common farmland bird index	index 2000 = 100	N/A	:	N/A	:	2013	83.9	2018	80.7
SDG 3 – Good health and well-being										
Healthy lives	Life expectancy at birth	years	2012	82.4	2017	83.1	2012	80.3	2017	80.9
	Share of people with good or very good perceived health	% of population aged 16 or over	2013	66.3	2018	73.3	2013	67.3	2018	69.2
Health determinants	Smoking prevalence	% of population aged 15 or over	2012	24	2017	25	2014	26	2017	26
	Obesity rate	% of population aged 18 or over	2014	10.8	2017	:	2014	15.9	2017	15.2
	Population living in households considering that they suffer from noise	% of population	2013	18.1	2018	10.9	2013	18.8	2018	18.3
	Exposure to air pollution by particulate matter (PM _{2.5})	µg/m ³	2012	23.0	2017	19.4	2012	16.8	2017	14.1
Causes of death	Death rate due to chronic diseases	number per 100 000 persons aged less than 65	2011	97.3	2016	84.6	2011	132.5	2016	119.0
	Death rate due to tuberculosis, HIV and hepatitis	number per 100 000 persons	2011	6.4	2016	4.8	2011	3.4	2016	2.6
	People killed in accidents at work	number per 100 000 employed persons	2012	2.64	2017	2.10	2012	1.91	2017	1.65
	People killed in road accidents	number of killed people	2012	3 753	2017	3 378	2012	28 231	2017	25 257
Access to health care	Self-reported unmet need for medical care	% of population aged 16 or over	2013	7.0	2018	2.4	2013	3.7	2018	2.0

(Continued on the next page)

⁽¹¹³⁾ Data extracted on 9 February 2020 from the Eurostat database (official EU SDG indicator set; see <https://ec.europa.eu/eurostat/web/sdi/main-tables>).

⁽¹¹⁴⁾ The EU SDG indicator set is aligned as far as appropriate with the UN list of global indicators, noting that the UN indicators are selected for global level reporting and are therefore not always relevant in an EU context. The EU SDG indicators have strong links with EU policy initiatives.

Table (continued)

SDG / Sub-theme	Indicator	Unit	Italy				EU-28			
			Starting		Latest		Starting		Latest	
			year	value	year	value	year	value	year	value
SDG 4 – Quality education										
Basic education	Early leavers from education and training	% of the population aged 18 to 24	2013	16.8	2018	14.5	2013	11.9	2018	10.6
	Participation in early childhood education	% of the age group between 4-years-old and the starting age of compulsory education	2012	99.2	2017	95.1	2012	94.0	2017	95.4
	Underachievement in reading	% of 15-year-old students	2015	21.0	2018	23.3	2015	19.7	2018	21.7
	Young people neither in employment nor in education and training	% of population aged 15 to 29	2013	26.0	2018	23.4	2013	15.9	2018	12.9
Tertiary education	Tertiary educational attainment	% of the population aged 30 to 34	2013	22.5	2018	27.8	2013	37.1	2018	40.7
	Employment rate of recent graduates	% of population aged 20 to 34	2013	48.5	2018	56.5	2013	75.4	2018	81.7
Adult education	Adult participation in learning	% of population aged 25 to 64	2013	6.2	2018	8.1	2013	10.7	2018	11.1
SDG 5 – Gender equality										
Gender-based violence	Physical and sexual violence to women experienced within 12 months prior to the interview	% of women	N/A	:	2012	7	N/A	:	2012	8
Education	Gender gap for early leavers from education and training	percentage points, persons aged 18–24	2013	6.4	2018	4.2	2013	3.4	2018	3.3
	Gender gap for tertiary educational attainment	percentage points, persons aged 30–34	2013	9.6	2018	12.3	2013	8.5	2018	10.1
	Gender gap for employment rate of recent graduates	percentage points, persons aged 20–34	2013	1.8	2018	4.8	2013	4.4	2018	3.4
Employment	Gender pay gap in unadjusted form	% of average gross hourly earnings of men	2012	6.5	2017	5.0	2012	17.4	2017	16.0
	Gender employment gap	percentage points, persons aged 20–64	2013	19.8	2018	19.8	2013	11.7	2018	11.6
	Gender gap in inactive population due to caring responsibilities	percentage points, persons aged 20–64	2013	23.2	2018	32.0	2013	25.5	2018	27.1
Leadership positions	Seats held by women in national parliaments and governments	% of seats	2014	30.3	2019	35.8	2014	27.2	2019	31.5
	Positions held by women in senior management	% of board members	2014	24.1	2019	36.6	2014	20.2	2019	27.8
SDG 6 – Clean water and sanitation										
Sanitation	Population having neither a bath, nor a shower, nor indoor flushing toilet in their household	% of population	2013	0.1	2018	0.3	2013	2.2	2018	1.7
	Population connected to at least secondary wastewater treatment	% of population	2012	57.6	2015	59.6	N/A	:	N/A	:
Water quality	Biochemical oxygen demand in rivers	mg O ₂ per litre	N/A	:	N/A	:	2012	2.06	2017	2.00
	Nitrate in groundwater	mg NO ₃ per litre	N/A	:	N/A	:	2012	19.2	2017	19.1
	Phosphate in rivers	mg PO ₄ per litre	N/A	:	N/A	:	2012	0.096	2017	0.093
	Inland water bathing sites with excellent water quality	% of bathing sites with excellent water quality	2013	77.2	2018	90.6	2013	76.5	2018	80.8
Water use efficiency	Water exploitation index	% of long term average available water (LTAA)	N/A	:	N/A	:	N/A	:	N/A	:
SDG 7 – Affordable and clean energy										
Energy consumption	Primary energy consumption	million tonnes of oil equivalent (Mtoe)	2013	152.1	2018	147.2	2013	1 577.4	2018	1 551.9
	Final energy consumption	million tonnes of oil equivalent (Mtoe)	2013	118.6	2018	116.5	2013	1 115.5	2018	1 124.1
	Final energy consumption in households per capita	kgoe	2013	568	2018	531	2013	605	2018	552
	Energy productivity	EUR per kgoe	2013	9.6	2018	10.1	2013	7.6	2018	8.5
	Greenhouse gas emissions intensity of energy consumption	index 2000 = 100	2012	89.6	2017	82.4	2012	91.5	2017	86.5
Energy supply	Share of renewable energy in gross final energy consumption	%	2013	16.7	2018	17.8	2013	15.4	2018	18.0
	Energy import dependency	% of imports in gross available energy	2013	76.7	2018	76.3	2013	53.2	2018	55.7
Access to affordable energy	Population unable to keep home adequately warm	% of population	2013	18.8	2018	14.1	2013	10.7	2018	7.3

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Table (continued)

SDG / Sub-theme	Indicator	Unit	Italy				EU-28			
			Starting		Latest		Starting		Latest	
			year	value	year	value	year	value	year	value
SDG 8 – Decent work and economic growth										
Sustainable economic growth	Real GDP per capita	EUR per capita, chain-linked volumes (2010)	2013	25 480	2018	26 760	2013	25 750	2018	28 280
	Investment share of GDP	% of GDP	2013	17.2	2018	17.8	2013	19.5	2018	20.9
	Resource productivity	EUR per kg, chain-linked volumes (2010)	2013	3.10	2018	3.21	2013	1.98	2018	2.04
Employment	Young people neither in employment nor in education and training	% of population aged 15 to 29	2013	26.0	2018	23.4	2013	15.9	2018	12.9
	Employment rate	% of population aged 20 to 64	2013	59.7	2018	63.0	2013	68.4	2018	73.2
	Long-term unemployment rate	% of active population	2013	6.9	2018	6.2	2013	5.1	2018	2.9
	Gender gap in inactive population due to caring responsibilities	percentage points, persons aged 20–64	2013	23.2	2018	32.0	2013	25.5	2018	27.1
Decent work	People killed in accidents at work	number per 100 000 employed persons	2012	2.64	2017	2.10	2012	1.91	2017	1.65
	In-work at-risk-of-poverty rate	% of population	2013	11	2018	12.2	2013	9	2018	9.5
SDG 9 – Industry, innovation and infrastructure										
R&D and innovation	Gross domestic expenditure on R&D	% of GDP	2013	1.30	2018	1.39	2013	2.01	2018	2.12
	Employment in high- and medium-high technology manufacturing and knowledge-intensive services	% of total employment	2013	40.1	2018	40.7	2013	45.0	2018	46.1
	R&D personnel	% of active population	2013	0.99	2018	1.23	2013	1.15	2018	1.36
	Patent applications to the European Patent Office (EPO)	number	2012	4 334	2017	4 148	2012	56 772	2017	54 649
Sustainable transport	Share of buses and trains in total passenger transport	% of total inland passenger-km	2012	21.1	2017	18.0	2012	17.2	2017	16.7
	Share of rail and inland waterways in total freight transport	% of total inland freight tonne-km	2012	12.7	2017	13.6	2012	25.4	2017	23.3
	Average CO2 emissions per km from new passenger cars	g CO ₂ per km	2013	121.1	2018	115.6	2014	123.4	2018	120.4
SDG 10 – Reduced inequalities										
Inequalities within countries	Relative median at-risk-of-poverty gap	% distance to poverty threshold	2013	28.2	2018	29.5	2013	23.8	2018	24.6
	Income distribution	income quintile share ratio	2013	5.9	2018	6.1	2013	5.0	2018	5.2
	Income share of the bottom 40 % of the population	% of income	2013	19.7	2018	19.3	2013	21.1	2018	21.0
	People at risk of income poverty after social transfers	% of population	2013	19.3	2018	20.3	2013	16.7	2018	17.1
Inequalities between countries	Purchasing power adjusted GDP per capita	Real expenditure per capita (in PPS)	2013	26 500	2018	29 700	2013	26 800	2018	31 000
	Adjusted gross disposable income of households per capita	Purchasing power standard (PPS) per inhabitant	2013	20 678	2018	22 341	2013	20 392	2018	22 824
	Financing to developing countries	million EUR, current prices	2012	8 707	2017	13 093	2012	147 962	2017	155 224
	Imports from developing countries	million EUR, current prices	2013	96 664	2018	107 139	2013	817 475	2018	1 013 981
Migration and social inclusion	Asylum applications	Positive first instance decisions, per million inhabitants	2013	239	2018	508	2013	213	2018	424
SDG 11 – Sustainable cities and communities										
Quality of life in cities and communities	Overcrowding rate	% of population	2013	27.1	2018	27.8	2013	17.0	2018	15.5
	Population living in households considering that they suffer from noise	% of population	2013	18.1	2018	10.9	2013	18.8	2018	18.3
	Exposure to air pollution by particulate matter (PM _{2.5})	µg/m ³	2012	23.0	2017	19.4	2012	16.8	2017	14.1
	Population living in a dwelling with a leaking roof, damp walls, floors or foundation or rot in window frames or floor	% of population	2013	22.9	2018	13.2	2013	15.6	2018	13.9
	Population reporting occurrence of crime, violence or vandalism in their area	% of population	2013	16.0	2018	11.3	2013	14.5	2018	12.7
Sustainable mobility	People killed in road accidents	number of killed people	2012	3 753	2017	3 378	2012	28 231	2017	25 257
	Share of buses and trains in total passenger transport	% of total inland passenger-km	2012	21.1	2017	18.0	2012	17.2	2017	16.7
Adverse environmental impacts	Settlement area per capita	m ²	2009	439.5	2015	471.5	2012	625.0	2015	653.7
	Recycling rate of municipal waste	% of total waste generated	2013	39.4	2018	49.8	2013	41.7	2018	47.0
	Population connected to at least secondary wastewater treatment	% of population	2012	57.6	2015	59.6	N/A	∴	N/A	∴

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Table (continued)

SDG / Sub-theme	Indicator	Unit	Italy				EU-28			
			Starting		Latest		Starting		Latest	
			year	value	year	value	year	value	year	value
SDG 12 – Responsible consumption and production										
Decoupling environmental impacts from economic growth	Consumption of toxic chemicals	million tonnes	N/A	:	N/A	:	2013	300.3	2018	313.9
	Resource productivity	EUR per kg, chain-linked volumes (2010)	2013	3.10	2018	3.21	2013	1.98	2018	2.04
	Average CO2 emissions per km from new passenger cars	g CO ₂ per km	2013	121.1	2018	115.6	2014	123.4	2018	120.4
	Energy productivity	EUR per kgoe	2013	9.6	2018	10.1	2013	7.6	2018	8.5
Energy consumption	Primary energy consumption	million tonnes of oil equivalent (Mtoe)	2013	152.1	2018	147.2	2013	1 577.4	2018	1 551.9
	Final energy consumption	million tonnes of oil equivalent (Mtoe)	2013	118.6	2018	116.5	2013	1 115.5	2018	1 124.1
	Share of renewable energy in gross final energy consumption	%	2013	16.7	2018	17.8	2013	15.4	2018	18.0
Waste generation and management	Circular material use rate	% of material input for domestic use	2012	14.5	2017	17.7	2012	11.5	2017	11.7
	Generation of waste excluding major mineral wastes	kg per capita	2012	1 709	2016	1 799	2012	1 716	2016	1 772
	Recycling rate of waste excluding major mineral wastes	% of total waste treated	2012	64	2016	68	2012	55	2016	57
SDG 13 – Climate action										
Climate mitigation	Greenhouse gas emissions	index 1990 = 100	2012	92.3	2017	84.1	2012	82.1	2017	78.3
	Greenhouse gas emissions intensity of energy consumption	index 2000 = 100	2012	89.6	2017	82.4	2012	91.5	2017	86.5
	Primary energy consumption	million tonnes of oil equivalent (Mtoe)	2013	152.1	2018	147.2	2013	1 577.4	2018	1 551.9
	Final energy consumption	million tonnes of oil equivalent (Mtoe)	2013	118.6	2018	116.5	2013	1 115.5	2018	1 124.1
	Share of renewable energy in gross final energy consumption	%	2013	16.7	2018	17.8	2013	15.4	2018	18.0
	Average CO2 emissions per km from new passenger cars	g CO ₂ per km	2013	121.1	2018	115.6	2014	123.4	2018	120.4
Climate impacts	European mean near surface temperature deviation	temperature deviation in °C, compared with the 1850–1899 average	N/A	:	N/A	:	2013	1.4	2018	2.1
	Climate-related economic losses	EUR billion, in 2017 values	N/A	:	N/A	:	2012	2 719	2017	2 649
	Mean ocean acidity	pH value	N/A	:	N/A	:	2013	8.06	2018	8.06
Support to climate action	Contribution to the international 100bn USD commitment on climate related expending	EUR million, current prices	N/A	:	2017	632.6	N/A	:	2017	20 388.7
SDG 14 – Life below water										
Ocean health	Coastal water bathing sites with excellent water quality	% of bathing sites with excellent water quality	2013	89.9	2018	90.0	2013	85.5	2018	87.1
	Mean ocean acidity	pH value	N/A	:	N/A	:	2013	8.06	2018	8.06
Marine conservation	Surface of marine sites designated under NATURA 2000	km ²	2013	6 704	2018	6 859	2013	251 566	2018	551 899
Sustainable fisheries	Estimated trends in fish stock biomass	index 2003 = 100	N/A	:	N/A	:	2012	110.0	2017	136.0
	Assessed fish stocks exceeding fishing mortality at maximum sustainable yield (Fmsy)	% of stocks exceeding fishing mortality at maximum sustainable yield (F>F _{MSY})	N/A	:	N/A	:	2012	52.9	2017	42.7
SDG 15 – Life on land										
Ecosystems status	Share of forest area	% of total land area	2009	33.6	2015	35.6	2012	40.3	2015	41.6
	Biochemical oxygen demand in rivers	mg O ₂ per litre	N/A	:	N/A	:	2012	2.06	2017	2.00
	Nitrate in groundwater	mg NO ₃ per litre	N/A	:	N/A	:	2012	19.2	2017	19.1
	Phosphate in rivers	mg PO ₄ per litre	N/A	:	N/A	:	2012	0.096	2017	0.093
Land degradation	Soil sealing index	index 2006 = 100	2009	101.4	2015	103.1	2009	101.7	2015	104.2
	Estimated soil erosion by water	km ²	2010	67 990.9	2016	68 398.2	2010	207 232.2	2016	205 294.5
	Settlement area per capita	m ²	2009	439.5	2015	471.5	2012	625.0	2015	653.7
Biodiversity	Surface of terrestrial sites designated under NATURA 2000	km ²	2013	57 137	2018	57 265	2013	787 766	2018	784 252
	Common bird index	index 2000 = 100	N/A	:	N/A	:	2013	94.7	2018	93.5
	Grassland butterfly index	index 2000 = 100	N/A	:	N/A	:	2012	72.2	2017	74.1

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Table (continued)

SDG / Sub-theme	Indicator	Unit	Italy				EU-28			
			Starting		Latest		Starting		Latest	
			year	value	year	value	year	value	year	value
SDG 16 – Peace, justice and strong institutions										
Peace and personal security	Death rate due to homicide	number per 100 000 persons	2011	0.7	2016	0.5	2011	0.9	2016	0.6
	Population reporting occurrence of crime, violence or vandalism in their area	% of population	2013	16.0	2018	11.3	2013	14.5	2018	12.7
	Physical and sexual violence to women experienced within 12 months prior to the interview	% of women	N/A	:	2012	7	N/A	:	2012	8
Access to justice	General government total expenditure on law courts	million EUR	2012	5 445	2017	5 831	2012	48 381	2017	51 027
	Perceived independence of the justice system	% of population	2016	25	2019	37	2016	52	2019	56
Trust in institutions	Corruption Perceptions Index	score scale of 0 (highly corrupt) to 100 (very clean)	2013	43	2018	52	N/A	:	N/A	:
	Population with confidence in the EU Parliament	% of population	2013	36	2018	44	2013	39	2018	48
SDG 17 – Partnerships for the goals										
Global partnership	Official development assistance as share of gross national income	% of GNI	2013	0.17	2018	0.23	2013	0.43	2018	0.48
	EU financing to developing countries	million EUR, current prices	2012	8 707	2017	13 093	2012	147 962	2017	155 224
	EU imports from developing countries	million EUR, current prices	2013	96 664	2018	107 139	2013	817 475	2018	1 013 981
Financial governance within the EU	General government gross debt	% of GDP	2013	132.4	2018	134.8	2013	86.3	2018	80.4
	Shares of environmental and labour taxes in total tax revenues	% of total tax revenues	2013	7.9	2018	7.8	2013	6.4	2018	6.1

Source: Eurostat

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