development report 2019

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Development Report 2019

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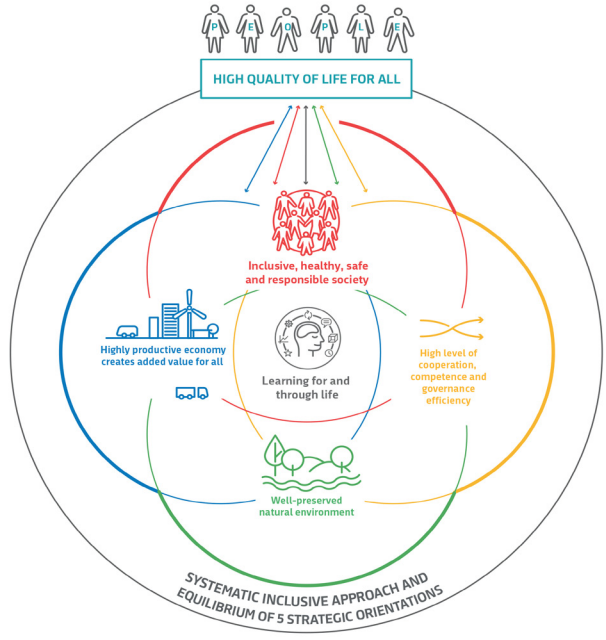
Introductory remarks

The Development Report 2019 presents an overview of developments according to strategic orientations set out in the Slovenian Development Strategy 2030 (SDS) adopted by the government of the Republic of Slovenia in December 2017. The basic structure of the report follows the five strategic orientations identified in the SDS as crucial for achieving its primary goal, i.e. to ensure a high quality of life for all. These are: (i) a highly productive economy that creates value added for all; (ii) lifelong learning; (iii) an inclusive, healthy, safe and responsible society; (iv) a well-preserved natural environment; and (v) a high level of cooperation, competence and governance efficiency. The SDS also set 12 development goals in interconnected and interdependent areas identified as essential for the implementation of the strategic orientations. The report tracks the implementation of each development goal within the strategic orientation with which it is most strongly linked, although individual goals can contribute to the realisation of several orientations (see Slovenian Development Strategy 2030, Figure 6). As at the time the report was prepared, statistical data for most indicators were only available for 2017 and only some also for 2018, the actual implementation of the Strategy could not yet be analysed.

The appendix to the report presents indicators for monitoring the implementation of the SDS in more detail. The 30 performance indicators for which the SDS set target values for 2030 are complemented by indicators that provide a detailed overview of progress in individual areas. These represent the main analytical basis of the report, which is complemented by an overview of other data, studies and research reports, particularly for those areas where no appropriate indicators for comparisons between countries or over time are available (for example because of the specificity of content). The report uses data sources released by 31 March 2019.

Figure 1: Primary objective and strategic orientations of the Slovenian Development Strategy 2030



Source: Slovenian Development Strategy 2030, 2017.

Summary

Key findings and recommendations

Positive developments in the last few years

Since 2016 Slovenia has again been narrowing its gap in economic development with the EU average, social inclusion of the population remains relatively high, while the efficiency of energy and resource consumption has improved somewhat. After the stabilisation of public finances and the banking system, which were heavily disrupted during the crisis, the economy has been rapidly recovering against the background of favourable international developments and improving export competitiveness. The recovery has mainly been based on the upturn of the export part of the economy. In the recent period domestic consumption has also started to increase more noticeably. The improvement in economic conditions was followed by growth in household income, which was the highest in lower income brackets. Policy measures and increased hiring in favourable economic conditions contributed to a decline in long-term unemployment and a rapid inclusion of population groups that were less represented on the labour market during the crisis (young people, older people and low-skilled people). The risk of social exclusion and income inequality have thus fallen to pre-crisis levels and remain relatively low by international standards. With the economic uptick, the consumption of resources and energy has increased, yet less than gross domestic product. This indicates

Key development challenges

In certain areas developments deviate from the principles of sustainable development and pose a risk to the achievement of the SDS' primary objective. Productivity growth, which is essential for raising the living standard of the population over the long term, has remained modest during the economic upturn. Developments in the field of innovations – which are the most important factor of long-term productivity growth – have been negative. Social protection systems are insufficiently adapted to demographic change, which increases pressures on their financial sustainability and limits the possibilities for ensuring high-quality public services for the population. From the perspective of creating an inclusive society, particularly the persistently high labour market segmentation of young people and the low economic and social inclusion of older people stand out as problematic. Progress in healthy life expectancy is relatively slow, the main challenges being the shortening of waiting periods in healthcare and a further improvement in the lifestyles of the population. From the environmental point of view, the sustainability of development is negatively marked by Slovenia's high carbon footprint, particularly the rising GHG emissions from transport, the share of renewable energy sources remaining unchanged for several years, and unsustainable use of land.

Recommendations for development policies

In previous years Slovenia has been relatively successful in solving short-term problems related mainly to the consequences of the crisis, but in the future more permanent measures for improving the long-term sustainability of development and quality of life will be required. Development policies should be focused primarily on the following:

- **Acceleration of productivity growth** for economic progress and higher living standards of the population. It is essential to strengthen long-term productivity factors, particularly by (i) investment in R&D to support high-quality research work and stable, long-term measures for fostering innovation and accelerating the digital transformation of the economy and society, (ii) a more rapid adjustment of education and training programmes to labour market needs and technological changes, and (iii) increasing lifelong learning;
- **Adjustment to demographic change** to ensure a decent life for all. The emphasis should lie on (i) reforming social protection systems to ensure sufficient funding, (ii) strengthening lifelong learning, (iii) promoting a healthy lifestyle, (iv) adapting working and living environments, and (v) securing a sufficient supply of appropriate workforce;
- **Transition to a low-carbon circular economy** economy to reduce the environmental burden and increase the competitiveness of the economy. This requires a shift towards more sustainable production and consumption patterns, especially (i) by a more efficient exploitation of natural resources, (ii) with a sustainable mobility, and (iii) by education and raising awareness of the population of the urgency of changes towards sustainable development;
- **Strengthening the development role of the government and its institutions** by (i) improving the strategic governance of public institutions, (ii) improving the legislative

and business environment, and (iii) restructuring general government revenue and expenditure to respond to development challenges.

Overview of developments according to the strategic orientations of the SDS

A highly productive economy that creates value added for all

With stronger economic growth, Slovenia has been catching up with the EU average in terms of economic development since 2016, but its gap in productivity remains significant. The rapid recovery of the economy after the stabilisation of public finances and the banking system, which were strongly disrupted during the crisis, was mainly based on the upturn of the export part of the economy, boosted by favourable economic developments internationally and the improving competitiveness of exporters. The fastest recovery has been recorded in the more developed western cohesion region, where the economy otherwise contracted the most during the crisis. The improvement in the competitive position has been reflected in increased export market share and greater integration of the economy in global value chains. In recent years the recovery has also spread to other parts of the economy. Private consumption and investment have started to pick up gradually. Owing to the sluggish recovery of investor confidence after the crisis and restrictions on government investment in the fiscal consolidation process, investment increased more visibly only in 2017, but with the cooling in the international environment, growth in investment in machinery and equipment is expected to ease off in the short term. Modest investment consumption impedes faster growth of productivity, which remains significantly below the EU average, as does, consequently, GDP per capita as a measure of economic development. Relative to the pre-crisis level, the low level of investment in construction stands out. From the aspect of future challenges, it is however vital to strengthen investment particularly in areas that have a greater long-term impact on productivity and competitiveness, such as research, development, innovations and digital transformation, where trends have mostly been unfavourable in the past. The strengthening of these areas is especially important as, owing to the shrinkage of the available workforce due to demographic change, future development will increasingly depend on the ability to raise productivity.

Lifelong learning

The level of educational attainment is relatively high in Slovenia, but demographic change and rapid technological progress require ever faster adjustment of educational programmes and knowledge and skills to development challenges. The field of education is marked by some good results and positive changes, which are contributing to greater participation of the population in society and strengthening human capital as a factor of competitiveness. The shares of people with secondary and tertiary education are rising and are relatively high by international standards. The quality of education as measured by young people's results in the international survey PISA has improved in recent years. With an increase in the share of students enrolled in science and technology programmes, positive shifts have also been observed in the structure of students enrolled in tertiary education. However, with a growing shortage of appropriately skilled workforce and rapid technological changes, there is an increasing need to reduce imbalances between the supply of knowledge and skills and the needs of society and the economy. Another weakness that can reduce labour efficiency and social inclusion is poor reading, mathematical and digital skills of adults, especially those with low education and older people, who tend to be less involved in lifelong learning programmes.

An inclusive, healthy, safe and responsible society

Slovenia has retained a relatively high level of social inclusion and participation in society, but has made insufficient progress in reducing labour market segmentation and improving the health status of the population. The economic recovery has been followed by growth in disposable income. The indicators of income inequalities and the risk of social exclusion, which worsened somewhat during the crisis, have returned to their pre-crisis levels with faster income growth in lower quintiles and are favourable by international comparison. Policy measures and increased hiring in favourable economic conditions have contributed to a decline in long-term unemployment and a rapid

increase in the inclusion of those population groups that were less represented on the labour market during the crisis (young, older and low-skilled people). The participation rate of older people remains low, however. Development towards an inclusive society is also indicated by the indicators of gender equality, participation in society and exposure to different types of discrimination. Labour market segmentation remains a problem, however, particularly among young people, although the share of temporarily employed young people has declined in recent years. Also higher than before the crisis is the at-risk-of-poverty rate among employed persons – it is the highest in non-standard types of employment, i.e. self-employment and temporary or part-time employment. The at-risk-of-poverty rate in Slovenia is otherwise below the EU average, but as in all years, the high poverty risk among older women stands out in this comparison. In healthcare, some positive developments have been made, but a great challenge in this area remains improving access to health services by shortening waiting times and increasing the number of years spent in good health, an indicator where Slovenia lags significantly behind other countries in the EU.

For the quality of life of all generations, it is essential for Slovenia to adapt to the changing demographic picture as soon as possible. Slovenia does not diverge significantly from the EU average in terms of the speed of population ageing, but with its social protection systems (the pension and health systems) not adapted to demographic change, it falls in the group of countries with a very large expected increase in age-related expenditure. This increases pressures on ensuring the financial sustainability of these systems and limits the possibilities for providing high-quality public services for the population and improving the quality of life.

A well-preserved natural environment

The natural environment in Slovenia is relatively well preserved, but the efficiency of resource and energy consumption is improving too slowly with regard to the long-term objectives. With forests covering a large part of the land, a large proportion of protected areas and moderate agricultural intensity, the natural environment in Slovenia is not excessively polluted on average. Waste treatment has also improved significantly in recent years. Meanwhile, two issues that stand out are poor air quality, with relatively high particle and ozone pollution, and insufficiently sustainable use of land. The efficiency of energy and resource consumption is gradually improving, but to close the gap with more developed countries and achieve the long-term goals for greenhouse gas reduction, further systematic action will be required. Particularly problematic is the high energy consumption in transport. This is not sustainable and has a significant negative impact on the environment, which is also manifested in the relatively high carbon footprint. The consumption of renewable energy sources is relatively high in Slovenia, given its favourable natural conditions, but it has not been rising for several years. Achieving the goals in this area is therefore becoming another increasing challenge

A high level of cooperation, competence and governance efficiency

The efficiency of the government in supporting the business sector and promoting development has improved in a number of areas; the main challenges remain a reduction of administrative burdens and a further improvement in the governance of public institutions. In the last few years Slovenia has made significant progress towards improving government efficiency, for example by digitisation of public services, introducing quality standards in public administration bodies, reducing administrative barriers and improving insolvency legislation. The efficiency of the judiciary has also improved. Institutional competitiveness continues to be marked by a heavy burden of state regulation and a relatively high degree of perceived corruption. Moreover, the dispersal of public sector bodies and a lack of interconnection hamper cooperation between sectors and between different levels of governance, which affects the efficiency of the management of public institutions. As regards the business environment, lengthy procedures remain a problem, according to managers, and not enough has been done to support businesses. Trust in key government institutions and the rule of law remains low, significantly below the EU average, which is also reflected in a low degree of representative democracy.

1 A highly productive economy creating value added for all

The Slovenian economy recovered quickly after 2014 and its competitive position improved as well. As economic growth accelerated, the gap to the EU average in terms of per capita GDP declined post-2016, but it remains wider than before the crisis. The general government balance and the stability of the financial system have shown strong improvements. The improvement of the competitive position was driven by cost-efficiency as well as non-cost factors of competitiveness, which has resulted in higher export market share and better integration in global value chains. Nevertheless, given the relatively low investment rate in the years of growth, productivity gains have been slower than in the pre-crisis period and insufficient to bridge the considerable gap to more developed countries. Moreover, the trends in research and development and innovation, which should form the bedrock of sustainable productivity growth, have been mostly unfavourable. Creation of new companies, which represent the potential for the transfer of know-how and innovation into practice, picked up but remains low by international standards. Since productivity is a key long-term factor determining economic development and living standards, in particular against the backdrop of demographic change, systematic investments in the strengthening of innovation capacity and digitalisation represent a key development challenge for Slovenia.

1.1 Economic stability

Economic stability (development goal 5)

The aim is to secure economic stability, which is a key precondition for bridging the gap to more developed countries and increasing the quality of life for all. The basis of economic stability is a well-performing economy which maintains key macroeconomic balances. The achievement and preservation thereof require appropriate economic policy action throughout the economic cycle, long-term sustainability of public finances, a stable and competitive financial sector, and balanced regional development. With regard to economic stability, SDS 2030 also highlights competitiveness and innovation along with sustainable and inclusive aspects of economic development; these are dealt with in depth in other SDS development goals, namely goals 6 (competitiveness and innovation), 3 and 7 (inclusive development), and 8 and 9 (sustainable development).

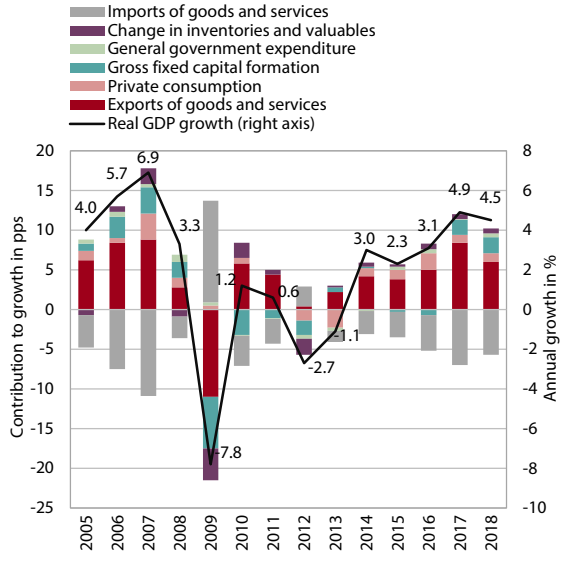
SDS 2030 performance indicators for development goal 5:

	Latest value		Target value for 2030
	Slovenia	EU average	
GDP per capita (in PPS), index EU=100	85 (2017)	100 (2017)	100
General government debt, as a % of GDP	70.1 (2018)	81.6 (2017)	60

Since 2016 Slovenia has again been narrowing the gap to the average level of economic development in the EU, mostly on account of rapid employment growth. The development gap, measured with per capita GDP at purchasing power parity, had widened by 8 pps during the crisis and did not start narrowing until 2016. The closing of the gap has been largely driven by a faster growth in employment rate relative to the EU; in 2017 productivity also grew at a faster pace. Nevertheless, productivity remains relatively low and the gap in this area is sufficient to entirely explain the relatively low level of Slovenia's economic development measured with this indicator; the employment rate in Slovenia has been above the EU average throughout this period (see Indicator 1.1).

Economic growth accelerated in 2014–2017 before gradually slowing in 2018, though even that year it remained above the EU average. Following a sharp decline during the crisis, GDP growth has exceeded the euro area average since 2014, which has resulted in a narrowing of the development gap measured with per capita GDP at purchasing power parity post-2016. Post-crisis GDP growth has been significantly affected by increased foreign demand, which has in turn been driven to a significant extent by stabilisation in the euro area supported by measures taken by the EC and in particular the ECB. Combined with the concomitant improvement in the competitiveness of exporters (see Chapter 1.2), the favourable impulse from the international environment supported the relatively high export growth. Since 2014 domestic consumption growth has also gradually picked up, as a result of the spill-over of external growth factors to the domestic market and, crucially, the effects of implemented measures, in particular the bailout of the banking system and the gradual fulfilment of fiscal commitments. Both these factors improved Slovenia's standing in financial markets and hence the financing conditions for corporates and the government, which in turn strengthened business and consumer confidence and also helped revive activities focused on the domestic market. Growth of private consumption has been affected by a gradually improving labour market and significant strengthening of consumer confidence, but household spending remains moderate as the savings rate increases. Expansion of investments in machinery and equipment has been driven by high utilisation of capacity and by improved conditions for financing and

Figure 2: Structure of GDP growth, Slovenia



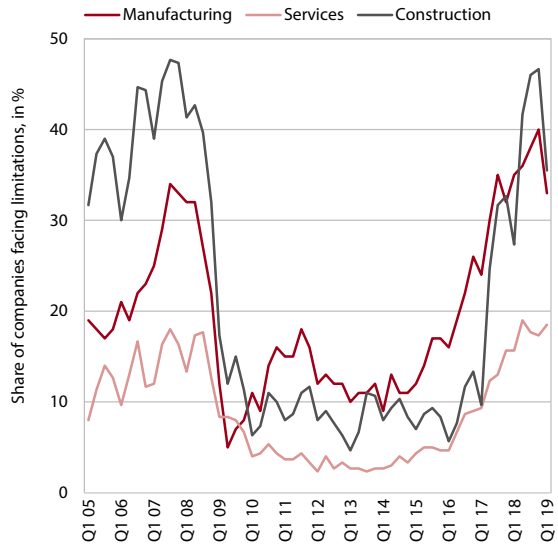
Source: SI-STAT Data Portal – National Accounts, 2019.

growth of own funds as company bottom lines have improved. In mid-2016 housing investment also began to recover, having dropped by almost 60% during the crisis; a year later investments in civil engineering works rebounded as well. Overall, infrastructure investments post-2014 were significantly affected by the dynamics of the drawing of EU funds towards the end of the previous and during the transition to the new multi-annual financial framework (see Indicator 1.2). The economic recovery has not led to a substantial increase in consumer prices. Services prices have been growing at a slightly brisker pace as household spending rises, but other prices are more strongly influenced by external factors, where inflationary pressure is again easing.

In conditions of mainly export-driven economic growth, very gradual recovery of investment activity and extensive deleveraging of banks and companies, a surplus has formed post-2012 on the current account of the balance of payments. By 2018 it had risen to 7% of GDP. In 2013–2016 it was additionally increased by relatively low import prices of energy products. The increase in the current account surplus – the widening of the savings–investment gap (surplus of gross savings over investment) – has been strongly influenced by the narrowing of the general government deficit and stronger household savings and, until 2018, by an increased corporate savings rate, which is related to fairly cautious investment decisions. The surplus of aggregate savings over investments resulted in a higher outflow of financial sources abroad (including massive settlement of liabilities to foreign banks), which is why Slovenia's net international investment position improved after 2013 despite increased government borrowing (see Indicator 1.5).

In the labour market, the favourable economic conditions facilitated a rapid recovery of employment, which exceeded the pre-crisis level in 2018, whereas wage growth did not start recovering more meaningfully until that year. In the favourable economic climate, the strong post-crisis rebound (even compared to the EU average), which started in 2014, has been partially driven by rapid improvement of labour force participation and more recently by the employment of foreigners. The latter is associated with increasing labour shortages on the domestic market, which is becoming a more and more frequent factor limiting production, in particular for manufacturing[1] and construction companies. The shortage of appropriately trained labour is largely a consequence of demographic change (see Section 3.3) and certain mismatches between the knowledge and skills of workers and the demands of the labour market (see Section 2.1). Having been moderate for several years[2], wage growth did not start accelerating until 2018, much like across most of the EU. In the private sector, wages have grown in particular because economic growth factors have exerted a positive impact on reduction of unemployment and on corporate bottom lines, though productivity has also improved. In the public sector, wage growth has been driven by the relaxation of measures taken during the crisis to restrain wage growth[3].

Figure 3: Share of companies reporting labour shortages



Source: SI-STAT Data Portal – Economy, 2018.

The economic climate having been favourable, the general government position continued to improve in 2018. The ongoing improvement of the balance after 2013, following a period of high deficits during the crisis, is a reflection of stabilisation measures, the improved economic situation, and measures to increase revenue and restrain expenditure[4]. Throughout the entire period since the start of the economic crisis, the containment of overall expenditure has to a significant degree been the result of a contraction of flexible expenditure, in particular investments, which remain low despite rebounding in the past two years[5]. In 2018, revenue substantially outpaced

[1] The share of companies reporting labour shortages increased substantially in the past year, approaching the pre-crisis level. In 2018 labour shortage was the number one limiting factor in construction and number three in services activities. Inability to fill vacancies is also evident from the vacancy rate, which continued to rise last year. In the first three quarters of 2018, roughly 20,000 vacancies were recorded, up by a fifth on the same period in the year before.

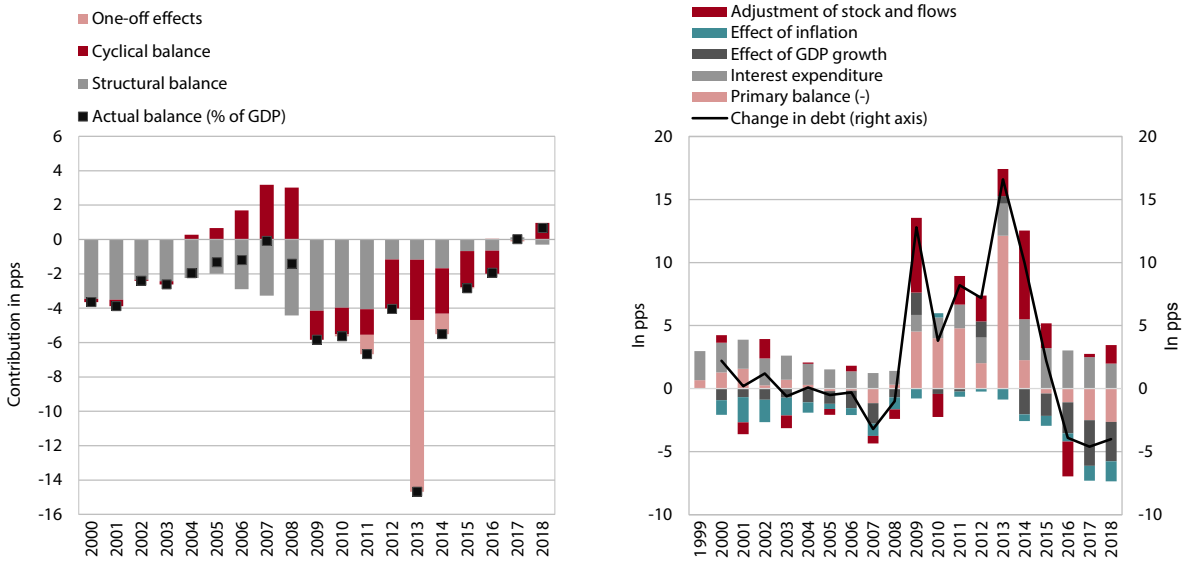
[2] Low growth of nominal wages in recent years is attributed primarily to sluggish growth of prices and productivity, but also relatively high unemployment, hiring of workers with low gross wages, and re-activation of the long-term unemployed, who typically enter the labour market with lower wages than before job loss.

[3] Measures associated with performance bonuses (regular bonuses and bonuses for increased workload) and promotions.

[4] For a detailed overview of adopted measures, see Development Report 2018 and Economic Issues 2018.

[5] Investments by the general government sector were at 3.1% of GDP in 2016 and 2017, the lowest on record, before increasing to 3.6% of GDP in 2018.

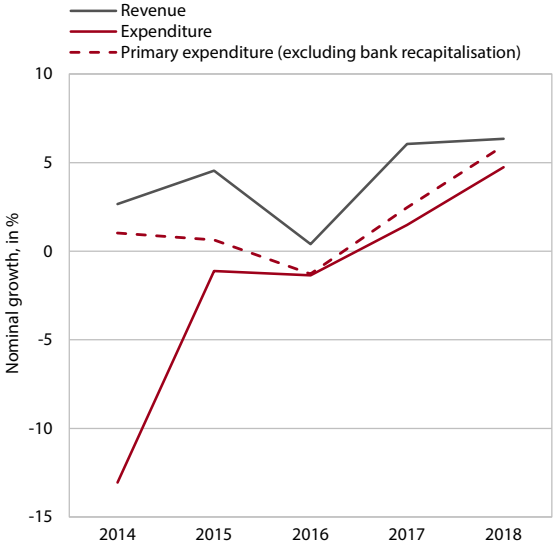
Figure 4: Actual balance and structural balance of the general government sector (left) and contributions to change of general government debt (right), Slovenia



Source: SI-STAT Data Portal – Economy – National accounts – General government accounts – Basic aggregates of the general government, March 2019.

expenditure for the first time (by 0.7% of GDP). After 2015, a period of brisk economic growth, the improvement of the general government balance also facilitated a rapid contraction of general government debt (to 70.1% of GDP), though that is still above the Stability and Growth Pact ceiling (60% of GDP). Although decelerating, the debt level is still relatively high, thus limiting fiscal wiggle room for action in the event of shocks.

Figure 5: Growth of general government revenue, expenditure and primary expenditure, Slovenia



Source: SI-STAT Data Portal – Economy – National accounts – General Government Accounts – Basic aggregates of the general government, March 2019.

The structural position of the general government has improved in recent years, but the improvement is not on a sustainable path since it is largely based on temporary measures. The structural balance, which stood at around –4.2% of GDP in 2008–2011, was close to balance in 2018. However, the excessive influence of temporary measure and the reduction of flexible expenditure in existing consolidation efforts have not put the improvement on a sustainable footing. The gradual relaxation of expenditure-side measures in recent years, combined with a rebound in investment activity in 2017 and 2018, has already led to stronger growth of general government expenditure. In the new medium-term period the challenge will therefore be to put in place an economic policy mix that preserves the achieved favourable structural position.

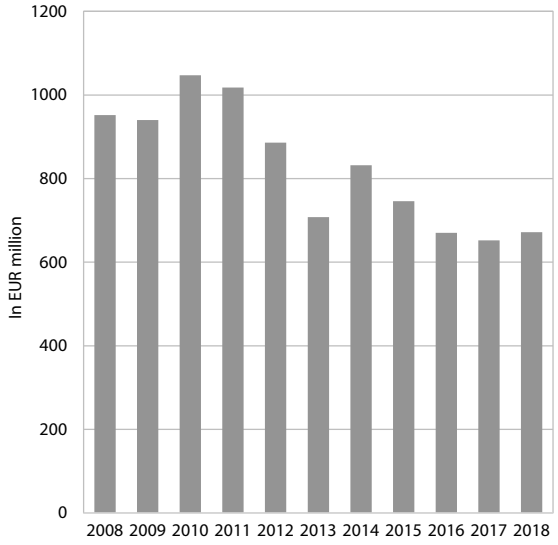
Besides achieving the fiscal targets, the developmental role of public finances should also be at the forefront when designing tax policy and setting expenditure priorities, to help address Slovenia's key medium- and long-term challenges. Since the start of the crisis Slovenia has introduced a variety of tax changes that have been largely targeted at the achievement of fiscal objectives in an environment of severely disrupted fiscal balances. The majority of these changes were permanent, which contributed to the improvement of the structural position of public finances. The changes are also reflected in the structure of tax revenue, in particular in a shift towards the taxation of consumption, which empirical studies show has a less severe distortionary impact on economic growth. On the expenditure side, the measures taken during the crisis were focused on the short-term challenge of stabilising

public finances, and the bulk of these measures were temporary. In this period the biggest expenditure increases were recorded in social protection and debt servicing[6]. Now that fiscal and economic conditions have become more stable, there is an opportunity to take measures that more prominently emphasise the developmental role of public finances and altered challenges. For Slovenia, these challenges include labour shortages and the attendant risk of low potential growth, the provision of a sustainable social protection financing system as the demographic structure of the population changes, and environmental challenges. Some of the implemented and planned measures already address these challenges, but they will have to be upgraded and expanded in the future.

The development of the financial system lags behind the EU average and the gap has not been narrowing. The development gap to the European average did not narrow in the era of favourable economic conditions, indeed it even widened in some segments as financial sector growth did not keep pace with economic growth (see Indicator 1.6). Considering that banks account for the bulk of the financial system, the trend has been strongly affected by the contraction of total assets relative to GDP. Growth of total assets had been largely underpinned by household borrowing. But the crediting of companies has remained modest as companies have used own financing sources to fund investments and current operation to a larger extent than before the crisis; financing on the capital market has increased somewhat as well, while foreign-owned companies have also had access to more favourable financing through their parent companies. The capital market remains shallow – i.e. it is underdeveloped – and does not play a significant role in financing the economy, with the gap to the EU average measured by market capitalisation relative to GDP remaining wide. The development gap is narrowest in insurance, which had not been strongly affected by the crisis since it is dominated by non-life insurance (which is less sensitive to cyclical economic movement than life insurance).

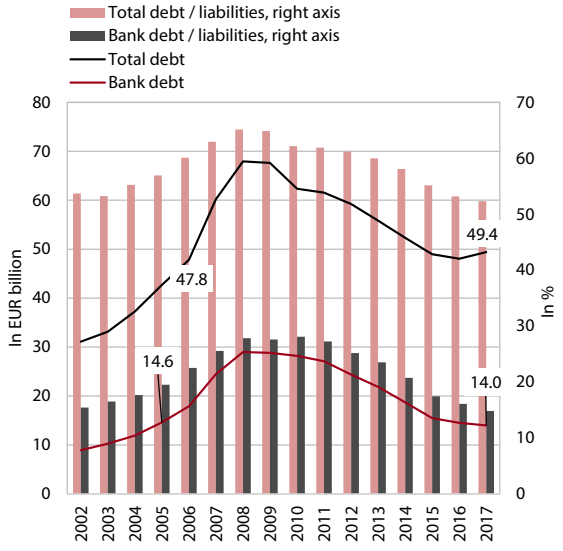
In the banking system the situation has been improving, but banks' core business is growing only sluggishly. The recovery has been underpinned by the banking system restructuring in 2013, which stabilised the banking system with capital injections and the transfer of a portion of non-performing claims to BAMC. Better economic conditions have allowed banks to continue reducing the share of non-performing claims. Banks' business results have recovered as well, though to a significant extent because of the release of provisions and impairments. In the future, when these effects subside, income growth stemming from core banking activity will once again be more important to the preservation of good business results; due to weak credit activity, net interest income declined until 2018. Lending activity has been picking up in the household segment, in particular consumer loans[7], but corporate

Figure 6: Net interest income in the Slovenian banking system



Source: Bank of Slovenia; IMAD calculations.

Figure 7: Corporate sector debt, Slovenia

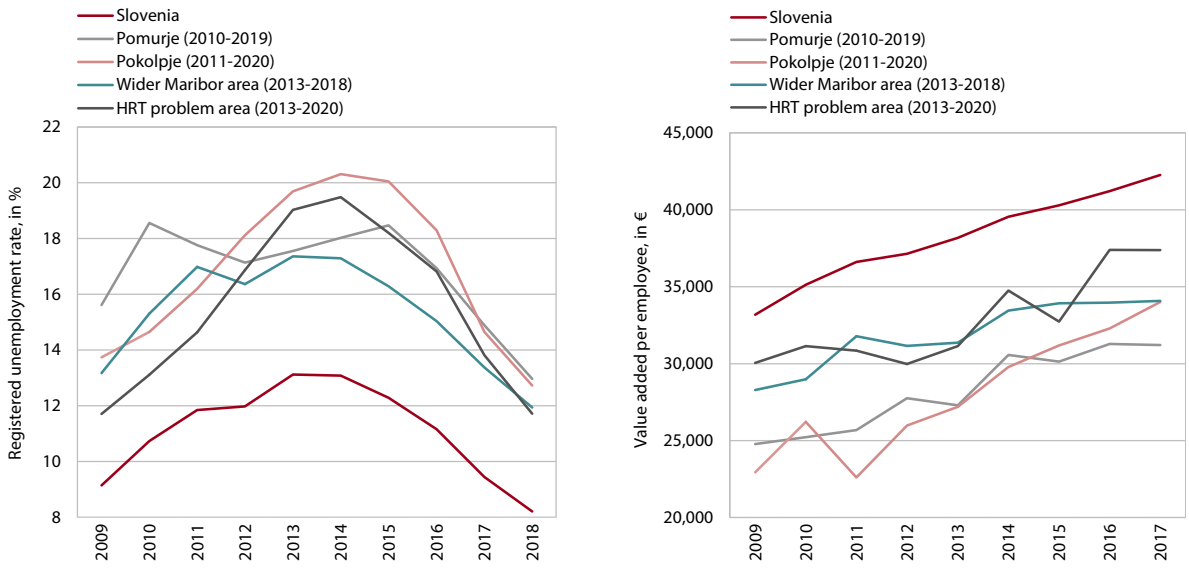


Source: AJPES; IMAD calculations.

[6] See also Economic Issues 2018, Chapter 2, Changes in the structure of general government revenue and expenditure.

[7] We estimate that banks are interested in such lending as well since household debt is low and interest rates on consumer loans are fairly high. Considering that consumer loan growth exceeds 10%, the Bank of Slovenia has extended its macroprudential recommendation for household crediting from housing loans to consumer loans.

Figure 8: Unemployment and productivity in areas receiving development support



Sources: SORS, ESS, AJPES; IMAD calculations. Note: HRT is the problem area of Hrastnik, Radeče, Trbovlje.

lending is still not growing. Banks no longer rely on foreign sources of financing[8], which have been replaced by deposits by domestic non-bank sectors (households as well as companies); these turned out during the crisis to be a stable source of financing. However, deposits are mostly short-term, which may exacerbate the financing of longer-term projects due to the maturity mismatch between liabilities and assets.

Corporate leverage, which peaked at the start of the crisis, has dropped to the level it was before it accelerated in 2005. Companies' ability to repay debt improved strongly and is at its highest level in the entire observed period. Corporate overindebtedness meanwhile dropped to the lowest level in the observed period, even as the concentration of financial debt of overleveraged companies remains high.

The post-2014 economic recovery has been more pronounced in the western part of Slovenia. As the situation across the entire economy has improved, so have the economic conditions across Slovenian regions, particularly those in western Slovenia. After being more exposed to domestic and external shocks at the start of the crisis owing to the structure of economic activity, they have recovered more rapidly since 2014 and have improved their standing relative to the country as a whole. The western cohesion region thus once again exceeded the EU average in terms of per capita GDP in 2017[9]. Among the regions of the less developed eastern Slovenia, south-eastern Slovenia has the highest per capita GDP and has already approached the Slovenian average (see Indicator 1.7).

The development deficiency, which is measured with the development risk index[10], is also higher in eastern Slovenian regions. This indicator covers various development factors that affect quality of life[11]. Regions in eastern Slovenia are overall worse off, with the highest discrepancies in indicators measuring economic activity, productivity, employment, investment, educational structure and demographic structure. However, some eastern Slovenian regions stand out positively, in particular by income, unemployment, the share of protected areas and R&D expenditure. The ratio between the best (Osrednjeslovenska) and worst (Pomurje) region measured by the development risk index was 1:3.8 in 2018, according to the latest available data, while the coefficient of variation, a measure of regional differences, was 27.8% (see Indicator 1.8).

[8] At EUR 1.6 bn, liabilities to foreign banks account for less than 4% of banks' total assets, compared to almost 40% of all sources of bank financing before the outbreak of the financial crisis.

[9] The eastern cohesion region, with 70% of the EU average, remains an underdeveloped European region (source: Eurostat).

[10] The development risk index is a composite index for monitoring regional development. It comprises the sub-indicators (1) GDP per capita, (2) gross value added per employee, (3) per capita disposable income, (4) employment rate (20–64 years), (5) gross fixed capital formation as a share of GDP, (6) youth unemployment rate (15–29 years), (7) population with tertiary education (25–64 years), (8) gross domestic R&D expenditure as a share of GDP, (9) share of secondarily and tertiarily treated wastewater, (10) extent of protected areas, (11) estimated damage due to natural disasters as a share of GDP, (12) registered unemployment rate, (13) population ageing index and (14) population density. Based on the index, regions are ranked by level of development for the programming period 2014–2020 (Rules, 2014).

[11] More in Pečar, 2018.

Regional policy activities are focused on securing a balanced regional development[12]. During the crisis, endogenous regional policy measures were adopted for areas of high unemployment[13] and targeted at reducing the unemployment rate and increasing productivity. Against the backdrop of more favourable economic trends after the implementation of the measures, the unemployment rate in all areas of temporary measures except Pokolpje has declined by more than the national average. In all areas value added per employee at companies and sole traders increased as well, most notably in Pokolpje, which thus narrowed its productivity gap with the Slovenian average.

[12] The Promotion of Balanced Regional Development Act (ZSRR-2) lays down a regional policy framework that is horizontal and endogenous. Endogenous regional policy represents a mix of development activities targeted at the pursuit of regional development goals whereby designated regional policy areas have priority funding eligibility. Horizontal regional policy is based on territorial, i.e. place-based, coordination of sectoral development policies which have a significant impact on regional development (Goals and Guidelines..., 2019).

[13] Due to high unemployment, an emergency development act was first adopted for Pomurje, followed by temporary development support measures for Pokolpje, the Maribor area, and Hrastnik, Radeče and Trbovlje (HRT) (Competition Promotion Programme..., 2016; Changes to the Programme for the Promotion..., 2016; Changes to the Programme for the Promotion..., 2016).

1.2 A competitive and socially responsible entrepreneurial and research sector

A competitive and socially responsible entrepreneurial and research sector (development goal 6)

The aims are to raise competitiveness by creating products and services with high value added and to strengthen the social responsibility of companies and research organisations. The creation of high value added will be supported by innovation, basic and applied research, promotion of creativity, and the exploitation of digital potentials and every opportunity afforded by the fourth industrial revolution. Other factors listed in SDS 2030 as relevant in efforts to increase value added include internationalisation of companies and research institutions and the provision of a supportive and predictable environment for business and investments that accommodates the needs of small enterprises. Achievement of the goal will also be contingent on suitable human resources, which the SDS deals with under development goal 2.

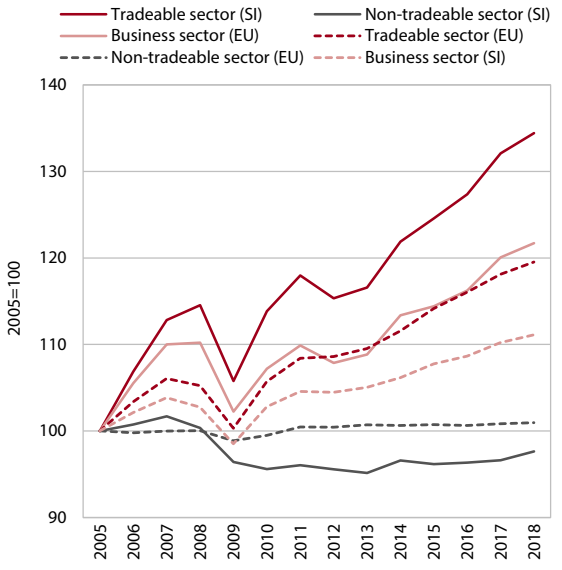
SDS 2030 performance indicator for development goal 6:

	Latest value		Target value for 2030
	Slovenia	EU average	
Labour productivity, Index EU=100	82 (2017)	100 (2017)	95
European Innovation Index, Index EU 2010=100	98 (2017)	106 (2017)	>120, i.e. ranked among innovation leaders
Digital Economy and Society Index, rank among EU members	15th place (overall in 2018) 8th–23rd place (across five components)	-	Ranking in top third of EU countries according to all five components of the index

1.2.1 Competitiveness of the business sector

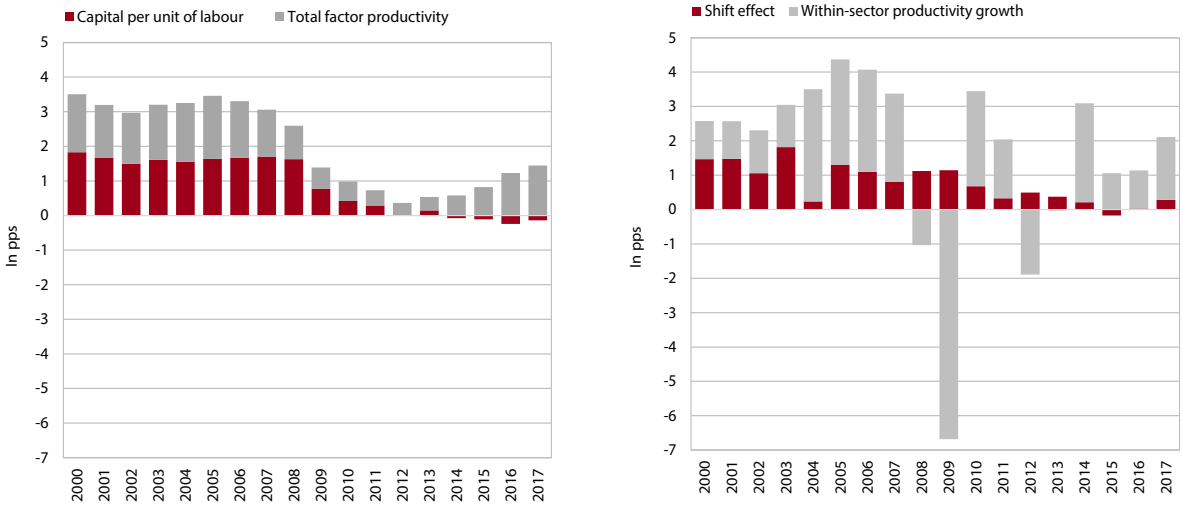
The competitiveness of the business sector has improved since the crisis, but strengthening productivity growth remains a challenge. Since the crisis both the price and non-price factors of competitiveness have improved. The economy, in particular its tradeable segment, has undergone an intense adjustment of unit labour costs. Slovenia's position on foreign markets measured by export market shares has improved and inclusion in global value chains increased (in particular in the export of value added). Deleveraging of the business sector and economic growth have underpinned growth of investments in machinery and equipment, foreign direct investment inflows have risen, and in the recent period construction investments have started to recover after a severe slump during the crisis. Continuation of the investment drive is instrumental to strengthening the currently sluggish productivity growth and will play the key role in preserving the economy's competitive position in the coming years, when pressure on labour costs is expected to escalate (due to shortages of skilled labour). The pace at which the productivity gap to the EU average narrows will depend to a substantial degree on investments in R&D, innovation activity, knowledge and skills, the creation of an environment conducive to entrepreneurship, and improved institutional efficiency.

Figure 9: Real productivity growth*



Source: Eurostat Portal Page – Economy and finance, 2018; IMAD calculations. Notes: * Value added (at constant prices) per employee. The tradeable sector includes the following activities: agriculture (A), industry (B–E) trade, transport and accommodation (G–I), and information and communication (J). The business sector includes all activities except agriculture (A), real estate activities (L), public services (O–Q), and creative, arts and entertainment activities, activities of households and other service activities (RST).

Figure 10: Contribution of capital and TFP to trend* productivity growth (left) and breakdown of productivity growth*** (right)**



Source: Eurostat Portal Page – Economy and finance, 2018; IMAD calculations. Notes: * Cyclically adjusted productivity growth. This is defined as potential GDP to potential employment expressed in hours worked. Potential GDP is calculated with the production function methodology, while potential employment is employment under the assumption of normal utilisation. **GDP (at constant prices) calculated on hours worked. ***Value added (at constant prices) per employee.

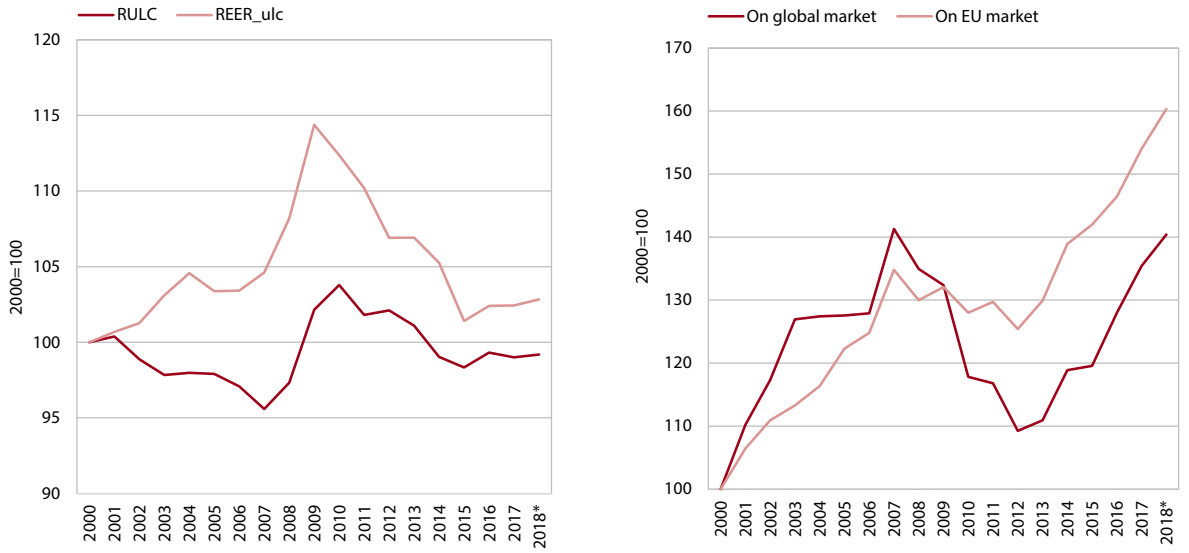
Productivity growth has gradually accelerated in the period of economic recovery, but not sufficiently to significantly reduce the gap to the EU average. In 2014–2017 it rose from 81% to 82% of average productivity in the EU[14], remaining below the peak it reached before the crisis (84% in 2008). Driven by stronger foreign demand, real productivity growth was initially confined mostly to the tradeable sector, where it outpaced average growth in the EU. In recent years it has become more broad-based: as domestic demand has gradually recovered and the situation in the construction sector improved, it has accelerated in the majority of the market-oriented activities in the non-tradeable sector, but it has remained low in non-market services (public sector activities) (see Indicator 1.9). The differences in the dynamics of productivity gains between the tradeables and non-tradeables highlight how substantially cyclical factors (impact of demand) have affected the recovery of productivity since the crisis. Since 2013 trend growth of labour productivity has been increasing as well, a result of higher total factor productivity[15], i.e. more efficient use of capital and labour. Nevertheless, the contribution of capital deepening to trend productivity growth remains well below the pre-crisis level in most industries despite a pronounced uptick in investments in machinery and equipment, reflecting a persistently low level of construction investments[16].

The bulk of productivity growth in recent years is attributed to within-sector growth; before the crisis, total growth had also been driven by changes in the structure of the economy. In the decade before the crisis, these changes had accounted for as much as half of total productivity growth, but in the course of convergence with the average structure of the EU their intensity has waned. Following the crisis, and in particular during the post-2014 rebound, the main engine of growth has been efficiency improvements within sectors, supported by a strengthening of the cycle and increased total factor productivity. Within-sector growth slightly outpaced the long-term average in 2014–2017, but compared to the previous period of economic growth (2004–2007), it was only roughly half as fast.

Following an improvement in cost competitiveness in the post-crisis period, unit labour costs in certain more export-oriented industries increased in 2018 as the labour market tightened. By substantially reducing labour costs in 2011–2015, in particular in the tradeables, Slovenia managed to largely offset the deterioration of cost competitiveness it recorded compared to the EU in the first years of the crisis. In 2016–2018 there were no substantial deviations between growth of labour costs and productivity, with the trends not noticeably deviating from the majority of the key trading partners, as confirmed by the real effective exchange rate (REER ulc)[17]; in fact, the trends were far more favourable than

[14] Productivity measured with GDP per capita at purchasing power standards.
[15] Trend growth of total factor productivity.
[16] Investments in buildings and civil engineering works.
[17] Real effective exchange rate deflated by unit labour costs (REER ulc) shows the movement of (nominal) unit labour costs in Slovenia compared to 37 trading partners (weighted by importance in Slovenia's merchandise trade), adjusted to the exchange rate (for

Figure 11: Cost competitiveness (left) and export market share (right), Slovenia



Sources: Eurostat, 2019; European Central Bank, 2019; United Nations Comtrade, 2019; Eurostat Comext, 2019; IMAD calculation. Notes: REER ulc for 2018 is an estimate based on data for the first three quarters of 2018. * Temporary data.

in other Eastern European countries, whose costs grew rapidly in this period. But even as unit labour costs remained stable at the level of the entire economy, they rose slightly in 2018 in the most export-oriented industry, manufacturing (see Indicator 1.11). In the non-tradeable sector, the trends were unfavourable post-2015, but in 2018 unit labour costs decreased.

Market share, an indicator of export competitiveness, increased for the sixth year in a row in 2018. On the EU market, the destination of three-quarters of Slovenia's exports, it exceeded the pre-crisis level by about a fifth in 2018. On non-EU markets, where it contracted precipitously during the crisis[18], it returned roughly to pre-crisis levels. Market share growth was broad-based for most of the period, underpinned by the majority of goods important for Slovenian exports. We attribute the growth to the above-mentioned price/cost factors as well as the impact of non-price factors (such as better quality of exported goods). This is also evident in the growth of value added of Slovenian exports in the post-crisis period. Aside from these factors, overall export market share growth was buoyed by the composition of exports: until 2017 demand from countries and for products that account for relatively high shares of exports rose at above-average rates[19]. Data on market share growth on the EU market highlights an absence of favourable product and geographic specialisation of exports in 2018, with quarterly dynamics indicating a slowdown in the year-on-year market share growth rates during the year. Partially this was the result of the one-off introduction of a new vehicle production line in 2017, which had caused a temporary spike in market share. To a certain extent, it is also a consequence of the cooling of the European automotive industry in 2018, which impacted multiple industries and affected a relatively high proportion of Slovenian exports. We assess that growing unit labour costs in manufacturing did not have a pronounced impact on export performance in 2018[20] but that the impact could become more significant if the deterioration in price competitiveness persists.

The technological composition of merchandise exports has approached the EU average, but the share of knowledge-based services is increasing too slowly and is low by international standards. These are products and services which require greater use of research, new technologies and knowledge and which typically generate higher value added for the economy. The *composition of merchandise exports*[21] underwent more intensive change before and during the crisis, when

countries outside the euro area).

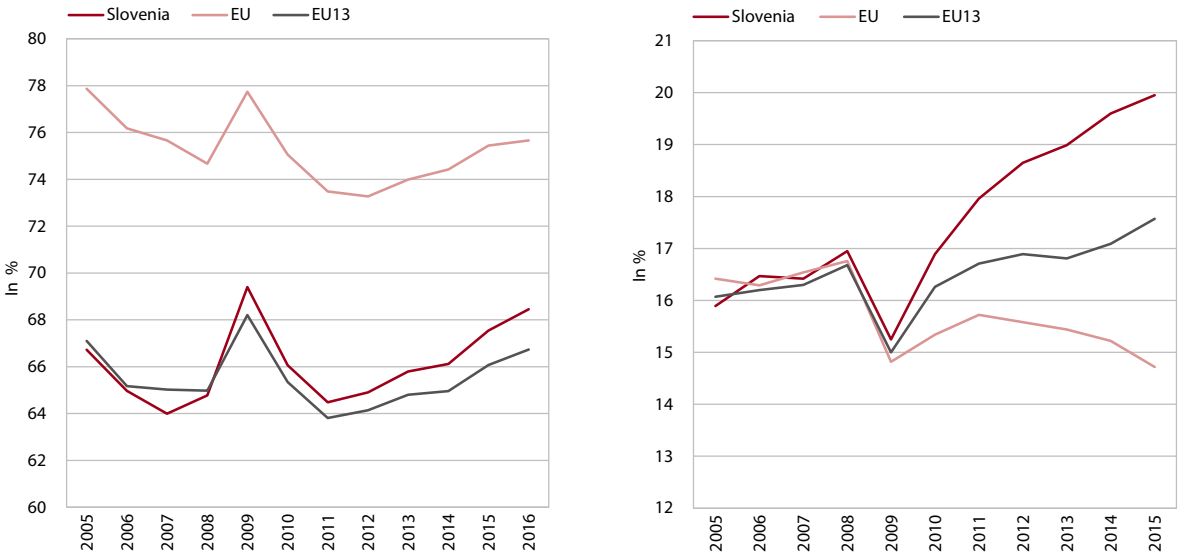
[18] The deeper decline may be largely explained by the widening differences between the composition of Slovenian exports and the composition of global imports during the crisis.

[19] The impact of the initial product specialisation of exports was favourable in 2014–2016, whereas the geographic specialisation exerted a positive impact in 2016 and 2017. In 2014–2016, when both these structural factors had the biggest impact, they explained a combined 40% of the growth of Slovenian market share on the global market.

[20] Given the still favourable level of the cost-competitiveness indicator, a limited spillover of cost pressures into prices in 2018 and the usually gradual impact of cost factors on exports.

[21] Export classification according to United Nations methodology (Lall), which divides merchandise exports into five groups: (i) natural resources, (ii) intensive use of natural resources, (iii) low-technology manufactures, (iv) medium-technology manufactures and (v) high-technoloy manufactures. Some products are not classified, which is why the sum of all shares does not equal 100.

Figure 12: Domestic value added, share of gross exports (left) and domestic value added embodied in foreign exports, as a % of total gross domestic exports – forward participation in GVC (right)



Source: OECD TIVA indicators, 2018. Note: EU13 includes new Member States which joined the EU after 2004.

it came very close to the EU average due to an increasing share of high-technology products and a contracting share of technologically less demanding exports (see Indicator 1.12). After 2013 the share of medium-high technology products expanded the fastest, having declined during the crisis. This is a group of products that is strongly integrated in global value chains and hence the most susceptible to changes in foreign demand; over a longer time horizon, however, the share of this largest product group did not change significantly. The *composition of services exports* differs significantly from the EU average, with a high share of travel and transport services and a relatively low share of knowledge-based services. Even though knowledge-based services have been growing in importance, Slovenia has not been reducing the significant gap to the EU average (see Indicator 1.12), which indicates that these services are not sufficiently competitive.

The post-crisis period has been characterised by stronger internationalisation of the Slovenian economy, an important factor as well as an indicator of competitive strength. With the growth of exports, value added of exports has also strengthened after the crisis. In 2011–2016 it was rising faster than both the EU average and the average of the new Member States. Its growth has stemmed from a surge in value added in the export of intermediate goods products. Broken down by sector, value added increased in both industrial and services exports, but over a longer horizon (2005–2015) growth was faster in services, where it had been relatively low by international standards a decade ago. The share of domestic value added of services in manufacturing exports dropped slightly after 2010[22]. With the increase in value added of exports, integration in global value chains has improved substantially. With regard to the increase in the share of domestic value added in foreign exports (forward participation in GVCs) in 2005–2015, Slovenia ranked second among EU Member States. The share of domestic value added in foreign final demand also increased (8th place). After 2014 inflows of foreign direct investments rose at a faster pace, underpinned both by a general global increase in investments in the post-crisis period and by an improvement of factors in the domestic environment, including a general improvement of economic condition, acceleration of privatisation and a more active role of the state in attracting FDI. Nevertheless, the share of FDI relative to GDP remains among the lowest in the EU (see Indicator 1.13).

As the economic conditions improved, entrepreneurial activity picked up after the crisis, but it remains low by international standards. Entrepreneurial activity is a major factor of long-term productivity growth in that it represents the potential to transfer knowledge and turn new ideas into commercially successful innovations. Early-stage entrepreneurial activity, which shows the share of the population starting a business in a given year[23], spiked as the economic cycle strengthened, according to GEM

[22] Although this indicates an improved integration of manufacturing in global value chains and hence the use of foreign services, it may also reflect weak competitiveness of domestic knowledge-based services (Stare et al., 2019).

[23] Early-stage entrepreneurial activity includes individuals who have started setting up a new business or are engaging in new business activities, including self-employment. It also includes individuals who are owners/managers of a business that operates less than 42 months.

data[24]. It peaked in 2016, but even in 2017 and 2018, when the decreased share of early-stage entrepreneurs was probably affected by improving employment opportunities, it remained above the long-term average. Nevertheless, in international comparison, Slovenia lags behind when it comes to company creation. Compared to the average of EU countries included in the GEM survey, it has a lower share of individuals starting a business due to perceived business opportunities, while the share of necessity-driven entrepreneurs is comparable. At the same time, the share of the population which estimates it has sufficient entrepreneurship knowledge and skills is favourable by international standards, which indicates there is a potential that could be better leveraged given policy improvements. According to GEM findings, the conditions for entrepreneurship have gradually improved, although the creation of an environment conducive to business remains a challenge. In 2018 the Government of the Republic of Slovenia adopted an action plan for supporting start-ups[25], while in 2019 the Slovenian Enterprise Fund presented certain financial products aimed at supporting companies in early stages of development[26] in advanced technological fields, including through mentoring, consulting, training and networking. For the broader entrepreneurial community (micro, small and medium-sized enterprises), a voucher system is available[27].

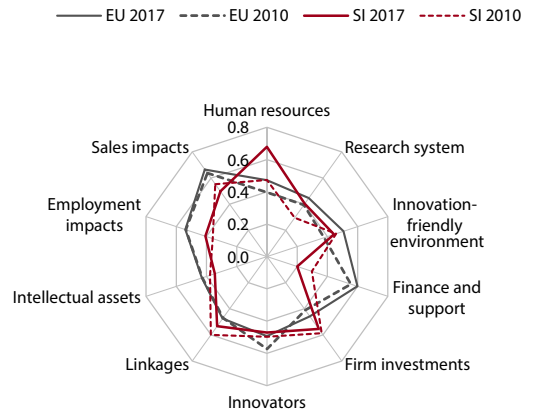
Promotion of corporate social responsibility practices[28] is dispersed among multiple institutions, with international benchmarks only available for environmental responsibility, where Slovenia ranks around the EU average. Globally, the uptake of various forms of socially responsible practices is increasingly becoming an important instrument for the promotion of sustainable production and consumption, while also having the potential to improve the competitive edge of companies. In the absence of a strategic national framework, the promotion of social responsibility in Slovenia is dispersed among multiple institutions. Data that would make it possible to systematically monitor progress in social responsibility also remains scarce. The benchmarks are best developed in environmental responsibility, one of the segments of corporate social responsibility. The prevalence of various environmental certificates demonstrating environmental responsibility of institutions (see Indicator 1.14) is roughly on a par with the EU average, but it is significantly lower than in countries which perform best in this field.

[24] Rebernik et al., 2018; Bosma, N., Kelley D., and GERA, 2019.
[25] Action plan Slovenia – Land of Innovative Startups, 2018
[26] More support for entrepreneurship than ever before, 2019.
[27] Vouchers with various contents are available: intellectual property protection; quality certificates and business excellence; internationalisation; transfer of ownership and change of legal status of companies; digitalisation and enabling technologies; circular/green economy; prototyping (Voucher-based small-scale incentives, 2019).
[28] In broad terms, the concept of social responsibility emcompasses general responsibility of organisations to the natural and social environment. In the narrower sense, it involves responsibility to stakeholders (buyers, business partners, interest groups, shareholders, etc.). More in Box 1, Development Report 2018 (IMAD), 2018.

1.2.2 Research, innovation and digital capabilities

Slovenia belongs in the group of strong innovators as measured by innovation system performance, but in the period 2010–2017 its position relative to the EU average deteriorated. Innovation system performance is an indicator of countries' capability to leverage research, development and innovation to increase productivity and competitiveness on international markets with technological and non-technological innovations. The European Innovation Scoreboard (EIS) monitors the development of EU countries in individual sub-sections of the summary innovation index, which together define the performance of innovation systems (Figure12). In 2010–2017 innovation performance in Slovenia improved at a more sluggish pace than in the EU overall, failing to catch up with the innovation system in the EU (see Indicator 1.15)[29]. In 2017 Slovenia lagged farthest behind the EU average in terms of the EIS sub-sections on financing, where the condition has been deteriorating (e.g. due to low venture capital investments and low public sector R&D expenditure) and sales impacts, where the situation has worsened in particular regarding sales of innovative products. This is a problem especially for many small and medium-sized enterprises, which have limited capacity to secure financing and to market innovative products and services. The most notable EIS sub-sections where Slovenia exceeds average EU values are human resources (number of new PhD graduates and growing share of population with tertiary education), R&D expenditure in the business sector, and linkages and cooperation between the research and business sectors[30].

Figure 13: European Innovation Index (EII) by sub-sections



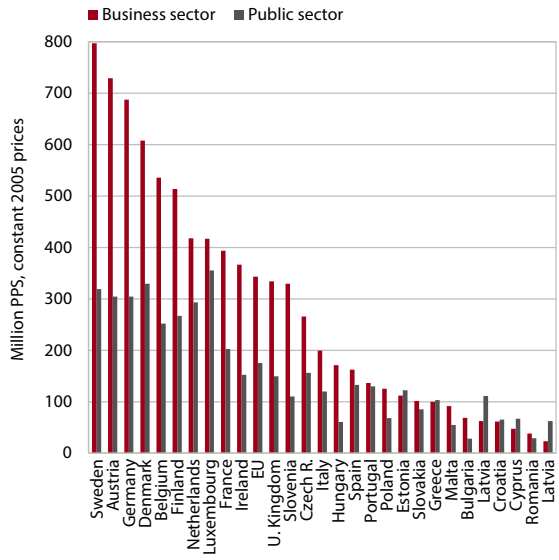
Source: European Innovation Scoreboard 2018, 2018.

[29] The SDS 2030 goal in this area is a ranking among innovation leaders, a group of countries whose innovation performance measured with the EII exceeds 120% of the EU average in 2010.
[30] Slovenia achieves good results in particular in the number of academic publications which are the result of collaboration between the researchers from both public and private sectors.

Overall expenditure on research and development (R&D) has been declining since 2013; the public sector discontinued the negative trend in R&D investments in 2017. In the 2013–2017 period R&D expenditure contracted by about EUR 130 million, principally because of a significant decline in public sector expenditure post-2011 (except in 2017). R&D expenditure as a share of GDP has thus been below the EU average since 2016 (see Indicator 1.16). In the business sector, the source of the bulk of R&D expenditure has been declining since 2014, with the biggest drop recorded in 2017 (by EUR 56 million). These developments are due to several reasons, most notably the impact of the drawing of EU funds on the volume and growth of private sector R&D investments, which slowed in the 2014–2020 multi-annual financial framework[31]. In the past, EU funds represented an important incentive for companies to invest their own resources in R&D[32]. We assess that the delay in the absorption of EU funds has had a negative impact not only on the scope of R&D investments but also on cooperation between the business and research sectors, a link which strengthens knowledge transfer and the innovation capacity of the economy. In 2017, the amount of tax relief for R&D investments claimed by companies and the number of companies claiming it also declined[33]. Slovenia's weakness in R&D investments is also visible in the reduction of per capita spending[34] (from EUR 544 in 2012 to EUR 441 in 2017), which stands in contrast with growth in almost all other Member States of the EU, where it averaged EUR 522 in 2017. Low R&D expenditure hampers access to cutting-edge equipment for researchers in Slovenia, since its price on international markets is similar for everyone, which affects in particular the testing of potential scientific breakthroughs.

In the 2008–2016 period the number of researchers in the private sector increased significantly, while it dropped in the public sector. Combined, however, the number of researchers grew at a slower rate than in the EU on average. In terms of competitiveness gains, it is positive that the share of business sector researchers is relatively high (2016: 55.3%), and it has exceeded the EU average since 2011. In 2017 the number of researchers increased further, whereby the pronounced spike in the business sector is a consequence of methodological changes[35] (see Indicator 1.16). In the public sector, the number of researchers has been dropping for several years as R&D investments declined, which is particularly true of the government sector, of which public research organisations are a part[36]. Emigration of early-stage researchers due to better working conditions, promotion and higher salaries has additionally reduced the capacity for basic research in breakthrough fields and for transfer of knowledge in the business sector, which forms the foundation of applied research and associated innovations.

Figure 14: Per capita R&D expenditure, 2017



Source: Eurostat Portal Page – Science and Technology – Research and Development, 2019.

Budget appropriations for R&D for environmental and energy purposes increased overall in 2013–2017 despite fluctuations. Environmental R&D investments are much higher than energy R&D investments, whereas in the EU more is invested in energy R&D than in environmental R&D. In Slovenia the share of both fields in total budget R&D investments increased from 6.0% in 2013 to 9.4% in 2017, which is a good basis for the implementation of SDS goals in this field. In the same period, Slovenia made headway in the European Eco-Innovation Index[37], jumping from 15th to 5th place among EU Member States. In four out of the five measured areas, it exceeds the EU average, but it is significantly behind in resource efficiency, in particular energy productivity, where it ranks among the five worst performing countries.

[31] By the end of 2018, the EU had certified claims for the payment of 13% (priority 1) and 11% (priority 3) of available funds for purposes that include development, research and innovations (www.eu-skladi.si, 2019).

[32] In 2010–2013, annual cohesion policy payments for R&D ranged between EUR 60–100 million and were used also for co-funding centres of excellence, competence centres and development centres (see Development Report 2015, 2015).

[33] In 2017 guidelines for improving tax certainty in claims for tax relief for R&D investments were issued as a result of multi-year experience in the evaluation of specific R&D projects, general and specific opinions by the Ministry of Economic Development and Technology, guidance by the tax authority, and case-law. The guidelines may be amended as needed.

[34] Expressed in PPP at constant 2005 prices.

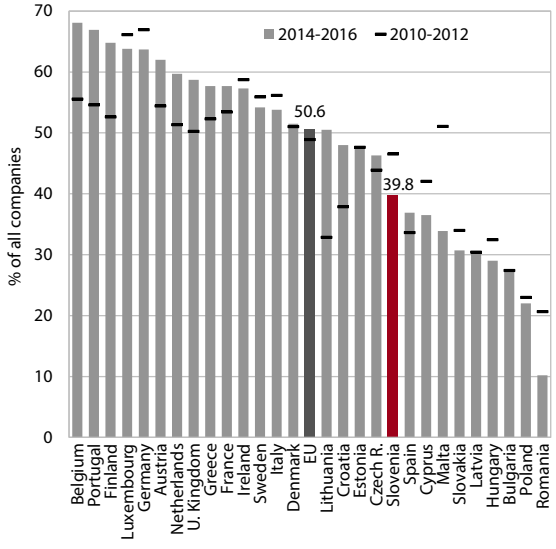
[35] Due to a break in the time series in 2017, we do not compare the share of researchers by sector or changes in the number of researchers with previous years or with other EU members, since it is unclear where similar methodological changes have already been implemented.

[36] In the government sector the number of researchers dropped by around 490 in 2008–2016 expressed in full-time equivalent (FTE).

[37] The Eco-Innovation Index comprises 16 indicators in five areas: (i) eco-innovation inputs, (ii) eco-innovation activities, (iii) eco-innovation outputs, (iv) resource efficiency outcomes and (v) socio-economic impacts (see Eco-innovation Scoreboard 2017, 2018).

The innovation activity of enterprises declined across all company size classes in 2010–2016. The share of companies that were innovation-active at the last measurement in 2014–2016 stood at 40%. In 2010–2016 innovation activity of companies increased in half of EU Member States, but Slovenia ranked among the three where the largest declines were recorded. After 2010 the contraction of innovation activity was sharpest in small and medium-sized enterprises, with small firms farthest behind the EU average. Low innovation activity of small companies is associated with their focus on cost reduction and routine process improvements and with a lack of human and financial resources for the implementation of innovations and improvement of competitiveness. In 2014–2016 half of innovation-active companies introduced both technological and non-technological innovations, which enables higher efficiency in the sale of innovative products and services. Manufacturing companies have been more active innovators than services companies, the latter recording a sharper decline in innovation activity post-2010. In both sectors, Slovenia fell even further behind the EU average in 2010–2016, with the gap to the most successful Member States exceeding 30 percentage points[38]. The fact that the business sector has not increased innovation activity despite significant R&D investments reveals obvious weaknesses in Slovenia's innovation system. Chief among these are insufficient transfer of knowledge between research institutions and the business sector, decline in public R&D expenditure, insufficient internationalisation of R&D, and shortcomings in the management of the innovation system and the support system for enhancing the innovation activities of small companies[39]. On the other hand, small and medium-sized enterprises state that they do not make sufficient use of state incentives supporting entrepreneurship because they are not acquainted with them or do not have the staff to deal with excessively complex tenders (Brečko, Bučar and Udovič, 2018). Innovation activity of companies is one of the principal long-term factors of increasing value added per employee and how to frame and efficiently address it remains a challenge.

Figure 15: Innovation-active companies



Sources: Eurostat Portal Page – Science and Technology – Community innovation survey, 2019; SURS 2018; IMAD calculations.

[38] Belgium in manufacturing and Portugal in services.

In the area of intellectual property protection, there has been notable progress in EU trademark applications, whereas in patents and Community designs the gap to the EU average has been widening since 2014. Data on EPO (European Patent Office) patent applications per million inhabitants are provisional, but the trend shows that the decline in Slovenia is more pronounced than in the EU on average. The number of patent applications filed with the Slovenian Patent Office[40] declined in 2016–2018 as well, a confirmation of low innovation activity in the country (see Indicator 1.17). For companies, legal protection of EU trademarks is an increasingly important factor of competitiveness; this is reflected in the growing number of EUIPO (European Union Intellectual Property Office) applications by Slovenian applicants per million inhabitants, which has approached the EU average and even exceeded it in individual years in 2014–2018. Slovenia's situation is different with regard to Community designs per million inhabitants, where the country remains far from the EU average and has not managed to bridge the gap since 2014. In designs, which involve legal protection of the external appearance of a product, this situation is associated with insufficient consideration of non-technological aspects (e.g. design and creative industries) in the achievement of higher value added.

Slovenia has been catching up to the EU average in digitalisation, with progress particularly brisk since 2016. Measured with the Digital Economy and Society Index (DESI), which gauges five areas, Slovenia ranked 15th among EU Member States in 2018[41] (see Indicator 1.19). The fastest progress was recorded in the integration of digital technology at companies; Slovenia also made headway in digitising public services, but it is lagging behind developed EU countries in leveraging the potential of public e-services and the digitalisation of the public administration[42]. Improvements in the digitalisation of companies are partially a result of the mandatory use of e-invoices in transactions with budget users, which shows that with well conceived measures, the state could significantly accelerate digitalisation in other areas as well. In the DESI areas of internet usage and connectivity, Slovenia has been losing ground.

[39] Bučar, 2017; Specific Support to Slovenia – Internationalisation of the science base and science-business cooperation (EC), 2018; Research and Innovation Analysis in the European Semester 2019 Country Reports (DG RTD), 2019.

[40] Office of the Republic of Slovenia for Intellectual Property, 2019.

[41] Data in the index are mostly for 2017.

[42] eGovernment Benchmark 2018 (EC), 2018.

Box 1: Strategic Research and Innovation Partnerships

Strategic and Innovation Partnerships (SRIPs) were formed in 2017 for a deeper and more effective cooperation between the business sector and R&D institutions. They are a new innovation and development policy instrument for implementing Slovenia's Smart Specialisation Strategy (S4). Conceptually very similar to clusters, SRIPs are active in nine S4 priority domains and connect, on a long-term basis, companies, institutions of knowledge, other stakeholders and the state. Their aim is to increase the share of innovation-active companies, raise value added and help penetrate global markets, all to enhance Slovenia's innovation system. Almost EUR 1 billion has been set aside from EU funds for the implementation of SRIP projects.

SRIP activities cover the following priority areas: Smart cities and communities; Smart buildings and homes, including wood value chain; Networks for the transition into circular economy; Sustainable food production; Sustainable tourism; Factories of the future; Health – medicine; Mobility; and Development of materials as end products. The SRIP Smart Cities and Communities also involves a horizontal ICT network which represents a collection of enabling technologies and competences whose activities also support other SRIPs. Since SRIP membership is open-ended, the number of members changes as new ones join and others leave. The number of SRIP members has increased from 631 to 783 since establishment, of which 83% are companies (of which almost 80% are SMEs), 12% are institutions of knowledge, and 5% are facilitators and other partners (SVRK, 2019). SRIPs are funded through membership fees, public funds and other sources. They can also secure co-funding of R&D activities in open calls, provided the development projects are in accordance with focal areas and/or technologies defined in S4 or in the basic guidelines of the respective SRIPs. The partners of each SRIP have drawn up action plans that define focal areas and technologies, common development activities, internationalisation, human resources development, promotion of entrepreneurship, and common services. The action plans, regularly upgraded and amended, represent the dynamic segment of S4 and are expected to facilitate the ongoing process of focusing innovation and development policy on key priorities. In 2019, a detailed review of the performance of SRIPs is to be undertaken as the basis for any changes or amendments to their activities and to verify their eligibility for funding over the next period (i.e. to 30 September 2022).

Another weakness in furthering digitalisation is the decline in investment in information and communication technologies (ICT), which accounted for 1.9% of GDP in 2017 and was below the pre-crisis level. Rapid technological progress requires stronger investments in ICT[43], where Slovenia is lagging behind in all but a few segments (e.g. robotics). Since 2012 the number of ICT graduates has declined mainly due to declining cohorts enrolling in tertiary education; however, the share of ICT graduates is slightly above the EU average. With demand for ICT staff expected to grow[44], it is paramount that the public and private sectors leverage scholarships to incentivise enrolment in both tertiary and secondary levels of ICT education and that appropriate communication be used to make these professions more attractive to women. In efforts to strengthen the demand for digital services among the population, there is scope for expansion of the range of services, simplification of procedures, and training designed to increase uptake of digital services among the elderly and the less educated, which would help bridge the digital gap. The development of technological capabilities and know-how in fields such as big data, artificial intelligence and machine learning, combined with the strengthening of digital literacy, are the key factors for accelerating digitalisation in both the business and public sectors, and they will also determine Slovenia's performance in innovation activity and competitiveness.

Slovenia has recently introduced a few measures and instruments to improve the efficiency of the innovation system and to respond more quickly to changes in the environment. Certain weaknesses in research, innovation and digitalisation could be addressed with new instruments associated with the implementation of Slovenia's Smart Specialisation Strategy (S4). Strengthening of cooperation between the research and business spheres and increasing the share of innovation-active companies is dealt with by the Strategic Research and Innovation Partnerships (SRIPs) instrument (see Box 1). However, the results cannot yet be assessed, since specific research and innovation activities among SRIP partners did not start until the second half of 2017. The re-introduction of incentives for young researchers from the business sector could promote direct transfer and co-creation of know-how by the research and business sector given positive past experience. In 2018, the Ministry of Economic Development and Technology issued an open call for pilot and demonstration projects for development and presentation of breakthrough and innovation projects in S4 areas. To improve the competitiveness and competences of micro, small and medium-sized enterprises (SMEs), in early 2019 the Slovenian Enterprise

[43] Country Report Slovenia (European Commission), 2019.
[44] A pilot study in seven EU15 members which monitored ICT vacancies in real time online shows that between July 2016 and the end of May 2018 their number rose by 17% (Digital Single Market, 2018).

Fund issued low-value vouchers[45] that facilitate access to co-financing of services such as protection of intellectual property, acquisition of quality certificates, participation in international forums and business delegations travelling abroad, group presentations at trade fairs abroad, and research of foreign markets. In the future, vouchers for ownership transfer and change of legal status, digitalisation and enabling technologies, circular/green economy, and prototyping will be issued as well. Realisation and evaluation of these instruments, coupled with additional measures to address weaknesses in Slovenia's research, innovation and digital capacity, represent a development challenge that calls for a coordinated effort by all public and private sector stakeholders.

[45] Individual vouchers are capped at EUR 10,000 per company, with the total amount of vouchers a company can use in a year limited to EUR 30,000. The deadline for applications is 23 March 2023 or until the funds for the individual segment are used up (Slovenian Enterprise Fund, 2019).

2 Lifelong learning

Slovenia has long had a high rate of youth participation in education, resulting in a relatively high share of the population with upper secondary and tertiary education by international standards. The quality of education, as measured by the performance of youths in the international study PISA, has improved in recent years. Positive trends have also been recorded in the structure of enrolment in tertiary education, as the share of STEM enrolments has risen. However, the overall number of students has been declining due to demographic change, with knowledge and skills mismatch additionally affecting the availability of skilled labour. The mismatch is associated both with the low interest of youths in certain professions and with the slow reaction of the educational system to the demands of the economy and society. Another weakness is poor literacy, numeracy and digital skills of adults, as they can hold back labour efficiency and the social inclusion of individuals. With demographic change dictating that people remain in the labour force longer and with technology progressing, it is therefore essential to improve the participation of adults in lifelong learning, which is currently low, in particular among the older population and the low-educated, especially in the private sector. In culture and language, Slovenia boasts a large number of events and high attendance by international standards; promotion abroad also helps drive attendance and recognition, but it lags behind plans. There are also delays in meeting the targets in digitalisation which contributes to the preservation of cultural heritage and in language sources and technologies which contribute to the development and preservation of the Slovenian language.

2.1 Knowledge and skills for a high quality of life and work

Knowledge and skills for a high quality of life and work (development goal 2)

The aim is to promote high-quality and accessible lifelong learning in order to improve the competitiveness of the economy and the prosperity of society. The goal will be realised through the promotion of lifelong learning across the entire population, with incentives for those with lower educational attainment and other marginalised groups to participate in education, with improvement of the functional literacy of youths and adults, by making sure education is efficient and of a high quality, by linking the education system to business, and by developing skills to improve employability. Realisation of this goal is essential for an active and healthy life, which the SDS deals with in development goal 1, and for competitiveness of the economy, which is dealt with in development goal 6.

SDS 2030 performance indicators for development goal 2:

	Latest value		Target value for 2030
	Slovenia	EU average	
Participation in lifelong learning, in %	12.0 (2017)	10.9 (2017)	19
Share of population with tertiary education, in %	32.5 (2017)	31.4 (2017)	35
PISA results, rank	Ranked in top quartile of EU countries (2015)		Maintain ranking in top quartile of EU countries

Youth participation in education and adults' educational attainment are high, but the supply of appropriately skilled labour is falling short in meeting the demands of society and the economy. The share of youths (aged 20–24) with at least upper secondary education has been increasing on the back of years of growing youth participation in upper secondary and tertiary education, and it has been above the EU average for a number of years. The shares of adults (25–64) with completed upper secondary[46] or tertiary education has been rising as well – both are above the EU average –, which may contribute to greater adult participation in society and strengthen human capital as a factor of innovation and competitiveness. The synthetic indicator measuring the development of knowledge and skills also puts Slovenia in a favourable position internationally, placing it among the leading countries. Slovenia ranks slightly worse in the indicator of knowledge and skills mismatch, which reduces the potential for efficient use of knowledge and skills. This is problematic in particular at a time when growing demand makes it challenging to provide a sufficient supply of appropriately skilled labour. Increasing shortages of appropriately skilled labour are largely the consequence of declining enrolment in upper secondary and tertiary education due to demographic change (see Indicators 2.2 and 2.3) and insufficient adjustment of the structure of enrolment to labour market demand and development challenges. The supply of skilled labour is also held back by daily migrations to neighbouring countries and growing emigration of Slovenian citizens to countries with strong demand for occupational profiles that are in short supply in Slovenia[47]. In terms of the supply of skilled labour, emigration of persons with tertiary education represents the biggest problem, having in recent years increasingly exceeded the number of immigrants with such education[48]. At the same time, such migrations, especially if they are temporary, can represent a potential that can be leveraged to strengthen domestic human resources.

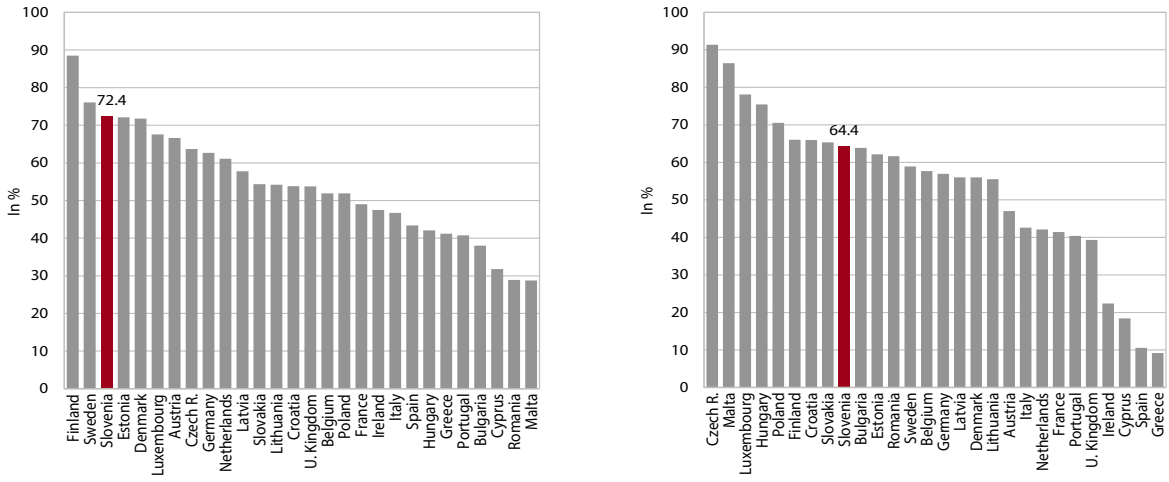
Youths over-perform and adults under-perform in indicators measuring quality of knowledge. Youth literacy and numeracy results, an indirect indicator of the quality of education, improved significantly in the PISA 2015 study compared to the previous (PISA 2012) study (see Indicator 2.4). Unlike youths, who are achieving above-average results in international comparisons, the PIAAC study shows that adults' literacy, numeracy and digital skills, which are an indirect indicator of quality of education and important for their participation in society and for quality of work, are low. What stands out in particular are the poor skills of the low-educated and the elderly, who participate in lifelong learning at lower rates, which can leave them with insufficient grasp of new knowledge given the rapid pace of technological development. Another important indicator of the quality of education is education expenditure, which is low by international standards (see Indicator 2.5).

[46] In 2017 it stood at 87.9% and was above the EU average (77.5%); it has always been higher among men than among women.

[47] According to a survey by Manpower (2018), there is huge global demand for engineers, IT staff, health personnel and other experts, for example researchers and project managers.

[48] In 2017, 3,643 persons with tertiary education emigrated from Slovenia and 2,580 immigrated. The difference between emigrants and immigrants with tertiary education thus stood at 1,063, compared to 447 in 2011.

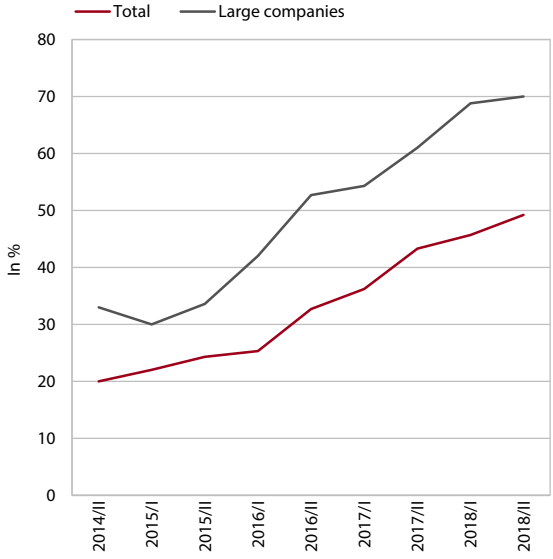
Figure 16: Development of knowledge and skills as share of ideal value (100%)[1] (left), EU, and mismatch in knowledge and skills as a share of ideal value (100%)[2] (right)



Source: Cedefop, The European Skills Index (ESI), 2018. Notes: [1] The development of knowledge and skills index comprises the following indicators: ratio between number of children from age three to school entry and number of teaching staff in pre-school education; share of the population aged 15–64 with at least upper secondary education; achievements of 15-year-olds in reading, maths and science in the PISA study; participation of adults in lifelong learning; share of enrolees in vocational education at secondary level; and digital skills (share of adults aged 16–74 who correctly completed 5 or 6 assignments in the study). The value x% means the country has achieved x% of the ideal value, higher being better (i.e. lower mismatch). [2] The knowledge and skills mismatch index comprises the following indicators: share of the long-term unemployed; share of the involuntarily underemployed; share of persons with tertiary education not working in ISCO 1–3 professions; share of persons with tertiary education receiving only the minimum wage and qualification mismatch. The value x% means the country has achieved x% of ideal value, higher being better (i.e. lower mismatch).

Reducing the mismatch between the population's knowledge and skills and the demands of the labour market could mitigate labour shortages. Although the mismatches are among the lowest in the EU, they hamper a more efficient use of the labour force given the general lack of labour. They are present in the active working population as well as those entering the labour market. In 2017 over a quarter of the employed population were overqualified or underqualified for their job, which is below the EU average. The share of the underqualified, which is high in the older population, has been decreasing. The share of the overqualified, on the other hand, is increasing and is relatively high among youths, which indicates that there are reserves in terms of how they utilise their education. There are also mismatches in knowledge and skills, as employees lack digital knowledge and skills, social and verbal skills, ability in logical reasoning, and skills associated with work methods, including cooperation, flexibility, diligence and independence[49]. Moreover, companies, especially large ones, encounter mismatches when taking on new staff, with the gaps widening rapidly in recent years. Candidates with an upper secondary vocational and technical education and those with tertiary degrees in certain fields are in particularly short supply[50], while the knowledge and skills that candidates lack most often include profession-specific knowledge, good rapport with customers and ability to work in a team. These mismatches are a result of lacklustre interest on the part of youths in vocational education and insufficient adaptation of the educational system to the

Figure 17: Share of employers reporting lack of suitable job candidates, Slovenia

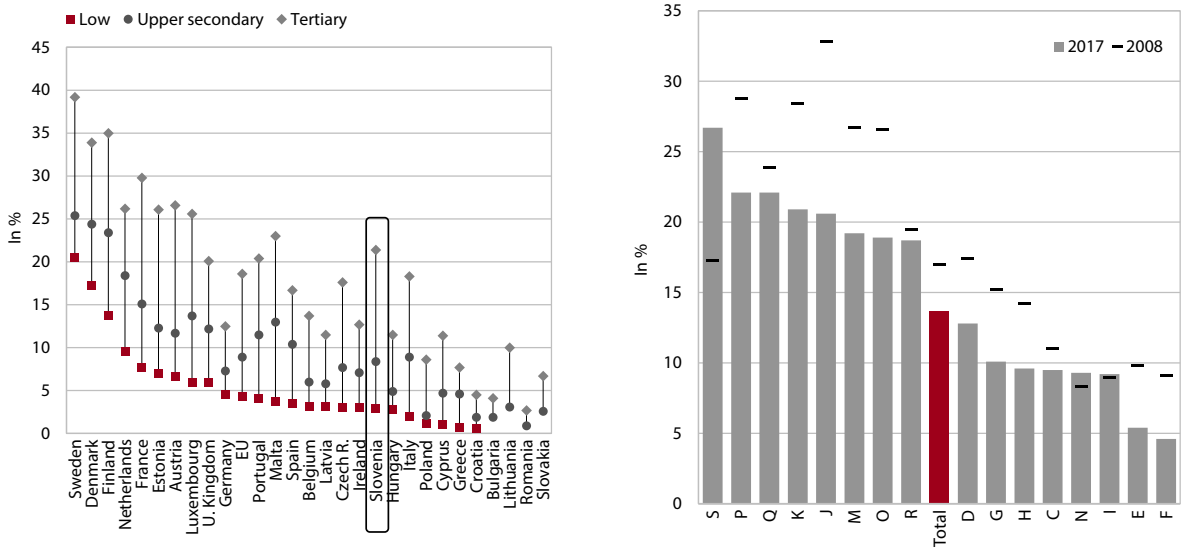


Source: ESS, Employment Forecaster.

[49] OECD Skills for jobs database, 2017.

[50] Data by the Employment Forecaster 2018/II (2018) shows that employers have problem hiring salespersons, welders, drivers of heavy lorries and towing vehicles, and bricklayers; in the group of professionals, demand is greatest for healthcare professionals. The compatences that candidates lack the most according to employers include appropriate education, profession-specific knowledge, good rapport with customers and ability to work in a team.

Figure 18: Participation of adults (25–64) in lifelong learning by education (left) and participation of active working population (25–64) in lifelong learning by activity (right), Slovenia, in %



Source: Eurostat – Population and social condition – Education and training, Labour force survey.
Note: O, P and Q are public sector activities, the rest are private sector activities. S - Other service activities, P - Education, Q - Human health and social work activities, K - Financial and insurance activities, J - Information and communication, M - Professional, scientific and technical activities, O - Public administration and defence, compulsory social security, R - Arts, entertainment and recreation, Total, D - Electricity, gas, steam and air-conditioning supply, G - Wholesale and retail trade, repair of motor vehicles and motorcycles, H - Transportation and storage, C - Manufacturing, N - Administrative and support service activities, I - Accommodation and food service activities, E - Water supply, sewage, waste management and remediation activities, F - Construction.

Box 2: Skills Strategy Implementation Guidance for Slovenia: Improving the Governance of Adult Learning, 2018

The guidance is the result of the multi-year project called "Skills Strategy", which involved Slovenia and the OECD. It provides measures to strengthen cooperation between stakeholders in adult education, a key precondition for improvement of knowledge and skills in adults. To this end, the Government, ministries, municipalities and other stakeholders are supposed to adopt measures in three areas. The first area comprises *overall conditions for cooperation*, which are to be strengthened with the help of a national adult education programme, stronger cross-sectoral oversight and accountability and with decision-making and coordination equipped with high-quality information. The second area, *cooperation between specific actors for adult learning*, is supposed to be improved by strengthening inter-ministerial coordination in adult education, improving cooperation with municipalities, and deepening cooperation between the Government (i.e. ministries) and actors in adult education. The third area, *cooperation to address specific challenges in adult learning*, is to be addressed with measures to raise awareness about adult education and improve the efficiency of adult-education funding. The guidance involves numerous specific recommendations to improve the governance of adult education.

requirements of society and the economy[51]. The latter is made more difficult by the fact that Slovenia does not have a system for monitoring and forecasting the demand for knowledge and skills. In the coming years the creation of a system for monitoring the employability of graduates could contribute to making the educational system more responsive to demands for labour[52].

Participation of vulnerable groups of adults in lifelong learning is inadequate for a successful integration in society and work. Adult participation in lifelong learning exceeded the EU average in 2017, but it was still far from the pre-crisis level (see Indicator 2.6). Low participation of the older population and the low-educated, which is below the EU average, is particularly notable. Participation of employees in lifelong learning is also too low to facilitate adaptation to job digitalisation and automation or for bridging the knowledge and skills

[51] The link between the educational system and employers is too weak, enrolment of youths in vocational education is growing at a sluggish pace and the apprenticeship system is only in its second year, hence the low number of enrolments.

[52] This measure is one of the recommendations in the Skills Strategy Implementation Guidance for Slovenia, 2018.

mismatch. Participation is particularly low in the private sector, where it is mostly below public sector levels and lower than at the start of the crisis. The main obstacles to higher participation in lifelong learning are insufficient financing (by the state, employers and individuals)[53] and poor learning motivation of adults[54]. Quality of adult education and its responsiveness to future needs are problematic as well[55]. In the coming years the situation in adult education could improve with the realisation of the Skills Strategy Implementation Guidance for Slovenia, which was adopted in 2018.

[53] Getting skills right: Future-ready adult learning system (OECD), 2018.
[54] Game (OECD), 2018.
[55] Getting skills right: Future-ready adult learning system (OECD), 2018.

2.2 Culture and language as main factors of national identity

Culture and language as main factors of national identity (development goal 4)

The goal involves developing and preserving national culture and the Slovenian language as factors of national identity, strengthening the country's identity, and promoting social and economic progress. Realisation of the goal will be supported with the promotion of participation in cultural activities, development and preservation of culture and cultural heritage, strengthening of cooperation between business and culture, and promotion of creativity and creative industries. Preservation of the Slovenian language and accessibility of culture will also hinge on digitalisation, while strengthening the country's identity will require international cultural collaboration, according to the SDS 2030. Involvement in cultural activities contributes to the development of functional literacy, which is dealt with in development goal 2, and a healthy and active lifestyle, which is the focus of development goal 1.

Performance indicators for development goal 4:

	Latest value		Target value for 2030
	Slovenia	EU average	
Visits to cultural events, per capita number of visits	6.3 (2017)	N/A	8
Share of cultural events performed abroad, in %	3.9 (2017)	N/A	3.5
Open source language resources and tools, number	109 (2018)	N/A	153

Culture and language influence national identity, the country's identity in the international arena, and social and economic progress. These impacts are intertwined, exceedingly complex and typically exerted over a longer time horizon, which limits the scope for comprehensive annual monitoring of this SDS development goal. Culture and language contribute to the recognition of our uniqueness, to the openness of society, and to the development of creativity, innovativeness and collaboration and they are essential factors of economic and regional development. They are important for individuals, society and economic development alike, a notion that a large share of the Slovenian population agree with[56].

In some areas of cultural production, the trends are favourable; in others, greater headway is needed to improve their contribution to Slovenia's social and economic development. The areas highlighted below are closely connected with SDS 2030 guidelines. The Report on the Implementation of the National Culture Programme 2014–2017 (2018) shows that trends were favourable in certain areas in recent years but that there are some shortcomings. Buoyed by many measures adopted by the government[57], the number and accessibility of cultural activities (film, performing, visual and musical arts, and amateur culture) has increased. In the field of creative industries, the Centre for Creativity was established and in 2019 an open call was published for the promotion of creative cultural industries. Progress in intermedia art has been modest. In heritage, some projects to restore and revive cultural heritage have been implemented, but there is a lack of appropriate financial and tax measures and incentives for renovation and preservation targeting owners of cultural heritage and investors. Digitalisation is lagging behind, as activities to improve the international visibility of Slovenian culture have not been implemented to the planned extent. The network of amateur culture is expanding and collaboration in Slovenia is thriving, but cultural ties with the diaspora are weak. Implementation of the mission of culture is also hampered by the fact that the old National Culture Programme has expired and a new one has not yet been adopted.

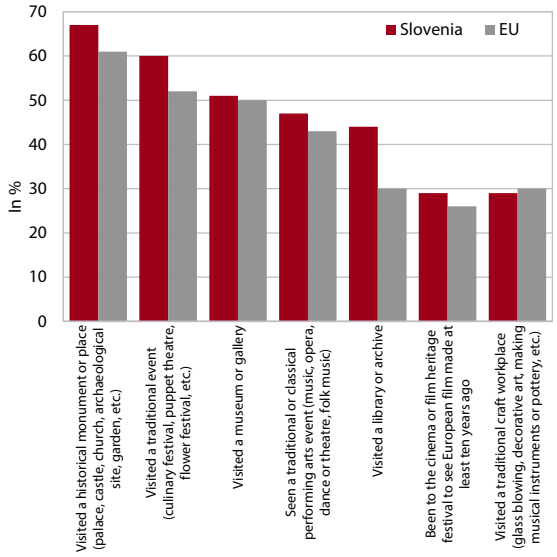
Attendance at cultural events is high by international standards, as is the number of events. The relatively high number of visits to cultural events (see Indicator 2.7) is attributed to geographic dispersal and strong cultural production facilitated by high general government expenditure on culture and a high number of employed persons in culture by international standards. Amateur culture is an important segment, not least due to its role in social inclusion, with the number of cultural societies, members, performances and visitors increasing in the last ten years (the highest increase in the number of societies was recorded in the music segment). One way to increase cultural output is through new forms driven by technological development, in particular digitalisation, and leveraging these factors both for the development of culture and for its promotion at home and abroad remains a challenge. Accessibility of content can be improved through the preservation of cultural heritage. Digitalisation plays an important role in this

[56] Cultural heritage, Special Eurobarometer Report 466, 2017.

[57] Examples of such measures include co-funding of cinematographic and audiovisual production; promotion of co-productions and targeted inclusion of guest performances in subscriptions; the Open Studio project; and promotion of the Slovenian network of galleries, which brings together an increasing number of organisers from various localities to collaborate on programmes and projects.

process, and the demand for digitalisation of museum, archive and library materials and content is significant[58]. A significant factor influencing attendance, in addition to a large supply of cultural events, is their quality, an indirect indicator of quality being the share of cultural events performed abroad, which has increased in recent years (see Indicator 2.8).

Figure 19: Share of population (over 15) who attended at least one cultural event in the last 12 months, 2017



Source: Cultural Heritage, Special Eurobarometer Report 466, 2017.

Although Slovenia has been undertaking activities to improve the visibility of its culture abroad, there is scope for improvement in this field. International cooperation in culture and its promotion help raise the profile of Slovenia and its culture abroad. Slovenia has been carrying out activities to increase the visibility of its culture abroad [59] (cultural projects and presentations of Slovenian artists abroad [60], host performances, Slovenian studies at foreign universities[61], etc.), combining these activities with the efforts of its foreign cultural centres (SKICA in Vienna, the Slovenian Cultural Centre in Berlin, etc.). However, new cultural centres have not been opened despite plans to that effect, and a comprehensive presentation of Slovenian culture in global capitals was not carried out as planned in 2017[62]. Better promotion would improve the visibility of Slovenian culture abroad. There will be several opportunities to do this in the coming years with projects that Slovenia plans to carry out (Slovenia as guest of honour at the Frankfurt Book Fair in 2022, hosting of the largest international choral competition in Europe, the Europa Cantat, in 2021, and the project Slovenia – European Region of Gastronomy 2021) or participate in (EXPO 2020).

Trends in book production and general libraries remain fairly unfavourable, while the development of language resources and technologies has been too slow. Although many book policy measures have been adopted in recent years (e.g. the Single Price for Books Act, launch of the portal Knjige na trgu (Books on the Market) and state co-funding of e-books), the trends in this field remain unfavourable. The number of publishers declined sharply in 2009–2017, as did the number of published books and brochures. Fiction can contribute to the development of national identity, but the number of published Slovenian titles decreased as well. Membership of general libraries has also declined in the last several years, as has the average number of library loans. The membership rate is highest in the Goriška region and lowest in Podravska, while loans are highest in Savinjska and lowest in Obalno-Kraška. We believe the decline in lending is partially affected by the accessibility of online materials facilitated by digitalisation[63], even though digitalisation is not progressing as planned[64]. But general libraries also organise a variety of events (exhibitions, lectures, lessons, etc.), which contributes to a more informed society and furthers social inclusion: in their localities, libraries are often the central cultural institutions. In recent years libraries have also organised many events to promote reading and improve literacy. The development of literacy skills and the accessibility of the Slovenian language also hinge on language sources, technologies and digitalisation, where Slovenia lags behind[65]. One notable example of best practice is Fran[66], a portal which provides dictionary information for free to the general public and is recording a rapid growth of search queries. The number of open-source language resources and tools in the national repository CLARIN[67] has also been increasing, standing at 109 at the end of 2018 (the SDS 2030 goal is 153).

[58] Bill on the Provision of Funds for Certain Vital Cultural Programmes of the Republic of Slovenia, 2018.

[59] The Ministry of Culture and the Ministry of Foreign Affairs have taken many measures to increase the visibility of Slovenian culture.

[60] The Culture Fund was set up for this purpose and in 2018 it co-financed more than 140 projects covering a variety of artistic practices, which is less than in the year before (Annual Report 2018, MFA, 2018, and Annual Report 2017, MFA, 2017).

[61] Annual Report, MFA, 2018.

[62] Report on the implementation of the National Culture Programme 2014–2017 (Ministry of Culture), 2018.

[63] Analysis of the Financing of Culture (Ministry of Culture), 2018.

[64] Digital libraries and open-access databases allow users to browse and download materials free of charge and without registration (e.g. Digital Library of Slovenia, History of Slovenia – Sistory, European digital library Europeana, Open Culture), which reduces the need for registered borrowing (Analyis of the Financing of Culture, 2017, p. 45).

[65] Bill on the Provision of Funds for Certain Vital Cultural Programmes of the Republic of Slovenia, 2018.

[66] The Fran portal combines dictionaries, Slovenian language resources and portals created at the Fran Ramovš Institute of the Slovenian Language, along with dictionaries digitised by the institute. It also allows users to search selected Slovenian language corpora.

[67] CLARIN is research infrastructure organised as an inter-institutional consortium which provides a unified computer platform that offers research communities permanent storage of and free access to language resources, applications, and advanced tools for the computer processing of Slovenian and other languages.

3 An inclusive, healthy, safe and responsible society

Social inclusion, participation in social life and participation of under-represented groups (youths, older people, those with low education) on the labour market have improved in recent years, which indicates development towards an inclusive society. The trend is underpinned by a variety of gender-equality factors which place Slovenia among the top-performing countries in the EU. Income inequality, a major indicator of the inclusiveness of a society, is the lowest among all EU countries and at a similar level as before the crisis. In recent years, the decline in inequality has been driven primarily by higher incomes in the lowest income brackets. Nevertheless, reducing inequality among those over 65, in particular women, remains a challenge. In healthcare, some indicators have improved, but extending healthy life years remains a challenge, as Slovenia lags far behind other countries in this regard. While financial access to health services remains relatively good (low share of out-of-pocket payments compared to other countries), improving accessibility in terms of reducing waiting times still needs to be tackled. Demographic trends have been affecting labour market trends as the supply of potential labour wanes, which requires adaptation of the financing of social protection systems; Slovenia ranks among the countries in which age-related general government expenditure will surge in the coming decades absent an appropriate adjustment of these systems. This would cause problems in the provision of public services, exerting negative pressure on prosperity. Aside from adjustments of the pension and healthcare systems, another major challenge is to put in place a system of long-term care, an area where demand for services is rising fast.

3.1 A decent life for all

A decent life for all (development goal 3)

What supports a decent life for all generations is the creation of conditions in which all people may decently, equally and responsibly realise their potential by undertaking activities across a variety of fields. The principal SDS guidelines for the achievement of this goal are geared towards (i) providing an appropriate income level for a decent life and preserving low income and wealth inequality, (ii) creating sustainable systems of social protection and care and protection of children, (iii) ensuring a good quality living environment, (iv) strengthening cooperation, solidarity and volunteering, and (v) eliminating all forms of discrimination. A decent life is also associated with an inclusive and healthy society, which is presented under development goal 1.

SDS 2030 performance indicators for development goal 3:

	Latest value		Target value for 2030
	Slovenia	EU average	
Social exclusion rate, in %	17.1 (2017)	22.5 (2017)	< 16
Income distribution inequality, quintile share ratio (80/20)	3.4 (2017)	5.1 (2017)	< 3.5
Personal experience of discrimination, in %	10 (2017)	16 (2017)	< 10

Having declined during the crisis, gross disposable household income[68] has been rising in the last several years. The contraction in the crisis years was driven by a deterioration of labour market conditions (job losses), with the state mitigating loss of household income with social transfers in cash and kind. Austerity measures[69] in 2012 and 2013 led to a renewed sharp decline in household incomes. Moreover, new social legislation that took effect in 2012 tightened eligibility criteria for social rights with the aim of better targeting recipients of social assistance. On the back of a revival of economic activity and the gradual relaxation of austerity measures, household incomes have been increasing since 2014[70]. Gross adjusted disposable income per capita (in PPS) stood at 78.9% of the EU average in 2017, 5 pps less than in 2007[71].

Household disposable income is increasingly dependent on employment. This is reflected in the rapid increase in the share of compensation of employees in disposable income after 2014. The structure of household disposable income indicates that the share of income Slovenian households derive from property (interest, dividends and rental income)[72] is well below the EU average, with the share of income from labour accordingly higher. The share of social protection benefits, which is not very far from the EU average, is higher than in 2008, mostly as a result of higher benefits for old age due to an increasing number of recipients. As the share of compensation of employees has risen, so has the share of taxes and contributions, which is on par with the EU average.

Income inequality was lower than in the EU in 2017, a result of increasing incomes of those in the lowest income brackets in recent years. Slovenia's low income inequality is strongly affected by the highly progressive taxation of household incomes[73]. While it widened slightly in 2012–2015, it has been narrowing again in recent years, dropping to the pre-crisis level in 2017 (see Indicator 3.1). The crisis and austerity measures reduced in particular the incomes of households in the first and second quintiles, but as the economy rebounded, the incomes in these two quintiles grew faster than in others. This trend was driven by faster employment of the low-educated after the crisis, the minimum wage increase in 2010, and the phasing-out of austerity measures affecting social protection and family benefits post-2014. Those in the fifth quintile, who had been the least affected during the crisis, have seen their incomes rise at the slowest pace in recent years.

Wealth inequality is below the OECD average but significantly higher than income inequality, according to the OECD[74]. In Slovenia, wealth inequality

[68] Gross disposable household income comprises gross household income from employment, social benefits in cash, operating surpluses and miscellaneous income from property reduced by contributions and taxes. Gross adjusted disposable income additionally includes social transfers in kind, i.e. services for individuals provided by the state for free or at non-market prices (educational, health, housing, culture, sports, etc.).

[69] Passage of the Fiscal Consolidation Act in 2012.

[70] In 2017 gross adjusted disposable income of households and NPISH was the equivalent of 68.9% of GDP (2008: 70.4%).

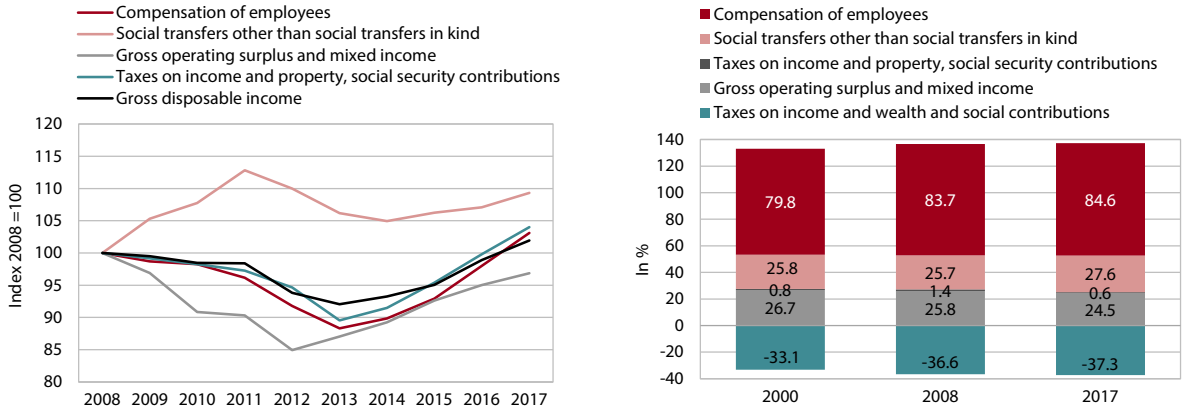
[71] The gap to 2008 is similar to the gap in economic development measured with per capita GDP at PPS.

[72] In Slovenia it hovers around 2% of gross disposable income; in the EU it stands around 12%.

[73] SURS estimates that taxes in the fifth quintile exceed the average for households by a factor of 2.5 (Vajda, J., 2018).

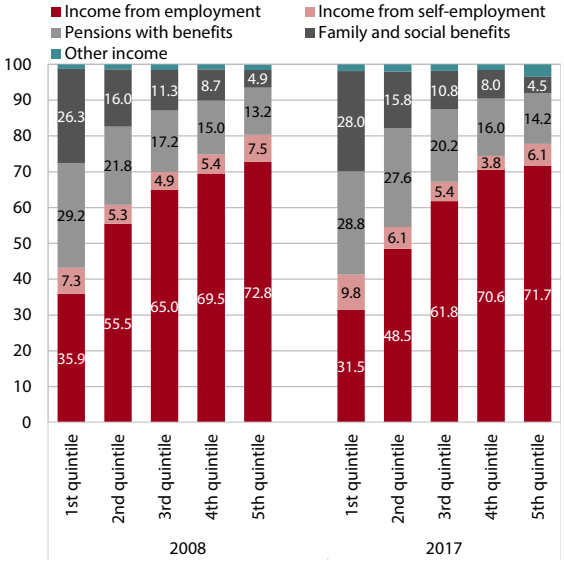
[74] Overall wealth inequality is significantly below the OECD average, but

Figure 20: Real growth of principal components of gross disposable income (left) and its structure (right)



Source: SURS, National Accounts; IMAD calculations.

Figure 21: Structure of equivalised[1] disposable income per household member by type of income, Slovenia



Source: SURS, Income Distribution, SILC survey. Note: [1]Equivalised disposable income is determined using the number of household members converted into equivalised adults according to the OECD equivalence scale, which assigns a weight of 1 to the first adult, 0.5 to any other person aged 14 or older, and 0.3 to each child younger than 14.

is determined by the value and distribution of fixed and financial assets, the latter modest in Slovenian households despite a high savings rate. The first and second quintiles typically borrow, but from the third quintile up savings gradually rise. In 2015 the wealthiest fifth of households saved a third of their disposable income[75]. The indicator of income and asset poverty, which combines households' income and financial assets, shows that Slovenia is on a par with OECD countries, but the indicator of economic vulnerability, which measures only financial wealth, places is among countries with a more economically vulnerable population (40% of individuals are estimated to be vulnerable)[76].

The at-risk-of-social exclusion rate has been decreasing in recent years and in 2017 it reached 17.1%, a similar level as before the crisis. It has been below the EU average throughout the entire period. Of its three components ((i) persons living below the at-risk-of-poverty rate, (ii) severely materially deprived persons and (iii) persons living in households with very low work intensity), only the at-risk-of-poverty rate was higher in 2017 than in 2007 (by 1.8 pps) (see Indicator 3.3). Compared to 2007, the at-risk-of-poverty rate was significantly higher in the age groups 18–24 and 50–64, while those over 65 are the only group in which it was lower in 2017 than before the crisis, which is associated with the fact that pensions (the principal income for the older population) were the most "stable" source of income during the crisis. Nevertheless, women over 65, who often live in one-person households, are still at greatest risk, which can be attributed to the fact that women in younger age groups are also at higher risk of poverty than men. This, in turn, is a consequence of women being more likely to work in lower-paid jobs and/or part-time.

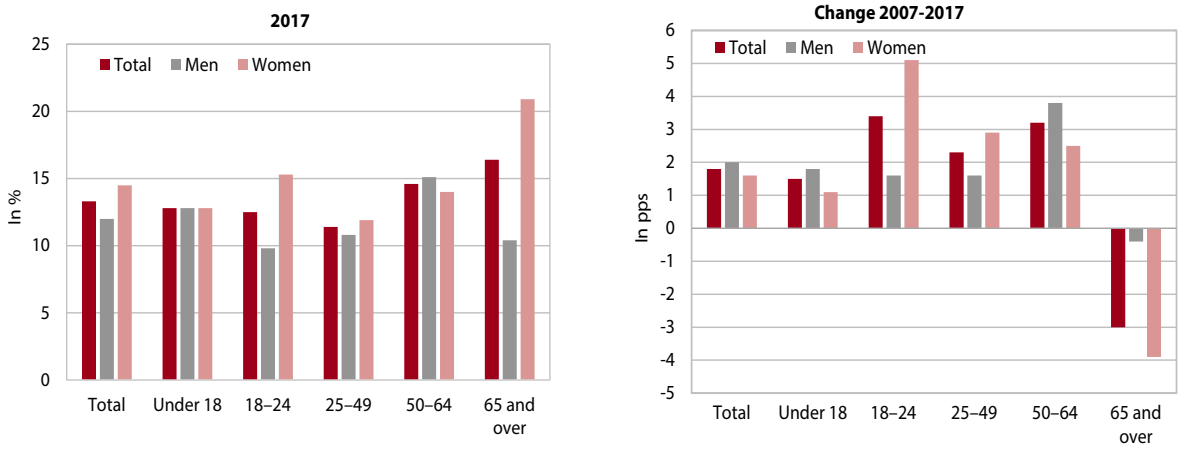
Social transfers in kind can improve the accessibility of education, healthcare and other services, but in

is comes very close to the average measured by the wealth held by the richest 5% and even exceeds it for wealth held by the richest 1% (Opportunities for All, 2018).

[75] Vajda, 2018. Measuring households' economic and social inequality in national accounts.

[76] Income and wealth poverty of households is defined as equivalised income below 50% of the median and below 25% of equivalised current financial assets over a three-month period. Households defined as economically vulnerable are not income poor, but they do not have sufficient financial assets to offset a three-month loss of income (For Good Measure: Advancing Research on Well-Being Metrics Beyond GDP, 2018).

Figure 22: At-risk-of-poverty rate by age group and sex in 2017 (left) and change in at-risk-of-poverty rate in the period 2017–2007 (right)



Source: Eurostat portal page – Population and Social Conditions, 2019.

higher income brackets accessibility is also improved by out-of-pocket spending. Social transfers in kind represent around 15% of disposable income and reduce income inequality by a quarter[77]. In the fifth quintile of households in particular there was a substantial increase in health and education expenditure in 2012–2015 (latest data available), with the biggest increase recorded in expenditure on recreation and culture, which households cover out of pocket. Long-term projections of age-related expenditure indicate that in future public expenditure in kind on health, long-term care and education will increase as well (see Box 3).

The income status of individuals affects their participation in education and educational attainment throughout life. Participation of children in pre-school education, which can have a favourable impact on educational attainment, is worst in the lowest income bracket. Students from families with lower socio-economic backgrounds perform worse in school (in reading, maths and science) and have poorer career prospects[78]. The share of students whose parents are financially not well off is high by international standards[79], which we believe is associated with good accessibility of tertiary education. However, socio-economic background does affect the choice of study. Individuals whose parents do not have a tertiary degree are more likely to choose non-university programmes. Income status also affects adult participation in education, which is lowest among the low-educated, who generally have low incomes.

Individuals' cultural and physical activity is strongly correlated with their income status. Persons with lower incomes are least likely to participate in leisure activities. The share of low-income persons[80] engaged in sports or other physical activities – activities which affect overall wellbeing and health – is low as well. Lower participation is partially a result of the financial accessibility of such activities, as low-income persons often quote high price as the reason for not participating. Similarly, about a third of the population of Slovenia name high price as one of the obstacles to attendance at cultural activities[81].

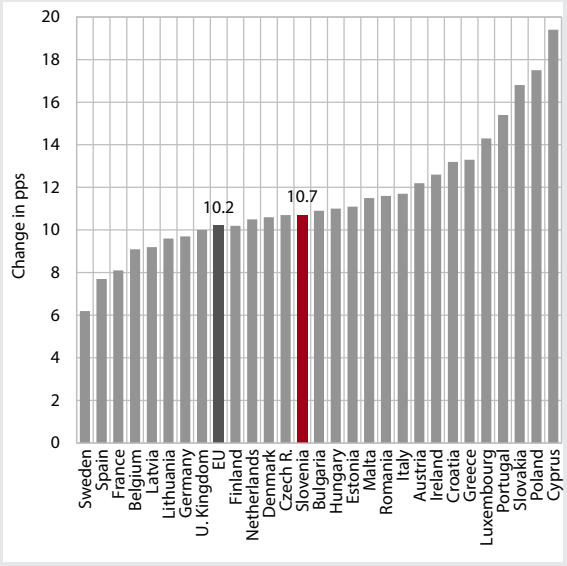
Financial accessibility of health services is relatively good at the level of the entire system, but waiting times remain a problem. Out-of-pocket expenditure on healthcare is low[82], which is associated with the broad basket of publicly-funded health services and high participation in supplementary health insurance (95%) Expenditure on supplementary health insurance as a share of total household insurance rose from 2.8% to 3.3% in 2005–2015, but in 2012 the share sharply dropped for the poorest households and rose for wealthier households, an indication that this source of healthcare financing has become less regressive[83]. Good financial accessibility of healthcare in Slovenia is further evidenced by the indicator of unmet needs for medical treatment for financial reasons, which is among the lowest in the EU across all income brackets. At the same time, unmet needs caused by waiting times are above the EU average[84].

[77] Vajda, 2018.
[78] According to OECD (2015), PISA.
[79] According to the Eurostudent VI 2016–2018 study (2018).
[80] In 2017 persons who have difficulties paying bills most of the time were least likely to do sports; in this segment Slovenia places in the top third of EU countries (Sport and physical activity, Special Eurobarometer, 2018).
[81] According to data by Cultural heritage, Special Eurobarometer Report 466 (2017).
[82] In 2016 it stood at 12.6% of all health expenditure (EU: 21%).
[83] Zver et al., 2019.
[84] This shows up in all three studies used in Slovenia and the EU to monitor unmet needs for medical treatment – EU SILC, EHIS and SHARE. The EHIS survey shows that in 2014, 19.6% of the population reported unmet needs because of waiting times, which roughly

Box 3: Demographic trends and projections of age-related expenditure

Slovenia is facing demographic change requiring that the entire society adapt. Life expectancy is rising, the number of births is stagnating and net immigration is relatively low. The size of the most active population, in the age group 20–64, is decreasing, while the number of those older than 65 is rising. Demographic change is thus reducing the supply of labour, which is already affecting labour market trends (more in Section 3.3). In the coming years, the pace of these changes will only intensify. By 2030 persons over 65 will already represent almost 25% of the population, with those over 80 accounting for 6.8% of the total. The dependency ratio will rise significantly as well: by 2030, 80 children, youths and older persons will depend on 100 people aged 20–64. The altered age structure requires changes and adjustments across a variety of fields.

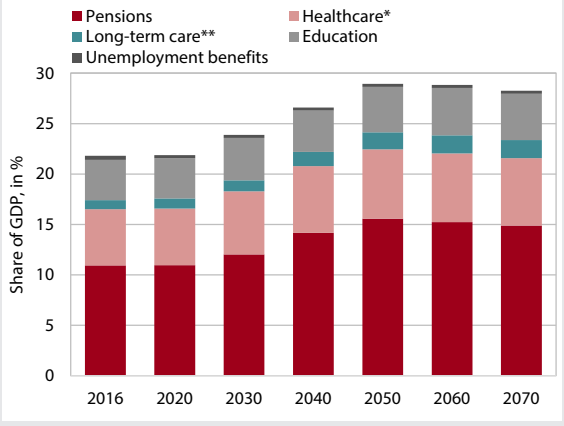
Figure 23: Projection of change in the share of persons over 65 in EU countries in 2015–2080

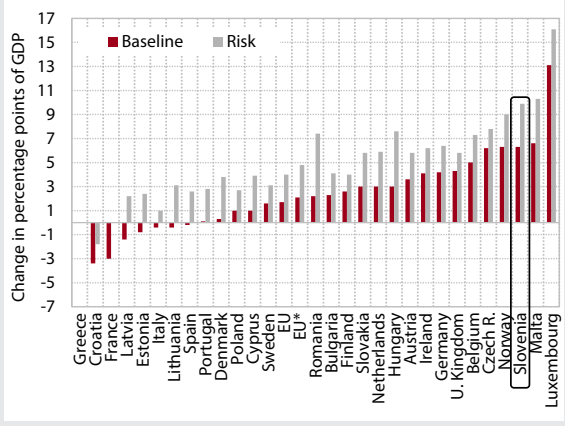


Source: Eurostat Portal Page – Population and Social Conditions, 2019.

In terms of the pace of population-ageing, Slovenia does not diverge much from the EU average, but because its systems of social protection are not adjusted to demographic change, it ranks among the countries with a very high projected increase in age-related expenditure. Measured by the share of persons over 65, it places just above the EU average. Nevertheless, age-related expenditure is projected to rise by 6.9 pps of GDP by 2060 and 7 pps of GDP by 2070, one of the sharpest increases in the EU. Assuming no policy change, the effect of ageing on general government expenditure will be very strong and significantly above the EU average (baseline scenario). The long-term sustainability of public finances will come under even more pressure if growth in public expenditure on healthcare and long-term care is additionally driven by various non-demographic factors (risk scenario). The increase in pension expenditure is the area where Slovenia stands out the most, but it also exceeds the EU average in terms of growth of expenditure on health, education and unemployment. Deferral of a pension reform that would improve the fiscal sustainability of the system merely increases pressure on general government expenditure. Even though the transfer from the national budget to the ZPIZ has declined in recent years as employment has improved, it still exceeded EUR 1 billion in 2018.

Figure 24: Projections of age-related public expenditure, Slovenia (left), and comparison with EU countries (right), 2016–2070





Sources: The 2018 Ageing Report: Economic and budgetary projections for the EU Member States (EC), 2018; Country Fiche on Pension Projections for Slovenia (MF), 2017. Notes: * Public expenditure on long-term care according to SHA methodology but excluding expenditure on healthcare and including investments according to COFOG methodology. ** Total public expenditure on long-term care according to SHA methodology (excluding expenditure on disability benefits, which had been included in previous AWG projections). EU – weighted average; EU* – arithmetic mean.

Slovenia has adopted the Active Ageing Strategy[1] to address demographic change. The strategy is based on a lifelong approach, since quality of life in old age requires a holistic and active approach throughout the course of life, and on the concept of active ageing, which emphasises activity and creativity in all periods of life, concern for health, and intergenerational cooperation and solidarity. It forms a comprehensive framework that indicates the direction of required adjustments and changes in four pillars: (i) employment (adjustments on the labour market, including education and training, and promotion of immigration of foreign labour); (ii) independent, healthy and safe living for all generations (systems of social protection, accessibility of healthcare and long-term care services, concern for health, and reducing inequalities in healthcare); (iii) participation in society (intergenerational cooperation, volunteering, use of ICT in communication, prevention of discrimination and violence in society, and political activity); and (iv) creating an environment enabling an active life throughout its course (adjustments to the economy, dwelling conditions and transport systems with the support of ICT and technological solutions).

[1] Active Ageing Strategy, 2017.

In 2017 the Government adopted a special programme to reduce waiting times, which is ongoing.

The provision of long-term care is a challenge that requires a systemic solution. Slovenia is roughly on par with the OECD average by participation of total population in long-term care[85], but the gap in the participation of the 65+ age group is growing (SI: 11.6%; OECD 18: 13.0%). Home care is the least developed segment and one in which Slovenia lags farthest behind by participation rate[86]. Inadequate long-term care is a burden on families and increases the demand for healthcare services while also highlighting the need for immediate systemic changes in this field. 2018 saw the start of pilot testing of long-term care solutions envisaged by the draft Long-Term Care and Insurance for Long-Term Care Act.

Quality of housing, an important factor of a decent life, has been improving since 2011, but the housing deprivation rate is among the highest in the EU. In 2017 it was at 22.3%, significantly above the EU average (see Indicator 3.6). But as disposable incomes grow, the housing cost overburden rate has been decreasing[87]. Slovenia is among the countries with the lowest housing cost overburden rates, to a significant extent because of the high share of owner-occupied housing.

Exposure to various kinds of discrimination may affect a decent life as well; in Slovenia, it is relatively low. Discrimination constitutes a breach of the right to equal treatment in society (e.g. to employment, education and access to goods) of an individual or group due to their social or personal circumstances (e.g. nationality, race, skin colour, gender, sexual orientation, religion, age, disability or education). Long-term exposure to discrimination has a negative impact on the discriminated persons and groups in that it may lead to social exclusion and produce negative economic outcomes[88], which is why it is important to continue making efforts to eliminate all types of discrimination. The share of persons who experienced any form of discrimination dropped in 2008–2017 and is lower than in other EU countries. The decline in age discrimination of those over 55 has been encouraging in recent years against the backdrop of population ageing and the need to extend working years. Gender-based discrimination was the most common type of discrimination and it disproportionately affected women. Violence against women, an extreme form of discrimination, is below the EU average according to a pan-European study on violence against women.[89] In 2010–2018 the number of female victims of crime declined, but since 2016 it has started to increase again[90].

corresponded to the available data on the number of all patients on waiting lists.

[85] In 2015 it amounted to 3.0% (OECD: 2.5%).

[86] The share of those over 65 receiving home care was 58.8% in 2015 compared to 66.8% in the OECD on average (Health at a Glance, 2017).

[87] Percentage of the population living in households where total housing costs represent more than 40% of total disposable income. In 2017 it stood at 10.2% in the EU and 5.2% in Slovenia.

[88] Kogovšek and Petković (2007).

[89] Physical and/or sexual violence was experienced by 22% of women in Slovenia (EU: 33%). The study also showed that the the share of violence reported to police and other institutions is low; the main reason listed by the respondents for not reporting violance was that they are dealing with the violence and its consequences alone or with the help of friends and family (i.e. violence is treated as a private affair).

[90] Source: Police (2019). The number of female victims of criminal acts related to domestic violence, bodily harm, sexual violence, and cruelty and neglect of minors dropped in 2010–2018, but the number of murders increased. Between 2016 and 2018 the number of victims of all these crimes increased.

3.2 A healthy and active life

A healthy and active life (development goal 1)

The aim is to provide a high quality of life for all generations by promoting healthy and active lifestyles. To achieve this goal, it is necessary to raise awareness about the importance of healthy lifestyles and of mental health, prevent risk behaviour, strengthen prevention, reduce risk factors in health stemming from environmental pollution and climate change, and promote sustainable consumption, intergenerational cohesion and gender equality. Against the backdrop of demographic change, it will be a challenge to preserve sustainable social protection systems that will provide appropriate pensions and good accessibility of healthcare and long-term services and contribute to reducing inequalities in health. To realise the goal, it is necessary to create conditions for a decent life for all generations, which is dealt with under development goal 3.

SDS 2030 performance indicators for development goal 1:

	Latest value		Target value for 2030
	Slovenia	EU average	
Healthy life years at birth, number of years	Men: 58.7 75.0 % of life expectancy (2016)	63.5 81.2 % of life expectancy (2016)	Men: 64.5 (80 % of life expectancy)
	Women: 57.9 68.7 % of life expectancy (2016)	64,2 76.8 % of life expectancy (2016)	Women: 64.5 (75 % of life expectancy)
Gender equality index	68.4 (2015)	66.2 (2015)	> 75

The health of the population has improved in recent years, but measured by healthy life years, Slovenia's gap to the EU average widened in 2015 and 2016. Principal health indicators improved across the EU due to advances in medicine, better quality of healthcare, and other factors such as increasing incomes, higher educational attainment and better awareness. In the last ten years Slovenia outpaced the EU average in life expectancy gains (see Indicator 3.9). But in healthy life years, an indicator where Slovenia was making gains on the EU for several years, the gap started to widen again in 2015, mostly due to faster progress in other EU countries (see Indicator 3.10). Similarly, self-assessment of disability and dependence[91] are worse than the EU average, with the gap widening in recent years. Measured by amenable deaths, an indicator of the effectiveness of the health system, Slovenia ranks around the EU average (see Indicator 3.11), but it still has higher preventable mortality[92], which is associated with a high prevalence of unhealthy lifestyles[93]. Slovenia still has high cancer incidence and mortality as well, which is associated with fast increases in life expectancy and persistent prevalence of risk behaviour[94].

Health inequalities have been slightly reduced in the last ten years. The gap between the low-skilled and the high-skilled in terms of life expectancy has narrowed, in particular among men, where the biggest gains were recorded in the life expectancy of low-skilled men. In 2016 Slovenia ranked below the average of 21 EU countries in life expectancy by educational level (see Indicator 3.9). In healthy life expectancy, the gap between the low-educated and the high-educated narrowed as well in 2005–2014, with the improvement in both sexes a result of a higher number of healthy life years for the low-educated and a lower number of healthy life years for the high-educated[95]. Further reducing health inequalities requires inter-sectoral coordination focused on promoting healthy lifestyles in those with low socioeconomic status and in the most vulnerable groups[96]. Improvement in health inequalities would significantly contribute towards the mitigation of pressure on health expenditure growth and towards a reduction in absenteeism, which are both above the EU average (see Indicator 3.21).

The prevalence of some unhealthy lifestyles has started to decline in recent years, but other health risks have been on the rise. The latest available data places Slovenia among the four EU countries with the sharpest decreases in child obesity[97], one of the principal

[91] The share of the population assessing that they are severely or moderately restricted in everyday activities due to health problems lasting at least six months dropped from 35.6% to 29.9% in 2010–2014, but in 2015 it bounced back to 31.5% (EU in 2015: 25.3%). This data is also used as input for the healthy life years indicator.

[92] Preventable mortality is an indicator showing mortality before age 65, which is often associated with unhealthy and risky lifestyles (death due to accident, especially traffic fatalities, and smoking and alcohol deaths). One way to reduce it is with preventive measures (early detection of risk factors and cancer screening tests).

[93] OECD Health at a glance: Europe 2018, 2018.

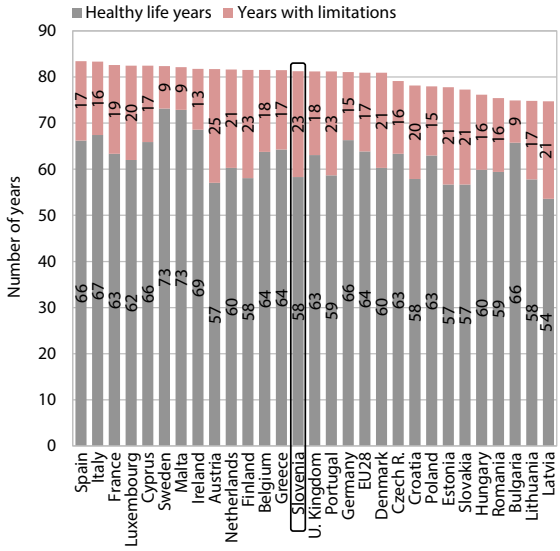
[94] Slovenia ranks 8th among EU countries by cancer incidence but is near the top in cancer mortality.

[95] Kofol Bric,T., Zaletel, M., 2018.

[96] The low-educated in particular have to be educated about healthier lifestyles and opportunities to personally contribute to better health and healthy ageing.

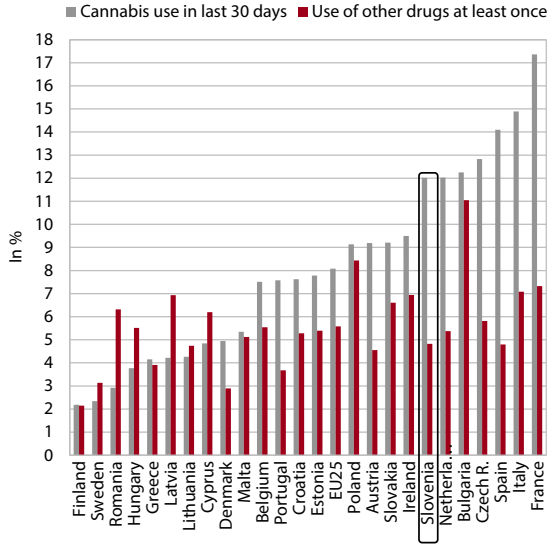
[97] The share of obese children aged 7–8 averaged 9% in 2015–2017, significantly below the level of 2007–2008 (see indicator 3.12). Only 7 of 23 EU countries reduced child obesity in this period, with Slovenia

Figure 25: Life expectancy at birth, 2016



Source: Eurostat. Note: The indicator health expectancy measures the number of years a person of a certain age may expect to live without limitations in basic activities of daily living. The assessment of incidence/limitations is based on the EU-SILC survey, which measures self-assessed limitations due to health problems that last at least six months and affect daily living.

Figure 26: Prevalence of cannabis and other illicit drug use among 15–16-year-olds, 2015



Source: OECD, 2018 (Health at a glance: Europe 2018).

risk factors of adult obesity. However, adult obesity continues to increase, and Slovenia remains one of the EU countries with the highest inequalities in terms of obesity by educational attainment (see Indicator 3.12). This is also a factor in the high prevalence of diabetes[98]. It is encouraging that the share of smokers among youths has decreased more sharply than in the EU on average: in adults as well as youths it was already slightly below the EU average in 2016[99]. Policies to reduce alcohol consumption have been successful as well, as the share of adults and youths drinking alcohol dropped substantially; 2016 was the first year that Slovenia was not among the top EU countries by alcohol consumption. However, Slovenian teenagers are more likely to enjoy marijuana than their EU peers on average, even as the use of other prohibited drugs is slightly lower than in the EU[100]. Use of psychoactive drugs increases the risk both of accident and injury in youths and of mental health problems later in life. To improve lifestyles, it is essential to strengthen preventive medicine and public health[101], improve policies mitigating risk behaviour, and raise awareness about responsibility for own health. Environmental health risks have been improving in Slovenia, but air pollution, the biggest health risk in developed countries (respiratory disease, lung cancer, coronary and heart disease), is above the EU average and exceeds the limit deemed acceptable by World Health Organisation guidelines (see Section 4.2 and Indicator 4.13)[102].

The incidence of mental health problems increased in the last several years and is above the EU average. The upward trend is characteristic of all developed countries, a consequence of a fast-paced life, society's high expectations regarding individual performance, unhealthy lifestyles, growing inequalities, deprivation, and loneliness among the older population. IHME and EHIS surveys[103] show that in Slovenia and other countries, women are more likely than men to have mental health problems. A high share of those aged 55–64 and over 75 have problems as well; in these age groups they are often associated with physical health, frailty, financial problems or poor social support. Those with low or at most secondary education are almost twice as likely to have mental problems that those with higher education, with the problems often associated with job loss and

now below the EU average in its share of obese children (Health at a glance: Europe 2018, 2018).

[98] In 2017, 7.1% of adults had diabetes (EU: 6.0%) (Health at a glance: Europe 2018, 2018).

[99] In 2016 the share of regular smokers stood at 22% in the 15–16 age group and 19% in adults (Health at a glance: Europe 2018, 2018).

[100] The most widespread illicit drugs among youths are ecstasy, amphetamines, cocaine and LSD (OECD Health at a glance: Europe 2018, 2018).

[101] Contrary to recommendations by international institutions, expenditure on preventive medicine and public health decreased in the last five years; in 2003–2010 it stood at 3.7% and by 2015 it had dropped to 2.7% of current healthcare expenditure (OECD: 2.8%). Several studies (Sassi, F., et al, 2013; Cecchini, M., et al, 2015; OECD, 2015) have confirmed that anti-alcohol policies and measures to restrict tobacco use and consumption of unhealthy food have a positive impact on heath expectancy and life expectancy and reduce healthcare expenditure (see also IMAD, 2016).

[102] OECD Health at a glance 2017, 2017, and OECD Health at a glance: Europe 2018, 2018.

[103] Institute for Health Metrics and Evaluation (IHME); European Health Interview Survey (EHIS).

unemployment. The share of the population reporting depression in the year before was above the EU average (Slovenia: 8.8%, EU-26: 7.9%). The economic burden of mental health problems is estimated by the OECD to be substantial (around 4% of GDP)[104]. Mental health problems are also associated with higher suicide rate[105]. Suicide mortality has declined in recent years, but it is still among the highest in the EU. Only the prevalence of dementia is slightly below the EU average (SI: 13.4 per 1,000 population; EU: 15.0), but projections suggest it will increase to 21 per 1,000 population by 2035.[106] In early 2018 the Resolution on the National Mental Health Programme 2018–2028 was adopted; this requires broader action by multiple departments and policies to reduce the burden of mental illness and also defines the priority areas of action. The emphasis is on a transition from predominantly in-patient treatment to the treatment of mental health conditions at the primary level and in the local environment.

In gender equality, an important element of an active society, Slovenia places at the top of EU rankings. Measured by the gender equality index, Slovenia has made rapid headway in the last ten years and is above the EU average across all six segments[107] (see Indicator 3.13). Significant progress was made in particular in women's participation in political decision-making[108], which is associated with electoral law changes (introduction of women's quotas)[109], but participation in political decision-making declined again with the 2018 elections. Gender-based work activity and pay gaps are narrow. This is largely associated with good access to pre-school education, appropriate parental leave policies, good education of women and high share of full-time employment among women[110]. In general, women are slightly better educated, but they are under-represented in some better-paid professional groups and in leadership positions; consequently, their average salaries are slightly lower. The index shows that, much like in other countries, the situation has not improved in the last ten years with regard to work/life balance and the division of household labour by gender. Women perform significantly more unpaid work than men, which makes it difficult for them to maintain a good work/life balance[111].

Participation in social life is reasonably good, but political participation is far below the EU average. The share of the population regularly performing unpaid work exceeds the EU average and has risen in the past several years (see Indicator 3.14). As the demand for long-term care and social protection services rises, it makes sense to encourage the older population to volunteer and help provide long-term care services. More volunteering among the older population can improve their participation in society and contribute to intergenerational cooperation, expansion of individuals' social networks and development of new knowledge, and also helps to prevent loneliness. Youths, meanwhile, gain knowledge and experience through volunteering and build a system of values thereby. Political participation has improved in recent years, but, compared to the EU average, the participation of youths (18–24 years) in particular still lags far behind. In all age groups, participation in cultural activities contributes to a more active lifestyle and participation in sports and recreational activities improves health outcomes and reduces the effects of ageing on wellbeing. It is encouraging that cultural participation and participation in sports or other physical activity are above the EU average[112], but they should also be promoted among older persons.

[104] The estimate includes direct costs of treatment of mental illness at 1.3% of GDP (EU: 1.3%) and costs of social protection (sickness and disability benefits) at 0.8% of GDP, along with significant indirect costs on the labour market (due to lower productivity and employment) estimated at 2.0% of GDP (EU: 1.6% of GDP).

[105] Institute for Health Metrics and Evaluation (IHME); European Health Interview Survey (EHIS).

[106] OECD Health at a Glance, 2016.

[107] The gender equality index is calculated from 31 indicators across six segments: work, money, knowledge, time, power and health.

[108] In 2006 the share of women in the Slovenian Parliament was 13.5%; by 2017 it had risen to 35.6%, but after the 2018 election it dropped to 27.8%.

[109] For more, see Bratuž-Ferk et al., 2017.

[110] For more, see Čelebič, T., et al., 2017.

[111] While women do five hours of paid work per week less than men, they spend 32 hours per week on care and unpaid household work compared to 15 hours for men.

[112] In 2017, 50% of the population on average did sports or other physical activity; the share was highest in the Osrednjeslovenska region (62%) and lowest in Zasavska and Pomurska (20%).

3.3 An inclusive labour market and high-quality jobs

An inclusive labour market and high-quality jobs (development goal 7)

The objective is to create an inclusive labour market that will provide high-quality jobs with high value added (see also goal 6). By implementing the concept of sustainable working lives and adapting jobs to demographic change, employees will be able to work longer and their health will improve. An improving system of flexicurity and the promotion of employment of both sexes in professions atypical for their sex will enhance the participation of under-represented groups on the labour market.

Performance indicators for development goal 7:

	Latest value		Target value for 2030
	Slovenia	EU average	
Employment rate (20–64 age group), in %	73.4 (2017)	72.2 (2017)	> 75
In work at-risk-of-poverty rate, in %	6.6 (2017)	9.6 (2017)	< 5

Rapid employment growth, combined with increased participation particularly of youths and the older population, indicates that the labour market is developing towards becoming more inclusive. Against the backdrop of relatively brisk economic growth, in 2018 the employment rate reached the highest level since independence (see Indicator 3.17). One of the driving forces was the entry into the labour market of persons who were not actively looking for jobs during the crisis due to a long period of low demand and were therefore under-represented on the labour market (youths, older persons, the low-educated). Among youths (15–24) the employment rate reached the EU average in recent years despite high participation in education, due not only to the shortage of labour but also to youth employment measures[113]. The rapid increase in employment among the older population (55–64) has in recent years been underpinned by high demand for labour but also by (i) the demographic effect[114] and (ii) gradual raising of the retirement age under the 2013 pension reform legislation that is accompanied by measures to promote employment of older persons. Despite increasing substantially, however, the employment rate of the older population is still among the lowest in the EU. Employment of low-educated persons has significantly increased as well, but it still lags behind the EU average.

Demographic change is reducing the potential supply of labour, which means that overall employment will have to rise in the future. In Slovenia the working age population (20–64) started contracting in 2011, with demographic projections showing the decline will accelerate in the coming years. During the crisis the effects of demographic change had not yet directly affected employment growth, since hiring was modest and unemployment high, but they have become apparent in recent years, as the demand for labour has picked up. Projections show that even with positive net migration (i.e. immigration outstripping emigration) of around 4,000 persons per year, the active working population will decrease by roughly 10,000 per year to 2030. Despite the increased employment of under-represented groups on the labour market, demographic change may therefore reduce the potential supply of labour, which is becoming an increasingly acute problem. To cope with demographic challenges, it is therefore necessary to (i) strengthen employment among vulnerable groups (in particular older persons and the low-educated), where it is still low compared to other groups, (ii) increase the attractiveness of work by ensuring reasonable pay and reducing labour market segmentation, (iii) decrease labour market imbalances, and (iv) put in place a suitable migration policy to attract foreign labour with a broad spectrum of skills.

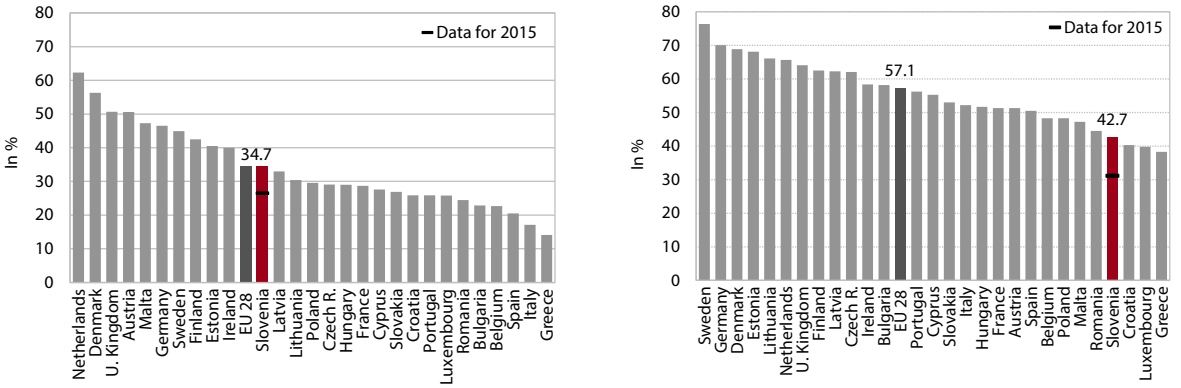
Another trend pointing towards the development of an inclusive labour market is the decline in long-term unemployment. Long-term unemployment having surged in 2009–2014, the employment prospects of the long-term unemployed have improved substantially since, in particular in the last year, as labour shortages became more acute[115]. The long-term unemployment rate dropped below the EU average by the second quarter of 2018, having exceeded it during the crisis (see Indicator 3.18). The decline was driven by great demand for labour and active employment policy measures. Nonetheless, over a fifth of all unemployed persons have been without a job for two years or more (the very long-

[113] Youth employment would benefit from better links between the educational system and business (see also Chapter 2).

[114] The employment rate is calculated as the ratio between the active working population and the working-age population. The demographic effect refers to the entry into the 55–64 age group of younger generations, which are more likely to be working, and the exit from this age group of generations with lower employment, which in effect increases the employment rate of the older population.

[115] The number of the long-term unemployed dropped by about a third in the second quarter of 2018, a much stronger contraction than in the EU (about a tenth).

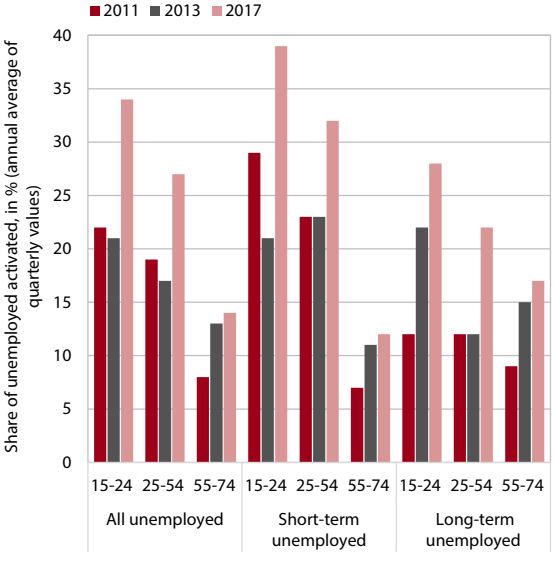
Figure 27: Employment rate in age groups 15–24 (left) and 55–64 (right), 2017



Source: Eurostat portal page – Labour market – Employment rate, 2019.

term unemployed). The long-term unemployed are at risk of losing their knowledge and skills or their knowledge and skills becoming obsolete, which stigmatises them in the eyes of potential employers, reduces their employment prospects and permanently affects their future earnings. The prospect of them leaving the labour market increases as well, which is unfavourable given the current demographic trends. Additional promotion of activation and training measures, which must be coupled with integrated and personalised services for vulnerable groups (integration of social work centres and employment offices), could improve the employability of the long-term unemployed. Against the backdrop of demographic change, this would contribute towards meeting the demand for labour and help foster prosperity.

Figure 28: Share of unemployed persons who transitioned to employment, by age and duration of unemployment



Source: Eurostat. Note: The long-term unemployed are persons who have been unemployed for at least a year.

Segmentation of the labour market remains a problem despite a decline in new fixed-term employment in recent years. In a segmented labour market, one tier of workers has regular, better-paid jobs and a second tier are in precarious[116], non-standard, less protected and worse-paying jobs[117] and with poorer prospects of transitioning to safer forms of employment. Severe segmentation may increase inequality among workers, accentuate the volatility of hiring and firing, discourage companies from investing in workers, and undermine the motivation for work. A segmented labour market is also more susceptible to shocks[118]. Due to labour shortages and relatively high economic growth, employers have been more willing to hire workers on permanent contracts in the last two years, but the share of temporary, precarious forms of employment nevertheless remains well above the EU average, in particular among youths, not least due to the existence of student work (see Indicator 3.19). Temporary employees have less favourable working conditions in several dimensions of employment quality: compared to permanent employees, they have less favourable working time and are less likely to be able to adjust working time, worse career prospects, and lower job security[119].

[116] The term "precarious forms of employment" does not have single definition. The European Commission defined it in 2017 as employment with lower pay (below two-thirds of median hourly wage) that is not full-time permanent employment (EC, Employment and social Developments, Annual Review 2017, 2017), whereas Eurostat uses the share of temporary employment shorter than three months as a proxy for precarious employment.

[117] An EC analysis (2017) for Slovenia showed that excluding selected factors such as age, education, activity and profession, workers on temporary employment contracts have roughly 10% lower wages than employees on permanent contracts.

[118] Lepage-Sauicier, 2013.

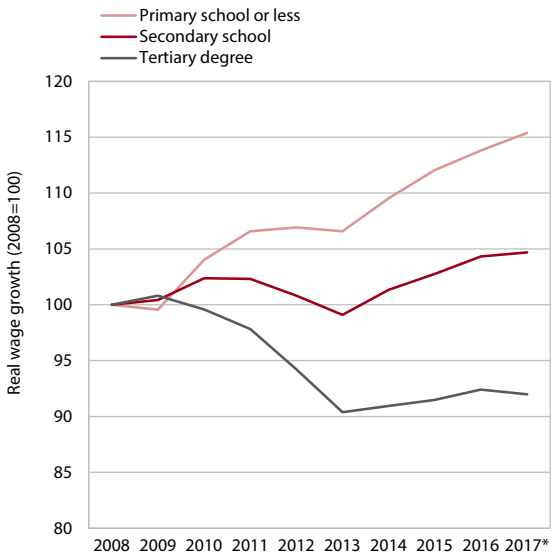
[119] Eurofound (2018). Does employment status matter for job quality? Publications Office of the European Union, Luxembourg.

Slovenia ranks around the EU average by employment structure in terms of employment quality profiles. Job quality is a multi-faceted concept, and how it is measured is still evolving (see Development Report 2018, p. 39). One of the more complex analyses and measurements of employment quality is the study by Eurofund, which leverages seven dimensions of quality to classify professions into the following groups (profiles): (i) high-flying jobs, (ii) smooth-running jobs, (iii) active manual jobs, (iv) under-pressure jobs and (v) poor quality jobs. In 2015[120] Slovenia ranked close to the EU average by share of individual job types, standing out only by a higher share of poor quality jobs and lower share of smooth-running jobs compared to the EU average.

Slovenia places among countries with relatively low net wages and low pay inequality. One of the elements of employment quality analysed by the OECD is pay quality, which it measures with the level and inequality of pay. In Slovenia a single person without children earning an average wage made 15,049 PPS in 2016 averaged over three years (2014–2016)[121], which is 23.5% below the EU average (unweighted). In 2007–2017 pay inequality improved, driven mainly by higher average net wage growth among the low-educated compared to other groups. Minimum wage growth[122], which far outstripped average wage growth in this period, contributed to the trend, but so did the structural effect, albeit to a lesser extent. The narrowing of pay inequality is also evident in faster median wage growth compared to average wage growth. Despite a brisk increase in the wages of the low-educated compared to those with tertiary or secondary education, the at-risk-of-poverty rate among the active working population was higher in 2017 than ten years before (see Indicator 3.20). We estimate this was partially a consequence of the increased share of the self-employed and those working part-time.

The quality of employment may have an impact on an individual's health and hence labour market situation, but also on social protection systems. Jobs characterised by high job demands (because of time pressure, physical risks to health, etc.), coupled with limited job resources (e.g. insufficient autonomy in the workplace and poor social support at work) represent a grave risk to health. Physical and mental health is also affected by poor working conditions and unemployment, risky types of behaviour, and obesity.

Figure 29: Real wage growth by educational attainment



Source: SURS; IMAD calculations. Note: * Data for 2017 is provisional.

The consequence thereof is lower participation on the labour market, especially by older persons, and rampant absenteeism. The rise in absenteeism is however also related to the high level and growth of employment, later retirement, and longer waiting times in healthcare (see Indicator 3.21). Considering that 38% of respondents in Slovenia (EU: 25%) believe that work has adverse effects on health, and as many as 43%[123] think they will not be able to do their job until age 60, measures promoting a sustainable working life are particularly important against the backdrop of demographic challenges.

[120] Eurofound (2017), Sixth European Working Conditions Survey – Overview report (2017 update), Publications Office of the European Union, Luxembourg. Most studies that measure individual components of job quality are not carried out annually but are conducted every five years.

[121] This is one of the indicators used for monitoring the European Pillar of Social Rights (social score board).

[122] Laporšek et al. (2017) have found that the minimum wage increase in 2010 reduced pay inequality, in particular among women, youths and low-skilled workers and in activities than stand out by share of minimum-wage recipients (e.g. manufacturing, construction and traditional market services).

[123] In Slovenia, the percentage is among the highest in the EU.

4 A preserved, healthy natural environment

The majority of indicators measuring the exploitation of natural resources and the burdening of the environment in the long term indicate improvements, but in a period of economic growth this can only be achieved with additional energy- and resource-efficiency measures. During the crisis there was a decline in resource and energy use, and hence greenhouse gas emissions, which are a major environmental problem. Resource productivity – the ratio of GDP to resource use and greenhouse gas emissions – has continued to increase in growth years, but it remains lower than in the EU overall. Faster improvement is held back in particular by greater use of energy in transport, which has a significant impact on the environment and is also unsustainably oriented. Total use of renewable resources is not moderate, but it has not increased in recent years. Increased waste generation increases the urgency of faster uptake of circular economy principles, even as the issue has been mitigated to some extent by progress in the treatment of waste. Due to a large share of protected areas, high forest cover and moderate intensity of agriculture, the natural environment is not excessively polluted on average. Nevertheless, there are two outstanding issues: poorer air quality due to relatively high concentrations of particulate matter and ozone and uneconomical use of space associated with areas that remain poorly utilised or abandoned after the crisis.

4.1 A low-carbon circular economy

A low-carbon circular economy (development goal 8)

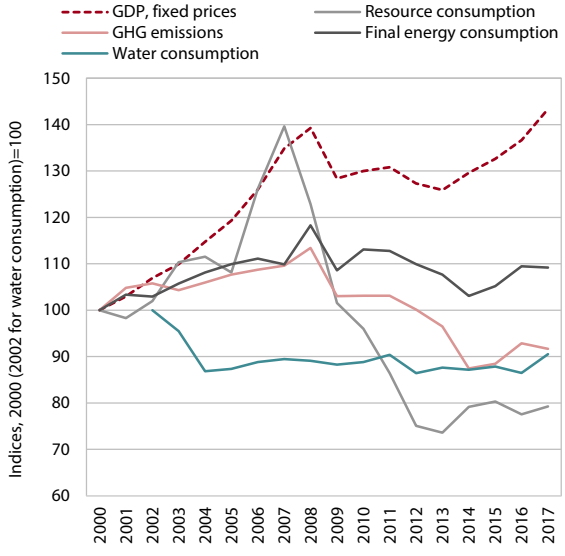
The aim of SDS 2030 is to break the link between economic growth and the increasing consumption of raw materials and energy, which is associated with significant pressure on the environment. Sustainable growth will be achieved primarily with profound changes in consumption and production patterns, including more efficient exploitation of resources, waste management and energy use and a higher share of renewable energy sources. This will also help reduce greenhouse gas emissions. Changes in this direction will be supported with education and integration, the promotion of environmental innovations, and, most notably, the phasing-out of fossil fuels. The SDS 2030 also highlights the need to change transportation by accelerating the development of sustainable mobility.

Performance indicators for development goal 8:

	Latest value		Target value for 2030
	Slovenia	EU average	
Resource productivity, PPS/kg	1.9 (2017)	2.2 (2017)	3.5
Share of renewable energy in gross final energy consumption, in %	21.5 (2017)	17.5 (2017)	27
Emission productivity, PPS/million kg CO_2	3.0 (2017)	3.4 (2016)	EU average in 2030

Use of key natural resources, which predictably declined during the crisis, has increased during the upturn; however, the rate of growth has lagged behind GDP growth and environmental efficiency has been improving. The environmental dimension of economic development is typically analysed using indicators which show the ratio between economic growth and the consumption of materials, energy and water and the resulting greenhouse gas emissions. During the crisis, the use of most of the observed resources and hence emissions declined. As expected, resource use declined the most as construction activity contracted. Use of water and energy decreased at a slower rate, the latter due to increased use in transport. Despite the economy having already recovered, resource use bottomed in 2014, which was the consequence of the closure of a major thermal power plant and a very mild winter. Resource use and greenhouse gas emissions remained relatively modest in the following three winters as demand for heating remained subdued. Efficiency of resource use has thus improved further during the upturn, but since external effects have been relatively strong, this has not been just the result of planned solutions of a sustainable nature.

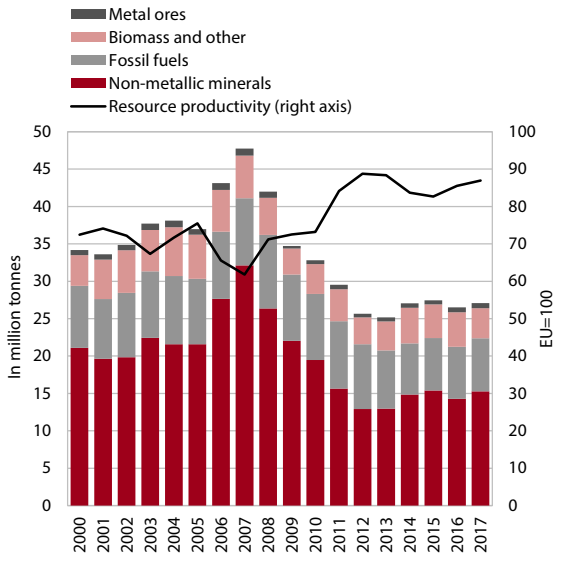
Figure 30: GDP growth compared to growth of energy, material and water consumption, and greenhouse gas emissions



Sources: SI-STAT Data Portal – Economy; SI-STAT Data Portal – Environment, 2019; IMAD calculations.

Resource consumption plunged after the start of the crisis, mostly due to a decline in construction activity. *Resource productivity*, which is one of the fundamental circular economy indicators and is measured as the ratio between GDP and the consumption of resources, increased at a faster pace than in the EU as a whole in 2007–2012 on the back of a contraction of construction activity and the resulting decline in the consumption of non-metallic minerals. Fluctuations in construction activity also had a significant impact on material consumption in the subsequent years. The share of construction materials in overall resource consumption is among the highest in the EU. In 2017 resource productivity increased to 87% of the EU average, which means that for a unit of consumed resources, Slovenia created 13% less GDP than the EU on average (see Indicator 4.1). Given the rebound in construction activity, continued improvements in resource productivity will be more difficult to achieve. The increase in resource productivity is expected to slow due to the implementation of some

Figure 31: Domestic material consumption1 and relative resource productivity, Slovenia

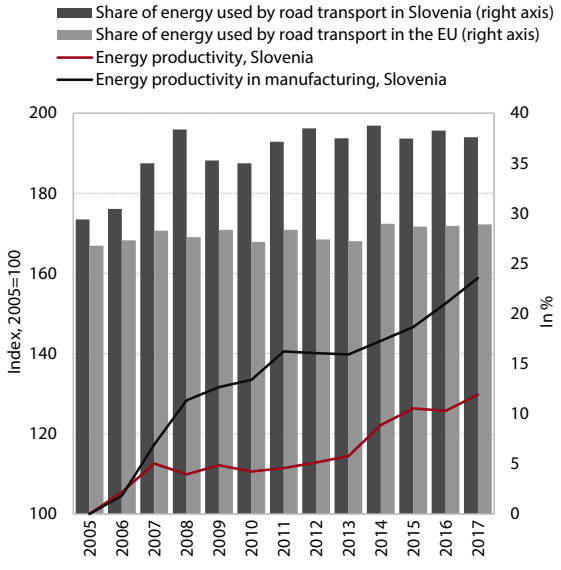


Sources: SI–STAT Data portal – Environment, 2018; Eurostat Portal Page – Environment, 2018; Eurostat Portal Page – Economy and Finance, 2018; IMAD calculations. Note: [1] Domestic material consumption is defined as domestic extraction plus net imports of materials.

major construction projects, such as the planned construction of rail infrastructure; to achieve the goals, greater attention will therefore have to be dedicated to planned material-circulation measures.

After the crisis energy consumption fell sharply due to energy-efficiency measures and the favourable impact of several one-off factors, but in the past two years it has increased again. The consumption of energy for heating has declined due to more prudent use, better building insulation, greater efficiency of heating installations and other efficiency measures. In individual years the decline was significantly related to above-average temperatures in the heating season. In 2014 the consumption of solid fuels decreased mostly on account of the closure of a brown coal-fired thermal power station and the launch of a modernised unit of a lignite-fired power station. In liquid fuels the consumption of petrol and heating oil has been dropping for a while[124], while the consumption of diesel has been growing, including due to increasing road freight transit. The consumption of nuclear energy fluctuates depending on the performance of the power station and the timing of its scheduled outage. Despite stronger economic activity, final energy consumption did not increase in 2017 and 2018, the increased energy consumption in industry being offset by the lower consumption of other sectors. This also improved energy efficiency towards meeting the EU's 2020 target (see Indicator 4.2). Over the longer time horizon, *energy productivity*, measured as the ratio of GDP to total energy consumption, increased at a similar pace as in the EU as a whole, but in 2017 the gap to the EU average narrowed, to 15%.

Figure 32: Energy productivity and share of road transport in final energy consumption



Sources: Eurostat Portal Page - Environment and Energy, 2017; Eurostat Portal Page - Economy and Finance, 2017; IMAD calculations.

The share of renewable energy sources (RES), for which Slovenia has relatively favourable natural conditions, is above the EU average but has stagnated in recent years. The growing use of RES until 2009[125] was at first driven by increased consumption of wood and wood biomass and later by higher use of solar and geothermal energy. Over the subsequent seven years, the share of RES increased only modestly, by 1 pps to 22% (EU: by 5 pps to 18%). Traditional RES – wood and hydropower – account for the bulk of RES (see Indicator 4.3). The use of wood for heating is desirable from an RES standpoint, but using is incorrectly may cause problems with particulate emissions. Slovenia ranks at the tail end of the EU by use of other RES, with the gap in wind energy being particularly wide. Wind energy is hardly exploited at all in Slovenia, whereas in the EU it already accounts for 15% of total RES consumption. In heating, Slovenia has retained a much higher share of RES due to the use of wood, whereas the share of RES in electricity consumption is almost equal to the EU average due to rapid growth in the EU as a whole. The already small share of RES in transport has decreased further in recent years, unlike in the EU, where it has been increasing on average[126]. Though natural conditions such as forest, water and wind abundance are favourable in Slovenia,

[124] The lower consumption of heating oil has been partially offset by the increased use of wood and wood pellets.

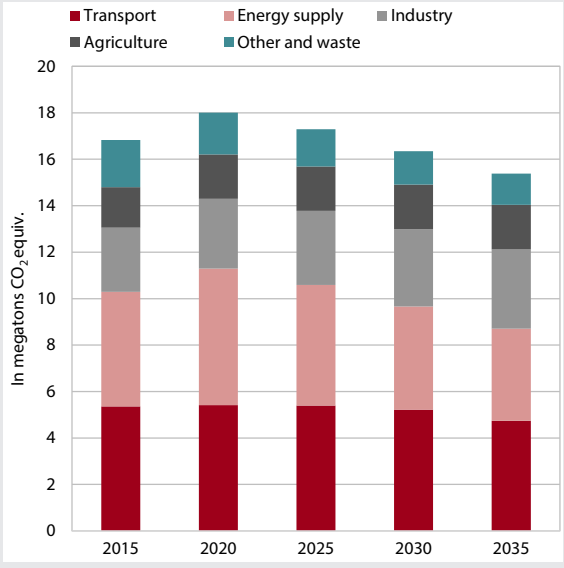
[125] In 2009 the share of renewables increased the most as a result of the crisis and hence a decline in overall energy use, but also due to better statistical capture.

[126] In 2017 the share of biofuels in transport was 2.7%, with the EU target for 2020, which is applicable to all Member States, at 10%.

Box 4: International commitments to reduce greenhouse gas (GHG) emissions and projections for Slovenia

Tackling climate change, one of the biggest global challenges, requires adaptation and measures to slow down the pace of change. The signatories of the Paris Agreement made the commitment in 2015 to keep the average global temperature rise at a maximum of 2°C above pre-industrial levels. In 2016 Slovenia adopted the Strategic Framework for Climate Change Adaptation to reduce exposure to the effects of climate change and increase its adaptation ability, but now a comprehensive climate strategy is needed. Across industries faster action will be needed to slow down the effects of climate change and improve adaptation, which hinges on faster development and transfer of climate-related research.

Figure 33: Projections of total GHG emissions, structure of sources, Slovenia



Source: IJS, 2018.

Stopping climate change will revolve around reducing anthropogenic GHG emissions. The EU has set the target of reducing emissions by at least 20% by 2020 and at least 40% by 2030 relative to 1990 levels. The biggest changes will be required from the biggest energy users, which emit large amounts of GHG and have been included in the *European Emissions Trading System* (EU-ETS)[1] since 2005. The number of emission coupons on the market will decline in accordance with the objectives. For sector *not included in the trading scheme (non-ETS sectors)*, the goal will be achieved with a division of effort among Member States. The index of economic development was used as the baseline criterion for the distribution. In Slovenia, these emissions, which account for around 60% of national emissions, may increase by 4% by 2020 but drop by 15% by 2030 relative to 2005.

National goals must become more ambitious. The Intergovernmental Panel on Climate Change (IPCC) stressed in 2018 that the goal of limiting global temperature growth to 2°C was not ambitious enough and that global warming had to be limited to 1.5°C. To achieve this goal, total global GHG emissions would have to be reduced by at least 45% by 2030 compared to 2010 and carbon neutrality achieved by 2050[2]. This will require setting more ambitious national emission reduction goals, including in the framework of the Strategy for Long-Term Greenhouse Gas Emissions Reductions and the National Energy and Climate Plan, which Member States are required to finalise by the end of 2019. The scientific basis for both documents – monitoring of progress and planning of measures to reduce GHG emissions in transport, industry, buildings, agriculture, forestry and waste – is being prepared in Slovenia in the framework of the LIFE Climate Path 2050 project[3].

Projections indicate that total GHG emissions in Slovenia will increase by 7% by 2020, whereupon they will gradually decline to be 9% below 2015 levels by 2035. Calculations for the purposes of reporting to the EC and the United Nations were made taking into account the adopted guidelines by sectoral programmes. Chief among them are: (i) *Transport*: road transport is projected to continue growing until 2035, with passenger transport up 24% and cargo transport by 66%. The measures include increasing the share of rail in passenger transport, improving vehicle efficiency, expanding the use of biofuels and other alternative fuels without GHG emissions, and changing patterns of behaviour; (ii) *Transformations*: future trends will be dominated by reduction in electricity and heat energy production in coal-fired power stations, replacement with gas units and greater use of renewable energy sources; (iii) *Industry and construction*: at times of economic growth it will be essential to improve energy efficiency and expand the use of renewable sources, but this will not entirely offset emissions increases; (iv) *Agriculture*: improved efficiency of animal husbandry, more efficient nitrogen circulation and greater self-sufficiency in food are planned; (v) *Waste*: total waste generation is planned to decrease and mixed municipal waste volumes are expected to drop as sorting and processing improves. Projections show that Slovenia will achieve non-ETS emission targets by 2020, but the existing measures will not be enough to achieve the 2030 target, which will therefore require additional efforts.

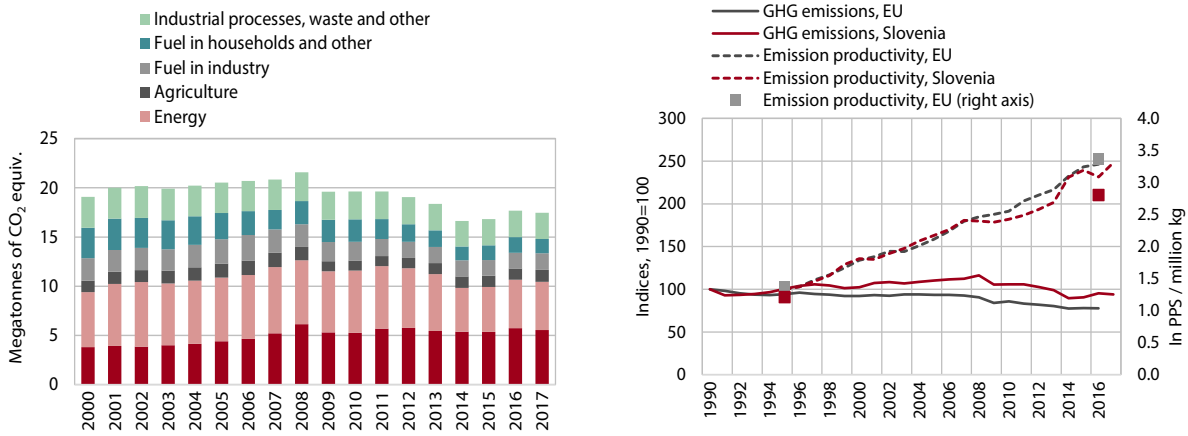
Table 1: GHG emission reduction commitments

	EU		Slovenia	
	2020/1990	**2030/1990**	**2020/1990**	**2030/1990**
Total emissions	–20 %	–40 %	–	–
	2020/2005	**2030/2005**	**2020/2005**	**2030/2005**
Of which: EU-ETS sectors	–21 %	–43 %	-	–
non-ETS sectors	–10 %	–30 %	+4 %	–15 %

Sources: EU Decision No. 406/2009/EC; EU Regulation 2018/842

[1] The emission trading system includes emissions from energy and processing sources that are the result of the burning of fuels, chemical reactions in industrial processes and the desulphurisation of flue gases. They are present in electricity and heat production and in industry.
[2] IPCC, 2019. Carbon neutrality is achieved when the carbon footprint does not disturb the ecological balance in the atmosphere and an equilibrium is achieved between activities which cause emissions and processes that cancel them out.
[3] Preparation of certain materials for the seventh country report and third biennial report to the Conference of the Parties to the UN Framework Convention on Climate Change, 2018.

Figure 34: GHG emissions by sector, Slovenia (left), and emission productivity (right)



Sources: ARSO, 2019; Eurostat Portal Page – Environment and energy, 2019; Eurostat Portal Page – Economy and finance, 2019; IMAD calculations. Notes: The figure for 2017 is a preliminary estimate by the Environment Agency. Comparison in PPS is sensible between countries in an individual year but not over a longer time horizon.

more intensive action will be needed to find common solutions for the siting of individual installations[127].

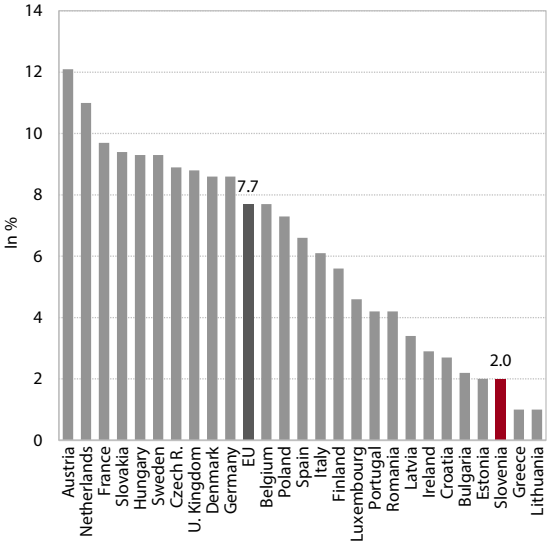
Greenhouse gas (GHG) emissions, which contribute substantially to climate change, have continued to decline per unit of GDP as the economy has picked up, but more effort will be needed to achieve the planned, sharper decrease. Preliminary estimates show GHG emissions in 2017 were about a fifth lower than in the peak year 2008. After the decline in emissions from the energy sector, associated with the closure of a major thermal power plant, transport has become the biggest source of GHG. The goal until 2020 that emissions from sectors not included in the Emission Trading Scheme (ETS) will not increase by more than 4% over 2005 (see Box), was exceeded several years ago. Achievement of the 2030 goal, on the other hand, will hinge on transport emissions, which are growing. Particularly problematic is the use of fossil fuels; this had been promoted in years past with higher subsidies, which runs contrary to emission-reduction goals[128]. *Emission productivity*, measured as the ratio of GDP to total GHG emissions, is below the EU average (see Indicator 4.4). The gap widened during the crisis but in the subsequent years it initially narrowed due to one-off factors before increasing again in 2016, to 17%. In particular when economic growth is faster, achieving the SDS goal will therefore require strengthening the link between measures promoting economic development and measures reducing emissions[129].

[127] Uptake of hydro and wind power in particular are hampered by environmental factors.

[128] Third annual report on implementation… until 2020, 2018; IJS, 2018.
[129] The adopted measures affect four fields: (i) sustainable production and consumption, (ii) turning waste into resources, (iii) supporting research and innovations, and (iv) subsidies damaging to the environment and fair pricing (Operational Programme for Limiting Greenhouse Gas Emissions until 2020, 2014).

The volume of transport, which has a significant impact on the environment, has increased sharply after each round of EU enlargement, with road transport a particularly pressing problem. Transport shapes the modern way of life; it connects and it facilitates trade, but it has a significant harmful and increasingly worrying impact on the environment and the health of the population. The main problem is the high, and growing, consumption of non-renewable fossil fuels. Much like elsewhere in the EU, most goods in Slovenia are transported by lorry and most passengers travel by car, neither of which is particularly environmentally friendly. Moreover, the density of total *freight transport* is high due to Slovenia's transit role. On a per capita basis roads, and rail even more so, carry more goods than the EU average (see Indicator 4.5)[130]. In *passenger* transport, Slovenia has a higher share of car transport than the EU on average. Use of public transportation, in particular rail, which is the most energy-efficient mode of transport, is very low by international standards. This is partially a consequence of a lower rate of urbanisation and higher dispersal of settlements, but outdated and rather modest public transportation options are increasingly a drag on public transportation uptake as well. This is evident from the relatively high share of the population which believes it has poorer access to public transportation. A more comprehensive expansion of sustainable mobility requires expansion of routes and frequencies and adjustment of timetables, along with updated rolling stock and more environmentally friendly technologies.

Figure 35: Share of rail transport in overall passenger transport, in passenger kilometres, 2016

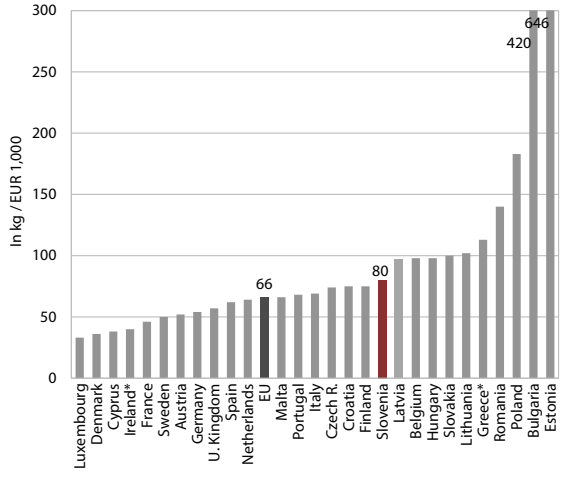


Source: Eurostat Portal Page – Tables on EU policy, 2019. Notes: The indicator refers to travel within the country, regardless of vehicle ownership. Cyprus and Malta do not have rail transport.

[130] Expansion of rail transport is limited by existing rail infrastructure. which has to be expanded, updated and upgraded (Climate Mirror 2018, 2018).

Waste generation per unit of GDP is about a fifth above the EU average in industry and services; per capita quantities of municipal waste, on the other hand, are roughly on par with the EU average and progress has been made in treatment. In *manufacturing and services*, the amount of waste generated increased by about 40% in 2012–2017 (see Indicator 4.6). Reducing waste, both in absolute terms and per unit of GDP, will require a more substantial shift towards a circular system, i.e. increased use of recyclable materials. Generation of *municipal waste* has also been increasing and per capita quantities are already roughly on par with the EU average. Foreign trade in waste has been increasing, but net imports of waste dropped to about half a percent of all generated waste. *Treatment* of waste has improved significantly in recent years, partly thanks to newly built or modernised regional waste-processing centres[131]. Indeed the value of total environmental investments and current expenditure on the environment was highest precisely in waste treatment. Better treatment reduces landfilling, the least environmentally desirable outcome of treatment, while improving processing and hence recycling – actions contributing towards sustainable development. Preparation of waste for reuse contributes towards a more efficient use of resources and reduces emissions of GHG and dependence on imports of raw materials. The treatment of waste, in particular plastic packaging,

Figure 36: Generated waste, excluding mineral waste, per unit of GDP, 2016



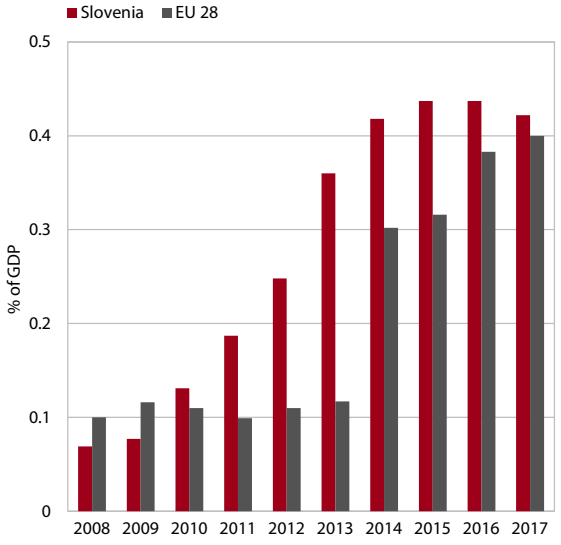
Source: Eurostat Portal Page – Tables on EU policy, 2018. Note: * data for 2014.

[131] In the previous programming period, these were among the most important environmental cohesion projects.

is however becoming increasingly problematic and will require faster action and solutions[132].

State aid for environment protection and energy saving has surged in the last decade, but a lot of it is earmarked for goals that are not strictly environmental. In 2017 state aid for environment protection and energy saving[133] totalled EUR 183 million, accounting for 43% of total state aid and 0.4% of GDP[134]. Around three-quarters of the aid is associated with compliance with national commitments to increase the share of RES and high-efficiency co-generation. The funds, disbursed since 2010, are collected with a contribution levied on electricity that all final electricity consumers pay. Their effect is rather modest, as the share of energy from RES has been increasing at a sluggish pace[135]. The remaining aid mostly takes the form of exemptions from or reductions of environmental taxes for CO_2 emissions. Since this aid is primarily intended to improve competitiveness and does not contribute to mitigation of pollution, it is undesirable from the environmental perspective.

Figure 37: State aid for environment protection and energy saving



Source: State Aid Scoreboard 2018 (EC), 2019.

[132] In early 2018 the first EU strategy for plastic waste was adopted in a bid to change the way plastic products are designed, produced, used and recycled. Plastic is produced in excessive amounts and how it is used and landfilled does not leverage the economic benefits of a more circular approach. The new strategy is expected to increase the utility of recycling, reduce the amount of plastic waste, help stop plastic pollution, and encourage investments and innovations (Strategy forPlastics in a Circular Economy, 2018).

[133] State aid comprises state measures that affect current and investment exoenditure (subsidies, capital transfers), revenue (tax exemptions and benefits), financing (favourable loans) and debt (guarantees) of residential producers that may have a potential impact on competition between EU Member States.

[134] Nineteenth survey of state aid, 2018

[135] The share of energy from RES rose by 1.1 p.p in 2010–2017, to 21.5% (the target until 2020 is 25%; see indicator 4.3).

4.2 Sustainable natural resource management

Sustainable natural resource management (development goal 9)

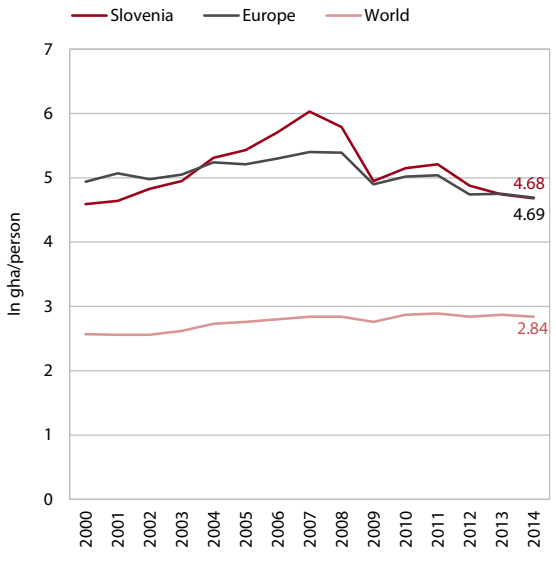
The aim of SDS 2030 is to sustainably protect natural resources and plan an efficient use thereof, as they represent a pillar of a healthy living environment, the production of high-quality food and economic activities with high value added. The goal will be achieved by overcoming silo mentality, preserving biodiversity, managing soil in a sustainable way, preserving high-quality farmland, sustainably developing forests and efficiently managing waters. SDS 2030 also recognises the importance of a responsible treatment of space. Efficient adaptation to climate change and exploitation of the opportunities that climate change brings will be particularly important.

Performance indicators for development goal 9:

	Latest value		Ciljna vrednost za 2030
	Slovenia	EU average	
Utilised agricultural area, in %	23.7 (2017)	40.9 (2017)	> 24
Quality of watercourses, mg O_2/l	0.9 (2014)	1.9 (2014)	< 1
Ecological footprint, gha/person	4.7 (2014)	4.7 (2014)	3.8

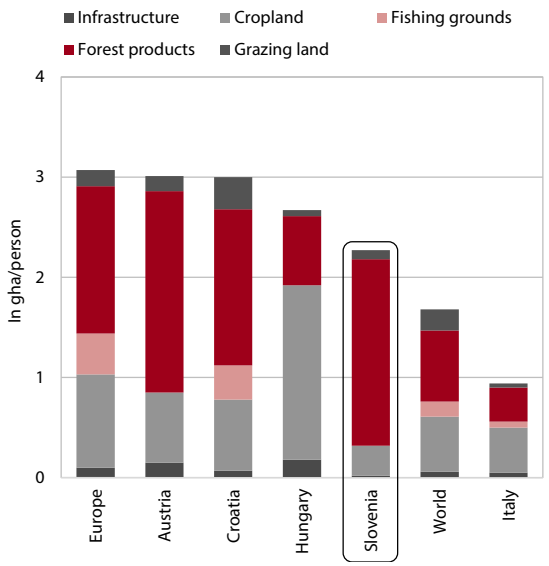
Current production processes and lifestyles are exerting too much pressure on nature. Long-term changes in lifestyles have accelerated the exploitation of natural resources and increased pollution. The *ecological footprint*, a synthetic indicator of environmental development, increased quite rapidly in the period of economic growth, but during the recession it dropped to roughly the level before the crisis (see Indicator 4.8). The latest calculation, for 2014, shows it amounted to 4.7 gha/person, roughly on par with the EU average[136]. *Nature's biocapacity*, i.e. biological areas with regeneration capacity, is below the EU average on a per capita basis. Forests account for the bulk of Slovenia's biocapacity area, but despite their large surface area they do not suffice to fully absorb emissions of carbon dioxide, the biggest contributor to the ecological footprint. In Slovenia the difference between ecological footprint and biocapacity, called the *ecological deficit*, is therefore

Figure 38: Ecological footprint



Source: National Footprint Accounts (Global Footprint Network), 2019.
Note: gha = global hectare, the fertile area needed to satisfy human needs for food and a particular lifestyle and to absorb or dispose of the wastes generated in the process.

Figure 39: Biocapacity, 2014



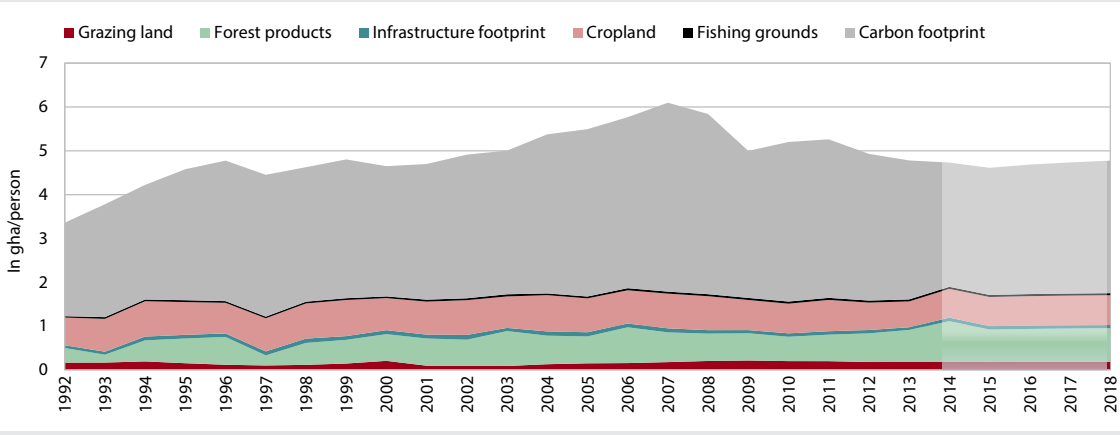
Source: National Footprint Accounts (Global Footprint Network), 2019.

[136] National Footprint Account (Global Footprint Network), 2019.

Box 5: Estimates and projections of Slovenia's ecological footprint

The Global Footprint Network report for Slovenia[1] emphasises that the country's development path has been resource-intensive. The Global Footprint Network, an international organisation, released the first report on Slovenia's ecological footprint in 2018. It found that Slovenia has made progress in this field, but that since 2007 the trend has been more a reflection of economic crisis than forward-thinking policies, a finding that also applies to most other EU countries. While guidelines for reducing the ecological footprint have already been established – mostly with regard to housing and transport, promotion of renewable energy, energy efficiency and sustainable transport options – implementation remains lacklustre.

Figure 40: Composition of ecological footprint, Slovenia



Source: GFN, 2018. Note: The figures for 2014–2018 are estimates.

First calculations for various scenarios[2] to reduce the ecological footprint highlight the impact of the transport sector. Scenarios were made for four selected measures: (i) sustainable forest management, which would improve biocapacity, (ii) uptake of photovoltaic panels in conjunction with charging of e-vehicles and distributed storage of electricity, (iii) comprehensive reduction of the ecological footprint in commercial buildings, and (iv) reduced emissions of F-gases[3]. The results of the calculations, made with data for 2014, showed that the measures combined made it possible to reduce the ecological footprint by no more than 13%, which does not suffice to achieve the goal in Slovenia's Development Strategy. Among the four, uptake of photovoltaic panels and electric vehicles has the greatest potential. Preventing continued growth in the number of cars and demand for new road infrastructure requires new sustainable mobility measures. The recommendations centre mostly on expanding the scope and quality of public transportation with buses and trains and on greater promotion of non-motorised forms of transport, i.e. cycling and walking. Forests already contribute a lot to biocapacity and since they are vulnerable to climate change their contribution cannot be expected to increase further. Forests' resilience needs to be improved with tending measures, while the use of greater quantities of wood can help reduce the ecological footprint by supplanting other materials.

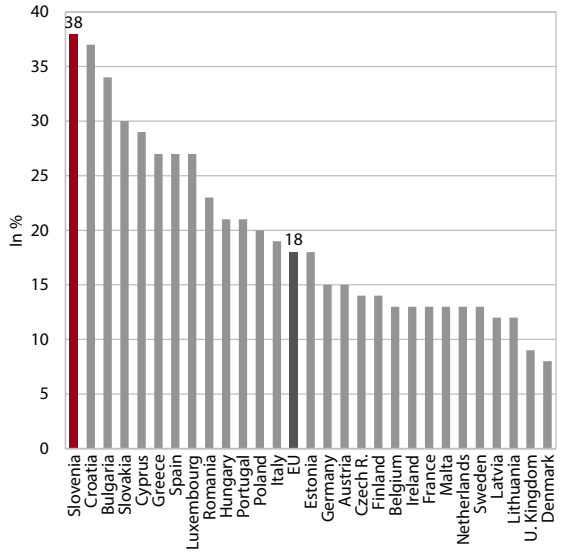
[1] The Ecological Footprint of Slovenia… policy implications, 2018.
[2] The Ecological Footprint of Slovenia… for selected measures, 2018.
[3] Fluorinated greenhouse gases (F-gases) are anthropogenic chemicals with a high greenhouse effect. They are used as coolants, fire suppressants, solvents and isolation gases in electronic equipment, in pharmaceuticals, and in the cosmetics industry.

above the European average and amounts to twice the biocapacity of Slovenian nature. Due to greenhouse gas emissions, one of the principal causes of climate change, the carbon footprint is the greatest single reason why ecological limits are exceeded.

Boasting extraordinary flora and fauna, Slovenia is among the areas with the highest biodiversity in Europe. This is a result not only of natural conditions but also of the protection of plant and animal species and prudent ecosystem management. Protected areas with high biodiversity, landscape diversity and natural features are a particularly important component thereof. Measured by the share of protected areas, which are key to preserving the habitats of endangered species, Slovenia ranks at the top among EU countries, with twice

the average share of such areas. Yet despite numerous activities to protect it, biodiversity has been on the decline in Slovenia in the long term[137]. The most pressing problems are (i) development with inappropriate spread of urbanisation, transport and industrialisation, (ii) poorly conceived management of waterways, mostly in connection with flood-prevention measures, and (iii) agriculture, which provides habitat for protected species but also shrinks habitat in areas of very intensive agriculture. The challenges are to overcome silo mentality, find compromises between the interests of nature protection and economic activity, and to act in concert, in particular when it comes to land use, which will produce greater synergies.

Figure 41: Share of protected area, 2017



Source: Eurostat Portal Page – Tables on EU policy, 2019.

***Soil in Slovenia* is largely unpolluted,** yet despite the good overall condition, there are individual areas with excess toxicity of certain *heavy metals*, e.g. cadmium, zinc, lead, arsenic and mercury[138]. Exceeded action values, and in some areas critical values, have been detected in particular in areas with a long history of mining, smelting and metallurgic activity and in areas with denser traffic. Unlike in air or water, substances in soil build up, which means that reduced release does not typically result in reduced levels. The most polluted areas include the Mežica Valley, the Celje Basin, Jesenice and Idrija[139]. In these and several other areas in Slovenia it is necessary to clean polluted soil and conduct remediation of polluted sites, but this is often technologically demanding and entails high costs[140]. Furthermore, some of the pollution with heavy metals is not the result of human activity, since heavy metal levels may also depend on bedrock. Pollution of soil with *organic pollutants* is less problematic, since in most areas action values have not been exceeded. In some areas of intensive agricultural production, limit values of pesticides or their breakdown products have been shown to be moderately exceeded. What matters most is to monitor soil quality on an ongoing basis and prevent excessive emissions of pollutants into soil, especially in areas designated for food production.

Agriculture, one of the key factors in land management, is not particularly intensive by international standards. Slovenia ranks among the EU countries with the highest share of agricultural land in less-favoured areas and the highest share of grassland. Field surfaces are modest and shrinking (see Indicator 4.9; for regional distribution, see Figure 44). The synthetic indicator of soil quality, the "soil value number", shows that only 7% of farmland is in the top-quality class and as much as a fifth is in the lowest two quality classes[141]. These conditions hamper agricultural production, reduce efficiency and dictate a significant focus on animal production. Since a lot of attention is dedicated to environment protection, the nitrogen and phosphorous balances, which are indicators of agriculture's impact on soil and water, have significantly improved over the long term (see Indicator 4.10). Even though agriculture is undergoing profound structural change, including concentration of land and specialisation of agricultural holdings, agricultural land remains relatively poorly utilised. Average yields are mostly below the EU average, which means that the impact on the environment is less severe but also indicates lower productivity of natural resources. Consequently, self-sufficiency in the majority of basic agricultural products, in particular organic produce, is relatively low and has mostly not increased over the long term[142].

[137] It is quite difficult to determine biodiversity because of the large number of species and interaction between them and with the abiotic environment. Indicators that broadly show the general condition include population size of selected bird species, the farmland bird index, preservation of wildlife populations and forest conservation.

[138] Surveys of Soil Pollution in Slovenia in 2008 and 2019 and Geoportal, 2018.

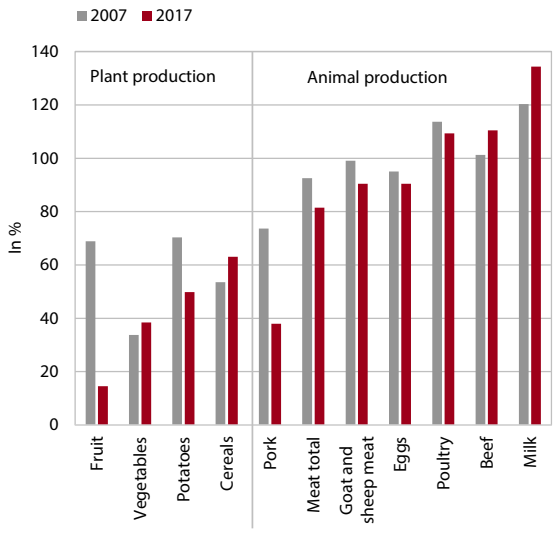
[139] In the Mežica Valley, measures have been carried out since 2008 to remedy the problem of soil pollution, including the asphalting of unmetalled roads, replacing polluted soil, resurfacing with unpolluted soil and planting grass. Lead content dropped to below action level, but in some places, it has started to again increase gradually. Before the remedial measures, 20% of children had elevated blood lead levels; in recent years the share has dropped to 10% (Report on the Environment in the Republic of Slovenia 2017, 2017).

[140] Soil pollution – Hidden dangers, Slovenian Partnership for Soil et al., 2018.

[141] The soil value number indicates the capacity of soil to sustain agricultural production and its capacity to perform basic ecological functions. Features such as soil depth, the ability to retain water and slope are factored in. Soil is divided into five classes (Slabe, 2015).

[142] Increasing self-sufficiency – providing food security with stable production of safe, high-quality and accessible food – is one of the main strategic goals of the Slovenian agri-food sector (Resolution on Strategic Guidelines… until 2020, 2011).

Figure 42: Degree of self-sufficiency in basic agricultural products, Slovenia

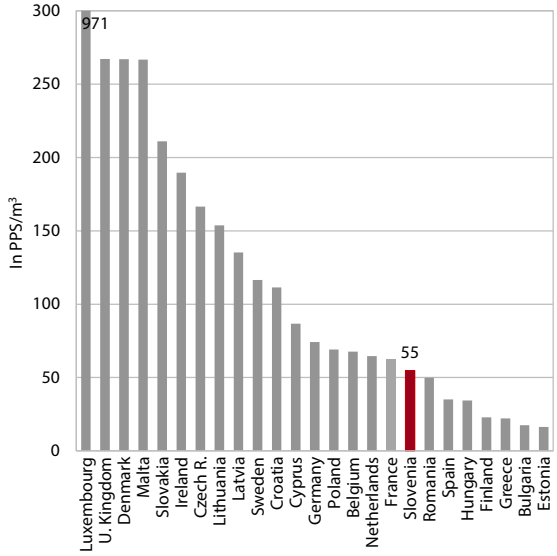


Source: SI-STAT Data portal – Environment and natural resources – Agriculture and Fishing, 2019.

Management of forests, which cover the majority of the landmass of Slovenia, is sustainably oriented but forest resources are not sufficiently exploited. Slovenia is one of the three most forested countries in Europe and forests are its best-preserved natural ecosystems. This is favourable for the environment, since forests act as carbon sinks and thus help offset the impact of greenhouse gas emissions. However, a very high share of forest is not desirable in terms of optimal use of space. Slovenia's forest cover has been increasing over the long term, but the changes have not been uniform. It has increased in areas where there was already ample forest from the point of view of landscape diversity and decreased in areas of intensive agriculture and, in particular, in suburban areas[143]. Since 2014 Slovenian forestry has been grappling first with the consequences of severe glaze damage and later with a massive invasion of forest pests. At the end of 2017, forests were also hit by severe windthrow, with sanitary cuts still ongoing. Intensity of felling had been relatively low, but it has risen sharply in the aftermath of the glaze ice and windthrow (see Indicator 4.11). The relatively high net exports of the highest quality wood remains problematic, as they represents a lost opportunity to achieve higher value added in all subsequent stages of the forest–wood supply chain.

Slovenia has very abundant water sources and most water bodies have a good chemical status; however, the ecological status of some river basins is not satisfactory. The *abundance of water resources* is evident from the per capita availability of freshwater resources, which is at twice the EU average and the fifth highest among EU Member States. Slovenia as a whole has sufficient water: only half of the quantity of surface waters flowing into or falling on the territory is utilised and only a fifth of groundwater. There are nevertheless occasional floods or water shortages, a consequence of weather and human intervention. The share of water for irrigation in total water use remains almost negligible. *Water productivity*, measured as GDP per unit of pumped freshwater, has been improving at a very slow pace over the long term and remains low by international standards. *Water quality*, measured with biochemical oxygen demand, improved to the highest level among EU countries after 2005 due to more and better treatment of wastewater (see Indicator 4.12). This indicates a significant improvement of the chemical, biological and biochemical parameters[144]. Slovenian rivers are fairly oxygen-rich on average and contain low levels of nutrients, organic matter and pesticides, but in some areas their content is nevertheless excessive. In 2009–2016, 96% of bodies of surface water had a good chemical status and around two-thirds a good ecological status. Adriatic rivers and the Soča and Upper Sava basins have the best ecological status, with the situation worst in the Mura and Drava river basins, which are areas with more expansive and intensive agriculture[145].

Figure 43: Water productivity, 2015 or latest data available



Source: Eurostat Portal Page – Tables by themes, 2019.

[143] Resolution on the National Forest Programme, Official Gazette of the RS, No. 111/07.

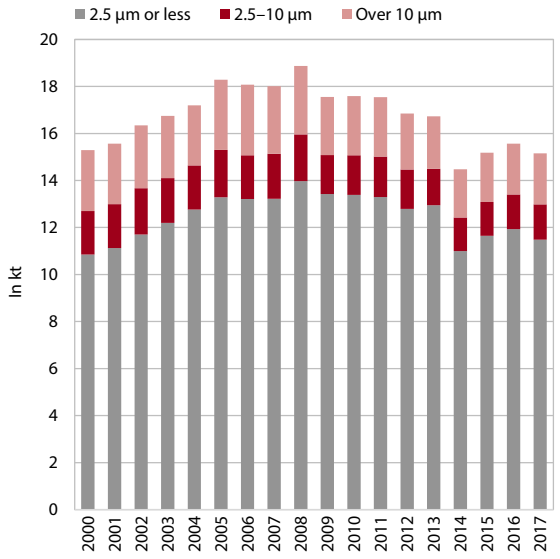
[144] The chemical status of waters is determined with reference to 45 priority substances including atrazine, benzene, cadmium and mercury. Their ecological status is assessed based on the condition of communities of water plants, algae, invertebrates and fish.

[145] Trobec, T., 2017; Ecological status... in Slovenia (ARSO), 2017; Environment Indicators (ARSO), 2018; National Environment Protection Action Programme, 2017.

Air quality in Slovenia is held back by high average concentrations of particulate matter and ozone. *Particulate matter* (PM) is created mostly by burning wood biomass in household furnaces and in road transport, but it is also generated by industry and agriculture. Despite a positive trend, exposure of the urban population to these particles is still relatively high and exceeds the EU average (see Indicator 4.13). In the cold part of the year, local concentrations are highly dependent on location and wind conditions. Daily limit values of particulate matter of 10 microns (PM_{10}) were most commonly exceeded at measuring points in cities, which are affected by transport emissions. But there is significant uncertainty about the conditions in populated rural areas, where there are far fewer measurements[146]. Aside from greater awareness of the population, the biggest improvements could be achieved with broader uptake of technologically more advanced furnaces and certain legislative restrictions. Due to the significant impact of air quality on people's health, EU policy in this field is becoming stricter[147]. The second major air quality problem in Slovenia concerns *ozone and its precursors*, which is associated with transboundary pollution from the west[148]. High ozone levels have been detected at most measuring stations, even in rural areas and at higher altitudes. In *other pollutants*, for example sulphur dioxide, which were highly problematic in the past, efficient solutions have been achieved over the long term as legislation has been tightened and sectoral policy measures deployed[149].

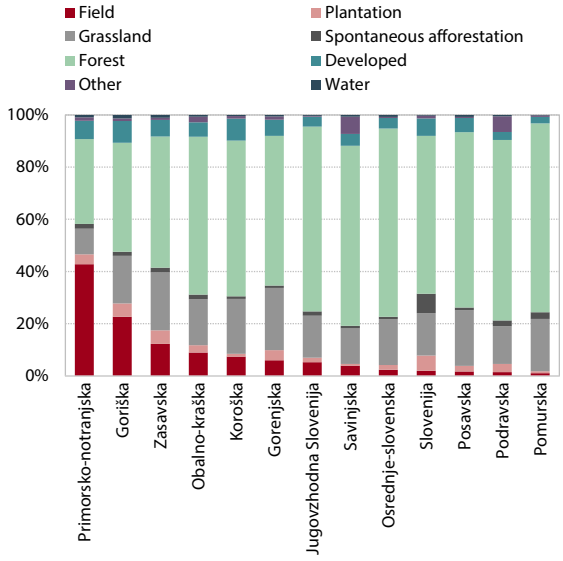
Slovenia's territory is unevenly populated, being characterised by high dispersion and a large number of small settlements. Around half the population live in urban areas, compared to approximately three-quarters in the EU on average[150]. Rather than in cities, population growth is concentrated in suburban areas close to urban centres, mostly along the motorway network, which offer good commuting links to areas with high concentrations of jobs. This causes fragmentation of space, interrupts green corridors between settlements, hampers the provision of social services of general interest and services of general economic interest[151], and increases demand for developed land. The location mismatch between housing and jobs increases commuting and car use and hence exerts a negative impact on the environment with increased noise and emissions. On the other hand, other rural areas, in particular along the

Figure 44: Particulate matter emissions, Slovenia



Source: Environment indicators in Slovenia, ARSO, 2019.

Figure 45: Actual land use by region, 2017



Source: Ministry of Forestry and Food, Graphic data of land use for the entire Slovenia (Repe and Lampič, 2017).

[146] Excessive concentration of airborne PM_{10} particles is also a legal issue in that it constitutes a breach of the directive on ambient air quality.

[147] The EU directive on the reduction of national emissions, which is the central element of the comprehensive programme Clean Air for Europe, sets stricter limits for five major pollutants, including PM particles. Slovenia is supposed to reduce $PM_{2,5}$ emissions by 25% by 2020 compared to 2005 and by 70% by 2030 (EU average by 22% and 51% respectively). This will require new investments, but the savings on labour are supposed to be several times higher due to lower healthcare and sick leave costs.

[148] Air Quality in Slovenia in 2017 (ARSO), 2018.

[149] Ogrin, 2017.

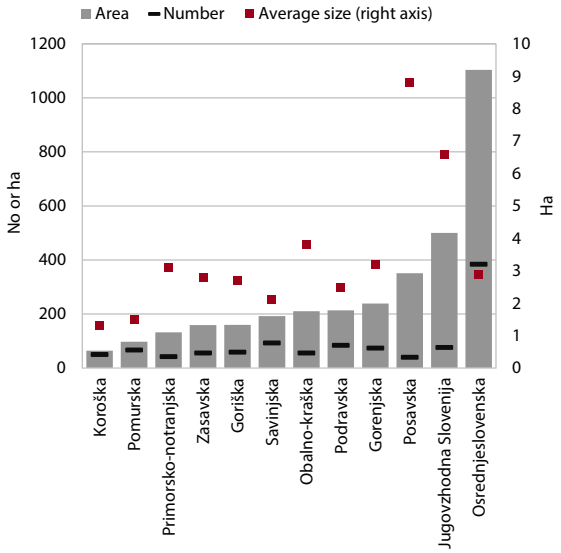
[150] World Bank, 2019. Only a quarter of the population live in cities and large towns, of which there are few. This settlement pattern is a consequence of natural features, historical development, targeted promotion of policentric development and the fact that people place a high value on living close to nature.

[151] Social services are basic non-market public services which the populaton has equal right and access to (e.g. public administration, education, healthcare and the judiciary). Services of general economic interest are market services subject to competition rules (electronic communications, postal services, supply of electricity, gas, water and transportation, etc.) (Nared et al., 2016).

border, face accelerated population ageing (which is an issue for Slovenia as a whole as well) and other negative development trends and development deficits[152]. This in turn leads to shortages of human capital, which forms the basis of development. In these areas it makes sense to revitalise central settlements and use existing infrastructure and building land more economically.

Degraded areas, which were created at an accelerated pace during the crisis, have not been sufficiently utilised during the upturn. At the beginning of this decade, when the impact of the economic crisis started to be reflected in the use of space, underutilised or abandoned sites with visible impact of prior use, i.e. functionally derelict areas (FDAs; see Indicator 4.14), were created at an accelerated pace. Some initiated investments were never completed because they had not been well planned (often due to the easy accessibility of both European and national funds), while some activities were abandoned. The rebound of the economy resulted in the expansion of some economic activities to farmland and forest land, while previously used and abandoned sites were re-activated and returned to use only to a limited extent and remain underutilised. Given the overall lack of undeveloped land, these sites, in particularly in densely populated urban areas, are key for economic development in the future[153]. Addressing this issue in a targeted and systematic fashion, which requires good responsiveness and systemic measures on the part of several different departments, can be facilitated with ongoing recording of FDAs, accurate siting, good information about the sites, and regular updating of records with other forms and types of degradation[154].

Figure 46: Functionally derelict areas by region, 2017



Source: Lampič and Bobovnik, 2017; Lampič, B., Kušar, S., and Zavodnik Lamovšek, A., 2017.

[152] These include poor infrastructure, low educational level of the population, high unemployment, poor transport access to regionally important centres and low personal mobility (Nared et al., 2018).

[153] Špes et al., 2012.

[154] Lampič et al., 2017.

5 A high level of cooperation, training and effective governance

Slovenia's institutional competitiveness, a measure of the state's effectiveness in supporting the business sector and promoting development, has been gradually increasing. In recent years Slovenia has made significant headway in individual areas of government, for example in the digitalisation of public services, introduction of quality standards in public administration bodies, reduction of administrative barriers, improvement of insolvency legislation and improvement of the efficiency of the justice system. However, institutional competitiveness remains marred by inefficient management of the public sector, high burden of government regulation and relatively high perception of corruption. Fragmentation and poor integration of public sector bodies hamper cooperation between sectors and between different levels of administration, which affects the effectiveness of management of public institutions. Businesses consider that the regulatory burden remains high, systematic measuring of the effects of regulation inadequate and participation of stakeholders in the legislative process insufficient. With regard to the regulatory environment, some procedures remain too long, and support for companies needs to be improved. Trust in key institutions of the state remains low and is well below the EU average, which is also reflected in the low degree of representative democracy. Slovenia remains one of the safest countries in the world, which has a positive impact on quality of life; at the same time, it participates in international organisations, operations and missions. However, fulfilment of international commitments in areas including international development aid and security remains a challenge going forward.

5.1 Efficient governance and high-quality public service

Efficient governance and high-quality public service (development goal 12)

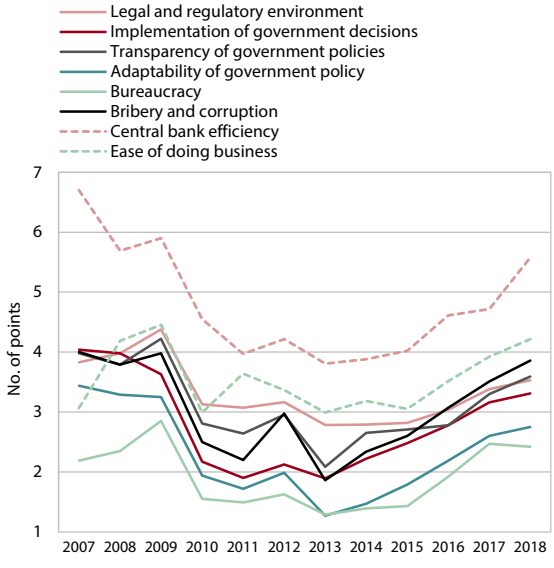
Achievement of this goal requires efficient strategic governance of public institutions and the creation of high-quality public policies that respond to change effectively and quickly. Significant factors listed in SDS 2030 as contributing to stronger governance of the public sector include framing goal-oriented policies, creating a highly developed culture of cooperation between citizens and institutions to strengthen trust in the latter, involving stakeholders at all levels of policy development and monitoring, nurturing social dialogue, and ensuring accessibility of information. It is also important to make governance of public systems and services efficient (and innovative), improve oversight of institutional and social structures, and ensure accountability for adopted decisions..

Performance indicators for development goal 12:

	Latest value		Target value for 2030
	Slovenia	EU average	
Trust in public institutions, in %	Parliament: 22 Government: 23 Local authorities: 40 (2018, autumn survey)	Parliament: 35 Government: 35 Local authorities: 54 (2018, autumn survey)	At least half the population trusts public institutions (average of latest three surveys)
Executive capacity, average score on a 1–10 scale	4.7 (2018)	6.1 (2018)	EU average in 2030

Slovenia's institutional competitiveness has been gradually improving and reached pre-crisis levels last year. International indicators of competitiveness (IMD, WEF, World Bank) show that institutional competitiveness deteriorated significantly during the crisis, with values of survey indicators dropping particularly sharply[155]. The trend is attributed to the performance of the legislative, executive and judiciary branches and sluggish adaptation to altered circumstances during the crisis. In recent years business sentiment has improved across the majority of measured areas, mostly as a result of more favourable macroeconomic conditions and more stable public finances. Yet surveys continue to show dissatisfaction of businesses with fiscal governance and tax policy[156] (see Section 5.1.2), with high bureaucracy and efficiency of public institutions remaining a challenge as well. Citizens' trust in key institutions of the state (the Parliament, the Government and the judiciary) and political parties has improved slightly but remains relatively low and significantly below the EU average (see Indicator 5.1).

Figure 47: Government efficiency indicators for Slovenia according to IMD



Source: The World Competitiveness 2018 (IMD), 2018. Note: Higher scores are better, the maximum being 10; all indicators are survey-based.

Turnout in elections, at which political representatives are directly elected, is relatively low compared to other countries. In the last general election turnout was 52.6%, below that in the majority of EU countries[157], while fewer than half the voters turned out for the local elections (49.2%). The low turnout is attributed to voters' lack of trust in political parties and institutions of the state[158] and dissatisfaction with democracy[159]. The relatively low interest in influencing political decisions is also indicated by the Eurobarometer study finding that maintaining the right to vote in national elections of their country of origin if living in another EU country

[155] The decline in survey indicators was also the result of a sharp deterioration in the business sentiment during the crisis, which was more pronounced than in other countries.

[156] The World Bank (Doing Business, 2018) says that tax rates in themselves are not problematic, the problem being the time it takes for companies to pay tax.

[157] Election turnout is lower only in Croatia, Poland, Lithuania, France and Romania (International Institute for Democracy and Electoral Assistance (IDEA), 2019).

[158] Trust in institutions is low in Slovenia, with political parties seen as the least trustworthy institutions.

[159] In Slovenia 41% of respondents are satisfied with democracy, which is below the EU average (57%) (Eurobarometer 90, 2018).

would be important for 63% of Slovenians[160], which is below the EU average (74%) and lower than in the majority of EU countries (the share was lower only in the Czech Republic, the Netherlands and Croatia).

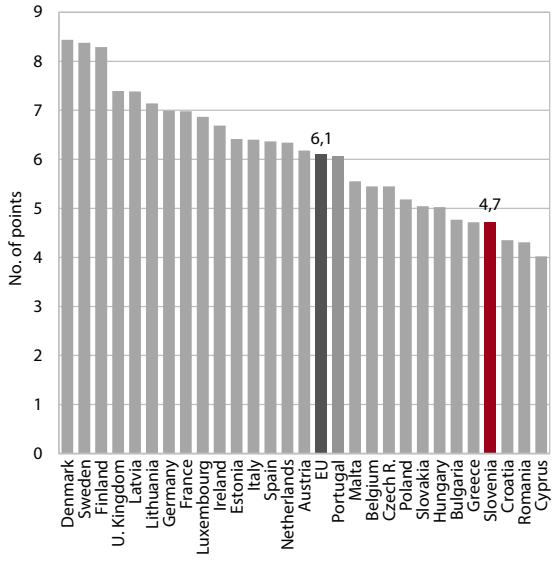
The degree of participatory democracy remains low. Participatory democracy is defined as consistent inclusion of stakeholders at all levels of making and changing policies and regulations. It does not replace representative democracy (e.g. elections); rather it strengthens public trust in state institutions, improves transparency and contributes to making policies more sustainable. In Slovenia public participation is relatively low, since even minimum standards of participation[161] are often ignored[162]. The OECD[163] states that the legal framework for effective inclusion of stakeholders (and the public) needs to be strengthened, since the majority of ministries do not involve them in the legislative process until the final phase. This is despite government rules of procedure stipulating that indication of public participation in the drafting of legislation is a mandatory component of any bill. Public participation in referendum voting is very low as well, with turnout in consultative referenda rarely above 20% in recent years.

The involvement of stakeholders in social dialogue is high[164]. Social dialogue involves all kinds of negotiations, consultations and exchanges of information between employers, employees and representatives of the state on matters of shared interest regarding economic and social policies[165]. An overview of past practice shows that there is significant scope for the development of social dialogue in Slovenia, which can be achieved by improving the know-how, competences and awareness of social partners[166]. The central forum of dialogue is the Economic and Social Council, but there consensus has been elusive on certain matters of key importance (including the response to the crisis and the minimum wage).

5.1.1 Performance of the public administration and provision of public services

Strategic governance of public institutions is weak and Slovenia and assessed as worse than most other EU countries. International comparisons show that weak executive capacity, an indicator measuring strategic governance of public institutions, is largely a consequence of inefficient government performance and organisation and performance of key government institutions. The rating is strongly affected by inefficient strategic planning (i.e. coordination of development policies with national and other strategies), fragmentation and poor integration of public sector bodies, weak inter-ministerial coordination, and low degree of participation of the expert public in government decisions (see Indicator 5.2). The fundamental document for the development and efficient performance of public administration is the Strategy for Development of Public Administration 2015–2020, which is implemented with operational programmes. So far, these measures have been focused mainly on preparation of overviews and analyses of the current situation, paving the way for legislative proposals. Several online portals have been established as well (upgrade of public contracting portal, national open data portal, etc.) in an effort to improve transparency and quality of service.

Figure 48: Index of executive capacity, 2018



Source: Sustainable governance indicators, 2018; IMAD calculations. Note: The index uses eight indicators to measure the strategic governance of public institutions (see Indicator 5.2). Higher is better, the maximum score being 10.

Slovenia has been improving accessibility of e-government services, but uptake remains below the EU average. In 2015 the eUprava e-government portal was updated, providing a one-stop-shop for citizens performing e-administration services – from data kept about the citizens by the State to information about administrative procedures and applications. All basic public services for citizens are available online and for legal persons around 80% are available; openness of public sector data is relatively high as well. This

[160] Special Eurobarometer 477, 2018.
[161] Resolution on Legislative Regulation, Official Gazette of the RS, No. 92/2007.
[162] Public Participation in the Legislative Procedure (Ministry of Public Administration), 2015; Regulatory policy in Slovenia – Oversight matters (OECD), 2018.
[163] Regulatory policy in Slovenia – Oversight matters (OECD), 2018.
[164] Industrial relations in Europe 2014 (EK), 2015; ICTWSS database, 2015.
[165] The typical forms of social dialogue are bilateral (between representatives of employers and employees) and trilateral, which is conducted at the national level (among trepresentatives of the state, employers and employees).
[166] Report of the analysis of the situation in social dialogue in Slovenia and abroad and overview of best practices in Slovenia and abroad, 2018.

has improved accessibility of e-government services and resulted in recent years in increased numbers of users and increased uptake of digital public services, though this is still below the EU average[167]. One major limitation to better uptake is poor general knowledge of e-services and weak capacity of individuals to use such services. Use of e-health services, however, is among the highest in the EU, largely as a result of the introduction of electronic prescriptions and referrals. Analysis by the EC shows that, in general, Slovenia lags behind more developed EU countries in exploiting the potential of e-services and digitalisation[168].

Introduction of quality models in public administration bodies continues and external quality controls have begun as well. Quality is controlled using the Common Assessment Framework (CAF)[169], which was initially introduced at administrative units and in the last two years also in public administration bodies (the first self-assessment was conducted at 14 ministries and the Government Secretariat-General). A second pilot project of external assessment, CAF EPI[170], was carried out as well. This showed that more attention will have to be dedicated to action and communication plans[171]. A Ministry of Public Administration study found that the majority of customers are satisfied with the expertise and knowledge of employees at administrative units, with dissatisfaction mostly associated with waiting times[172].

Implementation of the programme of measures to eliminate administrative obstacles and improve regulation continues, but the impact of regulations should be measured more systematically. A variety of programmes to eliminate administrative obstacles have been systematically executed for over ten years, with the currently valid document, the Single Document to Ensure a Better Regulatory and Business Environment, adopted in 2013. The Single Document is expanded with new measures on an ongoing basis, and the implementation of the planned measures continues (currently about two-thirds of all the planned measures are being implemented[173]). In the past two years several key measures have been implemented in fields including entrepreneurship (SME test, launch of the SPOT (e-VEM) system – Slovenian Business Point), environment and spatial planning (new planning and construction legislation, launch of a register of degraded urban areas), public procurement (launch of e-procurement system, common procurement of medicines and medical equipment), and other development issues (expansion of the network of economic diplomacy, promotion of new foreign direct investments and support for investments in new technologies). However, there are still shortcomings in regulatory impact analysis (RIA), since new legislation is still not subject to systematic and comprehensive analysis of the impact of regulation on public finances, business, the environment[174] and society as a whole[175]. Similarly, the OECD[176] has assessed that Slovenia needs to strengthen the institutional network and capacity to assess the impact of regulation, involvement of stakeholders and ex-post evaluation. It also proposed that Slovenia focus more on the benefits and effectiveness of regulation rather than just the costs business entities incur due to administrative obstacles and legislation.

5.1.2 Impact of public institutions on the economy and business sector

In the last decade important progress has been made in facilitating and speeding up the incorporation of companies, but more needs to be done to improve support for companies. Performance of the state and its institutions, and hence an efficient institutional framework, are essential to creating an environment conducive to business. Surveys among businesspersons show that the main obstacles to business in Slovenia in recent years are related to excessive bureaucracy, taxes and tax policy. This is despite the tax wedge being below the EU average (measured with total tax revenue as a share of GDP). Taxes on income and property are particularly low, whereas the burden of employer social security contributions is higher than the EU average. Other major obstacles include long procedures associated with public services and labour legislation which is too restrictive, according to business managers. Despite improvements, some procedures remain long (e.g. acquisition of building permits and registration of real estate)[177], which is largely the consequence of the complexity of procedures and the need for coordination with other stakeholders[178]. Aside from highlighting administrative burdens, international organisations

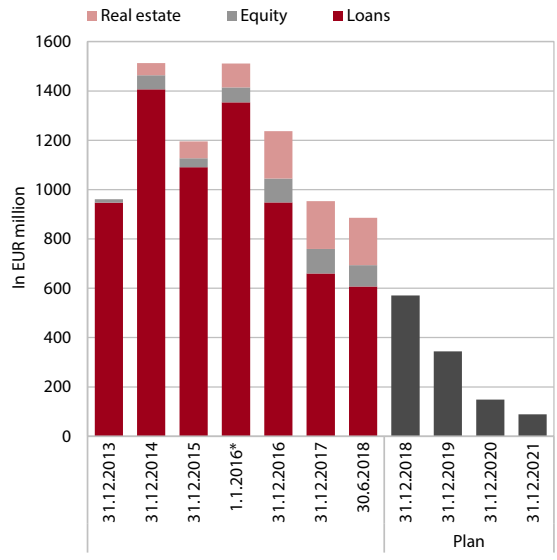
[167] DESI, 2018.
[168] eGovernment Benchmark 2018 (EC), 2018.
[169] The Common Assessment Framework in the public sector is a tool for comprehensive quality management developed by the public sector for the public sector based on a model of business excellence by the European Fund for Quality Management (EQFM).
[170] CAP EPI provides information about self-assessment processes in individual departments which are prepared by external assessors. In the second pilot project, in 2018, 14 administrative units were involved in this process.
[171] Newsletter No. 8/2018 (Ministry of Public Administration), 2018.
[172] Report on the satisfaction of public service users for the period from 17 January to 30 June 2018 (Ministry of Public Administration), 2018.
[173] Report on the Implementation of Measures Under the Single Database of Measures Aimed at Improving the Legislative and Business Environment and Increasing Competitiveness (Ministry of Public Administration), 2019.
[174] Starting in 2019, a green (environmental) test is expected to be introduced in the drafting of laws and executive regulations.
[175] The MSP test, which measures the impact of new legislation on small business, is an exception (Sustainable governance indicators 2018, 2018.)
[176] Regulatory policy in Slovenia – Oversight matters (OECD), 2018.
[177] Doing Business 2019, 2018.
[178] There are problems in verifying compliance with planning documents, which are in the domain of local authorities, and getting the consent required for the issuing of building permits. The long coordination process is also the reason for the relatively long time it takes companies to register a property, which is one and a half times as long as in the EU on average.

(the WEF, IMD, World Bank, European Commission and OECD) have also cautioned against state interference in company operations, sluggish sale of state-owned companies and a lack of good corporate governance in state-owned companies. According to the OECD[179] and IMF[180], the long list of strategic and important companies should be shortened to just a few strategic companies in industries where competition is not possible and whose state ownership would have a positive impact on the entire economy.

Return on equity in state ownership has been improving, which is to a large extent the result of favourable economic conditions. SSH, as the manager of state-owned equity stakes in companies, creates conditions for active management of its assets in accordance with annual management plans[181]. As of the end of 2016, the book value of assets under management (assets in direct ownership of SSH and assets managed on behalf of the Republic of Slovenia by SSH) was EUR 10.9 billion, two-thirds of which was strategic investments and the rest important[182] and portfolio investments. In recent years, as the economy has strengthened, net return on equity (ROE) under SSH management has improved: at 6.5% in 2017, it was above SSH projections. The biggest improvements were recorded in returns on equity classified as important (financial intermediation), whereas returns on the rest of the portfolio (including portfolio assets) declined. In recent years dividend payments have increased as well, but the trend is not expected to continue (in particular due to high one-off payments in 2017–2018 and the privatisation of NLB in 2018)[183].

Withdrawal of the state from company ownership, conducted through BAMC and SSH, continues, and in 2018 the first part of the privatisation of Nova Ljubljanska Banka (NLB) was completed. In compliance with commitments made to the European Commission, SSH sold 65% of NLB in an initial public offering (IPO) for EUR 669.5 million, with the remaining shares of up to 75% minus one share slated for sale by mid-2019. Equity stakes in ten out of 15 state-owned companies designated for sale have been disposed of so far[184], while privatisation procedures for the remaining five are currently suspended[185]. Among companies classified as important, only the privatisation of Abanka is currently planned (SSH has already published an invitation to bid for the 100% stake). The state is also withdrawing from company ownership via BAMC[186], which has to be wound down by the end of 2022. BAMC's assets under management amounted to EUR 935.4 million as of the end of 2017 and decreased by a further 7% by mid-2018[187]. This means that by the middle of the year, BAMC had already come close to fulfilling the plan to sell at least 10% of the estimated value of acquired assets every year. Claims from non-performing loans account for over two-thirds of BAMC assets and they represent the bulk of the decrease in assets in the last two years. The value of real estate and equity stakes, which account for a smaller share of BAMC assets[188], has not changed significantly. The BAMC strategy for 2016–2022 stipulates that assets under management should drop to EUR 571 million by the end of 2018.

Figure 49: Assets under BAMC management and portfolio plan through 2021



Source: BAMC interim report, 2018. Note: On 1 January 2016, the value of the portfolio increased after the merger by acquisition of Factor banka and Probanka. Under the transaction, BAMC received a small leasing portfolio, which is included among the loans.

[179] OECD Economic Surveys: Slovenia (OECD), 2017.
[180] Slovenia: Staff Concluding Statement of the 2018 Article IV Mission (IMF), 2018.
[181] Decree on State-Owned Asset Management Strategy, Official Gazette of the RS, No. 53/2015; Annual State Assets Management Plan (SSH), several volumes.
[182] The class of important assets encompasses equity stakes in companies which are the providers of broader economic development and play an important role in the integration of companies into supply chains and in the internationalisation of the economy. This includes systemic financial institutions, lotteries, and development and technology companies.
[183] Annual State Assets Management Plan for 2019 (SSH), 2018.
[184] From this list, which had been confirmed by the government in 2013, SSH has so far sold equity stakes in Adria Airways, Adria Airways Tehnika, Aerodrom Ljubljana, Cimos, Elan, Fotona, Helios, Nova KBM, Paloma and Žito.
[185] Three more companies (Cinkarna Celje, Gospodarsko razstavišče and Telekom Slovenia) remain to be privatised, while two (Aero and Terme Olimia bazeni) no longer exist.
[186] The state withdraws from company ownership through BAMC by selling claims (non-performing loans) to companies, by offloading real estate that BAMC took possession of in the process of bank restructuring and by selling equity in companies.
[187] As of mid-2018 it was at EUR 885.8 million, which is around 7% less than at the end of 2017.
[188] As of 30 June 2018, claims (non-performing loans) accounted for 68.5% of BAMC assets, real estate for 21% and equity for 9.8%.

5.2 A trustworthy legal system

A trustworthy legal system (development goal 10)

The legal system is of significant national and strategic importance for the protection of citizens, economic development and prosperity, as all social systems and subsystems are highly dependent on it. The goal is to create a legal system that provides a high-quality and efficient legal framework. Key factors of trust in the legal system listed by SDS 2030 include protection of human rights, fundamental liberties and equal opportunities, clear procedural and substantive legislation, concern for the independence, efficiency and transparency of the judiciary, and elimination of the causes of corruption.

Performance indicators for development goal 10:

	Latest value		Target value for 2030
	Slovenia	EU average	
Rule of law index, rank among EU members	Rank 14 (data for 21 EU countries) (2018)	–	Ranking in the top half of EU countries
Time needed to resolve civil and commercial court cases, number of days	280 (2016)	244 (2016)	200

Trust in the rule of law and the judiciary is relatively low and is improving only slowly. The bedrock of people's trust in the legal order and respect of legislative provisions is clear, understandable, transparent and unambiguous legislation, while people's trust in the legal system and the rule of law also depends on the implementation of rights in practice, the duration of administrative and court procedures, accessibility of legal remedies, and predictability and stability of legal standards. International comparisons (the World Justice Project and World Bank Governance Indicators) indicate that trust in the principle of the rule of law is low, and compared to other EU countries Slovenia ranks poorly in terms of rule of law, an area where there has not been any notable progress in recent years (see Indicator 5.3). Lack of trust in the rule of law and the judiciary is also reflected in the relatively high number of applications to the European Court of Human Rights (ECHR), which is significantly higher than in other EU countries[189]. In recent years the number of pending cases at the Court has been decreasing, however, and most of the cases in which violations have been determined have been related to the right to fair trial. The EC[190] has highlighted very low trust in the independence of the judiciary and judges, in which regard it is necessary to point out that improving the reputation and people's trust in the judiciary requires a concerted effort by the legislative, executive and judiciary branches.

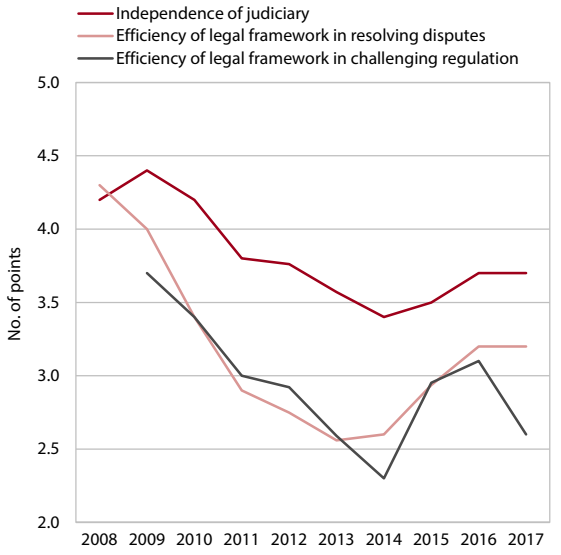
The key strategic document on the justice system is the Justice 2020 Strategy. The main priority is improving the effectiveness, transparency and quality of the justice system with an emphasis on the judicial branch. Important steps have been made in efficiency improvements and staff cuts[191], but the achievement of some of the objectives is uncertain if current trends continue. The Supreme Court has warned against the broadening of its jurisdiction on the grounds that this could lead to an increase in pending cases (e.g. the new Family Law transfers jurisdiction in several areas from social work centres to courts; implementation of the Act on judicial relief granted to holders of eligible bank liabilities) if the number of judges continues to decline in line with the agreed objectives. Other major challenges are to create a predictable and stable legal environment and to adopt measures and legislation in cooperation between the judiciary and the executive branch.

Court statistics show that the efficiency of courts has improved further, with the number of pending cases decreasing. New caseload (in particular the number of more important cases) has been declining in recent years, which the Supreme Court believes is partly a consequence of a decline in speculative applications due to greater alignment of case-law and legal certainty and the awareness that courts resolve cases efficiently and quickly. As new caseload has declined, the number of pending cases at almost all courts has continued to fall, even though the number of judges has declined further[192]. The average time it takes to resolve a case also fell, but the time it takes to resolve important cases has not changed significantly (see Indicator 5.4). The Supreme Court has warned, however, that excessive shortening of the duration of procedures may jeopardise

[189] European Court of Human rights – statistics (ECHR), 2019.
[190] The 2018 EU Justice Scoreboard (EK), 2018.
[191] The strategy determines that by 2020 the expected time it takes to resolve important cases is to be reduced to six months, with all other cases to be resolved in three months. The number of judges per 100,000 population should also decrease (to 42), whereas the ratio between judges and court staff should increase to 4:3.
[192] In the past five years the number of pending cases dropped by 56%.

parties' right to be heard and the right to fair trial[193]. Compared to other EU countries, the expected duration of civil and commercial procedures is slightly longer, but it has been decreasing. Personal and corporate bankruptcy procedures remain long[194], which affects how businesses rate the work of the judiciary at least to a certain extent (WEF survey). Changes to insolvency law have had a beneficial effect on the duration of bankruptcy procedures at court. The total duration of such procedures remains very long, as insolvency cases are recorded as unresolved at court until they are completed, despite the fact that courts cannot directly affect the course of procedures once they declare insolvency.

Figure 50: Indicators of efficiency of the judiciary in Slovenia according to the WEF



Source: The Global Competitiveness Report 2018 (WEF), 2018. Note: Higher is better, the highest score being 7.

The quality of the Slovenian judiciary is comparable to other EU countries. Quality of the judiciary in the narrow sense is the quality of judges' output – i.e. court decisions – but in the broader sense it also reflects the provision of court services. Having been preoccupied in the past decade with reducing the number of pending court cases and shortening the duration of procedures, the Slovenian judiciary has more recently made it a priority to improve quality[195]. According to an EU study[196], the quality of the judiciary in Slovenia is being positively influenced by the permanent training of judges and court staff and improvements of the competences of court staff. The option of alternative forms of dispute resolution and the use of clear efficiency standards is also highlighted as positive, whereas the Slovenian judiciary lags behind in the use of ICT, communication with stakeholders (in particular at lower courts) and communication with parties to procedures. Electronic services have been introduced in certain court procedures (land register, enforcement procedures, insolvency procedures) and establishing a comprehensive system (e.g. with electronic filing, service of court documents and data access) is one of the priorities of the judiciary. The quality of court services is also good according to the court user satisfaction survey (in particular regarding ease of understanding the judge's language and the professionalism of judicial staff).

The perception of corruption remains high. The assessment (perception) of corruption in a country mainly reflects the performance of institutions of the rule of law, public sector integrity and the quality of public sector management. The number of reports of corruption and other irregularities surged after the start of the crisis, which can be largely attributed to the work of the competent institutions being more widely publicised, which led to keener perception and reporting of corruption. In 2017 a new programme for the strengthening of integrity and transparency was adopted for the period 2017–2019; this emphasises measures to improve the integrity of institutions, public employees, holders of public office and other employees in the public sector and greater transparency therein. In order to reduce corruption risks in healthcare, the introduction of centralised contracting in healthcare continued (e.g. pooling of contracts for medicines, medical devices and equipment); in the past, this was an area where funds were often found to have been spent uneconomically. Nevertheless, international comparisons of the perception of corruption show that perceptions of corruption remain high and above the EU average (see Indicator 5.5). The Commission for the Prevention of Corruption[197] sees inadequate response by decision-makers (or indeed absence thereof) when the competent authorities detect corruption as one of the main reasons for this. This is also an indication of the absence of systemic change (e.g. delays in new legislation) that would improve the situation and procedures with regard to prevention and faster, more efficient prosecution of corruption and white-collar crime. International studies also highlight a lack of progress in ensuring the integrity of the most senior representatives of the state (MPs, judges)[198].

[193] Opening of the court year 2019 (Supreme Court), 2019.
[194] Other liquidation procedures are much shorter (e.g. compulsory liquidation and simplified compulsory composition).
[195] Opening of the court year 2018 (Supreme Court), 2018.
[196] The 2018 EU Justice Scoreboard (EK), 2018.
[197] The corruption perception index in Slovenia remains unchanged for yet another year (Commission for the Prevention of Corruption), 2019.
[198] Second Compliance Report: Corruption prevention in respect of members of parliament, judges and prosecutors (GRECO), 2018. Efficiency and quality of justice (CEPEJ), 2018.

5.3 A safe and globally responsible Slovenia

A safe and globally responsible Slovenia (development goal 11)

The aim is to equip Slovenia to be able to face global challenges such as migration flows, terrorism, climate change and ensuring respect for human rights. Factors listed by SDS 2030 as instrumental to strengthening global responsibility and solidarity include providing a high level of security, which includes providing protection against terrorist and other supranational threats (cyber threats included) and promoting prevention of and strengthening the capacity for managing natural and other disasters. It also highlights the strengthening of foreign policy cooperation at the bilateral and multilateral levels and defence capabilities. Through international development cooperation and humanitarian aid, Slovenia contributes to a more balanced and just global development and the eradication of poverty and inequality.

Performance indicators for development goal 11:

	Latest value		Target value for 2030
	Slovenia	EU average	
Share of population that reported crime, vandalism or violence in their area, in %	8.0 (2017)	11.6 (2017)	< 10
Global Peace Index, rank	7 (in the EU) (2017) 11 (among 163 countries) (2017)	–	Improving the ranking to the top ten countries in the world and top five in the EU

Since independence, Slovenia has been a member of the most important international organisations which maintain a stable international environment, security and human rights. For over a decade it has also been a part of the EU, its most important value-based, political and legal environment. Changes in the broader international environment affect the EU as well as Slovenia, which is grappling not just with developmental, political and economic issues but also with global security challenges. The fundamental framework of institutional national security aside from the EU's common foreign and defence policy is NATO. Slovenia allocated 0.9% of GDP for defence in 2017, which is below the EU average and falls short of NATO commitments.

5.3.1 Safety

Slovenia is one of the safest and most peaceful countries in the world. The Global Peace Index ranks it among the 11 most peaceful countries in the world, with the EU the most peaceful region (see Indicator 5.6). Other indicators confirm this, showing it to be one of the safest countries, with a decline in the number of crimes by more than a third in the last five years[199]. Most kinds of crime are on the decrease, although police and the National Bureau of Investigation have recorded upticks in organised crime and corruption-related crimes.

Slovenians feel safe in their country. The sense of endangerment in the living environment remains low. The share of people who feel safe in their local area remains high (see Indicator 5.7). In 2016 fewer people had a personal experience with burglary or physical assault than in preceding years and their share is below the EU average[200]. The sense of safety also depends on people's trust in the police, which has been significantly higher in recent years than trust in other institutions in the country, though it remains below the EU average[201]. Slovenians continue to feel that their immediate neighbourhoods and indeed Slovenia as a whole are generally secure places to live in. Statistics show, however, that in 2015 the standardised death rate for assault was slightly above the EU average (Slovenia: 0.8 persons per 100,000 population; EU: 0.7). In 2018 the General Data Protection Regulation (GDPR) entered into force in the EU[202], expanding the protection of the rights of individuals with regard to their personal data, in particular in terms of information security.

Transport safety has greatly improved in recent years. In 2017 Slovenia recorded 50 deaths per million population, close to the EU average (49). The number of deaths from transport accidents declined at a faster pace than in the EU in 2010–2017 and is significantly lower than

[199] Overview of police work for the first half of 2018 (Ministry of the Interior – Police), 2018.

[200] European Social Survey. The data for the selected European countries show the total average result of the selected countries regardless of size of national sample or country size. The selected countries are countries for which data were available (Belgium, Germany, Finland, France, the UK, Ireland, Netherlands, Poland, Sweden and Slovenia).

[201] Eurobarometer Survey 90 (EC), 2018.

[202] Regulation (EU) 2016/679. The regulation became directly applicable in May 2018 and within a year at the latest Slovenia will have to transpose it into national law and adopt appropriate legislation.

before 2010[203]. In 2017 there were a total of 104 deaths from transport accidents, with the number dropping to 92 in 2018, the lowest since transport accident statistics began in 1954[204]. There are several factors behind the improvement, including better transport infrastructure (e.g. motorway construction), safer cars and preventive measures (e.g. reduction of permitted blood alcohol level and training of young drivers), and the situation improved even though the total number of kilometres driven has been increasing every year to almost half above the level in 2000[205].

In 2013–2017 the number of incidents[206] classified under permanent sources of threat increased. The goals, policies and strategy of protection against natural and other disasters are determined in the national programme for 2016–2022, which was adopted in 2016[207]. In 2017 the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief intervened in more than 18,600 incidents with protection, relief and rescue personnel. Compared to 2016 the number of incidents increased, but there were fewer transport accidents. In the last five years, fires, explosions, and other incidents requiring technical and other help accounted for the bulk of all incidents. The number of interventions in natural disasters has increased in the last three years, but it is lower than in 2014, the peak year in the last five-year period due to the glaze ice. The biggest cause of problems and interventions are floods, strong wind and snow. Timely intervention is ensured through emergency notification centres and public rescue services and the preparedness of other rescue and relief forces and civil protection units. The key challenge is creating a system that will facilitate effective coordinated action and contribute to the mitigation of damage and other consequences of accidents. Preventive measures are important as well, in particular appropriate land-use planning and measures for protection against fire and other natural disasters[208].

Appropriate and effective responses to threats and risks are vital for national security. It is particularly important to secure national borders and the EU's external border, prevent, detect and investigate organised crime, cybercrime and crime associated with firearms, and fight terrorism. In the past three years preventing illegal crossings of the border has been a priority for the police. The number of illegal border crossings has been increasing since 2010, spiking in 2018[209]. In 2010–2017 the number of recorded instances of organised crime increased[210], with crimes related to drugs and banned substances in sports in particular surging in the last year. Cybercrime also increased in this period, mostly through a surge in attacks on information systems[211]. Modern technology also facilitates new kinds of cybercrime (e.g. use and theft of cryptocurrency). The number of weapons-related crimes, on the other hand, has been on the decline[212]. In terrorism, Slovenia focuses on preventive action[213].

5.3.2 Global responsibility

Slovenia strives to improve global responsibility and solidarity[214]. This entails speaking up and working for peace and security, prosperity and dignity for all people, eradication of poverty, environmental and sustainable development, respect of human rights, and more peaceful and inclusive societies. By endorsing the UN global compact on migrations, Slovenia supports strengthening international cooperation on all aspects thereof[215]. It is also important to consistently implement international commitments in other areas, including financial obligations, adjustment of the domestic legal order, and fulfilment of international commitments regarding climate change and sustainable development (see Chapter 4). In this framework, Slovenia remains committed to achieving the sustainable development goals enshrined in the 2030 Agenda for Sustainable Development.

Changes in the broader international environment and new global trends pose a challenge for Slovenia. For Slovenia the challenge is not just to improve its ability to respond and adapt to new trends and global challenges (climate change, cybersecurity, the impact of technological progress on integration of regions and countries, migration flows, radicalisation, violent extremism and terrorism), but also to increase its role and influence in the shaping of these trends and overcoming the associated challenges[216]. To this end, Slovenia has

[203] In Slovenia the number of deaths due to transport accidents declined by 25% in 2010–2017 (EU: 20%) (EC, 2018).
[204] Police (press release), 2019.
[205] OECD Road Safety Annual Report 2017, 2017.
[206] Such as natural and other disasters, transport accidents, fires and explosions, pollution incidents, accidents involving hazardous substances, nuclear and other incidents, finds of unexploded ordnance, supply disruptions, damage to buildings, and other events that required technical and other assistance.
[207] Resolution on the National Programme of Protection against Natural and Other Disasters 2016–2022, Official Gazette of the RS, No. 75/2016.
[208] Slovenia will also address these challenges by using EU funds, in particular through the 5th and 6th priority axes of the Operational Programme for the Implementation of EU Cohesion Policy (Adaptation to Climate Change and Better State of the Environment and Biodiversity)
[209] In 2016, 1,148 illegal crossings of the national border were recorded, with the figure increasing to 1,930 in 2017 and surging to 9,149 in 2018 (citizens of Pakistan, Afghanistan and Algeria accounted for the bulk of the crossings). Police statistics on illegal border crossings do not include migrants who entered Slovenia during the period of mass migrations in 2015 (around 360,000 persons).
[210] The number of cases of organised crime totalled 352 in 2010, 524 in 2012, 403 in 2016 and 408 in 2017.
[211] The number of attacks on information systems fluctates wildly year by year, but it increased overall in 2010–2017 (76 in 2010 and 169 in 2017).
[212] The highest number of weapons crimes was recorded in 2014 (134); in 2017 there were 64, the lowest in the 2010–2017 period.
[213] Annual Report on the Work of the Police 2017, 2018.
[214] Slovenian Development Strategy 2030 (SVRK), 2017.
[215] Addressing root causes, preventing illegal migrations, fighting human trafficking, and managing safe, orderly and legal migrations.
[216] Slovenia: Secure, Successful and Respected in the World (Foreign

in recent years strengthened its network of diplomatic and consular missions[217] and its activities in international organisations and other forums[218]. Having actively participated in the Human Rights Council in 2016–2018[219], Slovenia had the opportunity to strengthen its role in the UN, not only in human rights but also in the maintenance of international peace and security and respect of international law.

The EU has been facing serious challenges in recent years and they are having a significant impact on Slovenia. Slovenia's ability to successfully address global trends and challenges hinges to a certain extent on the resolution of fundamental issues concerning the existence, continued integration and political nature of the EU. Slovenia is an advocate of a deepening and enlargement of the Union. In the EU key debates are underway about the future of the Union, completion of the economic and monetary union, and the next multi-annual budgetary framework. This will not only affect the scope of funding from the EU budget for Member States, but also means identifying priority areas and the direction in which the EU wants to develop. The exit of the United Kingdom from the EU will have a profound impact on the balance of power between Member States, division of interests and financing in the EU, and it also highlights the need for a serious deliberation on the future of the Union.

Membership of the EU gives Slovenia a place at the table where decisions are made, but the country must become more active in the Union. In recent years Slovenia's activity within the EU has been focused on areas such as security, measures for growth and jobs, strengthening the social dimension, and enhancing the global role of the EU[220]. Another priority has been strengthening the democratic legitimacy of the EU[221] and improving trust in the work of the EU and European institutions. As an EU member, Slovenia has participated in decisions on the implementation of the EU's Global Strategy[222] as a framework for EU action in international relations. Pursuing its foreign policy, it has complemented the actions of the EU in particular by working to deepen political, economic, social and cultural relations in the Western Balkans with the aim of strengthening the resilience of societies and countries in the region and accelerating their process of EU accession. Formulating and asserting Slovenia's interests in the EU requires in-depth activities on EU issues, closer coordination within the state administration and additional staff[223]. One of the key future tasks will be the Presidency of the EU, which Slovenia will assume in the second half of 2021[224]. Aside from shoring its reputation in the EU, the Presidency will also be an opportunity to strengthen the knowledge, skills and capacity of the public administration and to improve the country's capacity to operate in the EU in the long term. Furthermore, Slovenia must leverage the Presidency to formulate clear sectoral priorities in conjunction with key stakeholders[225].

Expenditure on international development aid remains significantly below international commitments. International development cooperation and humanitarian aid are essential components of global responsibility and contribute to strengthening bilateral relations and Slovenia's image in the world[226]. Expenditure on official development aid has increased in recent years but remains well below internationally adopted commitments, which stipulate that Slovenia should strive to increase official development aid to 0.33% of GNI until 2030 (see Indicator 5.8)[227]. Multilateral aid in the framework of EU development policies accounts for the majority of aid spending, with the increase in recent years mainly associated with the refugee and migration crisis[228]. The OECD states that Slovenia's main challenges in international development aid include narrowing its focus to just a few priority regions and hence improving the effectiveness of aid, improving cooperation and the sharing of information with stakeholders in Slovenia, and forging long-term partnerships with prospective aid donors[229].

Ministry), 2015.

[217] In the last two years Slovenia opened embassies in Bulgaria, Iran and the United Arab Emirates. It now has 55 diplomatic and consular missions abroad.

[218] Annual report of the Ministry of Foreign Affairs for 2017, 2018.

[219] Slovenia chaired the Human Rights Council in 2018.

[220] Declaration on the activities of the Republic of Slovenia in the institutions of the European Union for the period January 2019–June 2020 (Ministry of Foreign Affairs), 2019.

[221] Lange, S., 2016.

[222] Shared Vision, Common Action: A stronger Europe. A Global Strategy for the European Union's Foreign And Security Policy, 2016.

[223] Barbutovski, D., Bucik, M., and Lange, S., 2017.

[224] Terms of reference for the special government project of the Republic of Slovenia's presidency of the EU Council 2021, 2019.

[225] Barbutovski, D., 2019.

[226] Mrak, M., Bučar, M., and Kamnar, H., 2007.

[227] Resolution on the International Development Cooperation and Humanitarian Aid of the Republic of Slovenia, Official Gazette of the RS, No. 54/2017.

[228] Report on International Development Aid 2017 (Foreign Ministry), 2018.

[229] OECD Development Cooperation Peer Reviews: Slovenia (OECD), 2017.

Appendix:
Indicators of Slovenia's development

1 A highly productive economy creating value added for all

Economic stability

1.1 Gross domestic product per capita in purchasing power standards

1.2 Real GDP growth

1.3 General government debt

1.4 General government balance

1.5 Current account of the balance of payments and Slovenia's net international investment position

1.6 Financial system development

1.7 Regional variation in GDP per capita

1.8 The Development Risk Index for regions

A competitive and socially responsible business and research sector

1.9 Productivity

1.10 Export market share

1.11 Unit labour costs

1.12 Exports of high-technology goods and knowledge-intensive services

1.13 Foreign direct investment

1.14 Corporate environmental responsibility

1.15 European Innovation Index

1.16 R&D expenditure and the number of researchers

1.17 Innovation activity of enterprises

1.18 Intellectual property

1.19 The Digital Economy and Society Index

Gross domestic product per capita in purchasing power standards 1.1

In 2016 Slovenia again started to approach the EU average in terms of economic development as measured by gross domestic product per capita in purchasing power standards (PPS). In 2017, with 85% of the EU average, it reached the level of relative economic development from 2009, lagging only 5 pps behind the pre-crisis peak from 2008. More precisely, in 2008 Slovenia's GDP per capita in PPS was 10% lower than the EU average, but during the economic crisis the gap widened to 18%. A breakdown of per capita GDP into productivity and employment rate shows that in 2016 and 2017 the development gap narrowed due to a relatively faster increase in the employment rate than in the EU, in 2017 also due to higher productivity growth. Productivity otherwise remains relatively low (82% of the EU average in 2017), the lag in this area fully explaining the relatively low level of Slovenia's economic development, measured by per capita GDP, given that the employment rate has been above the EU average throughout the period (in 2017 it exceeded it by 4%).

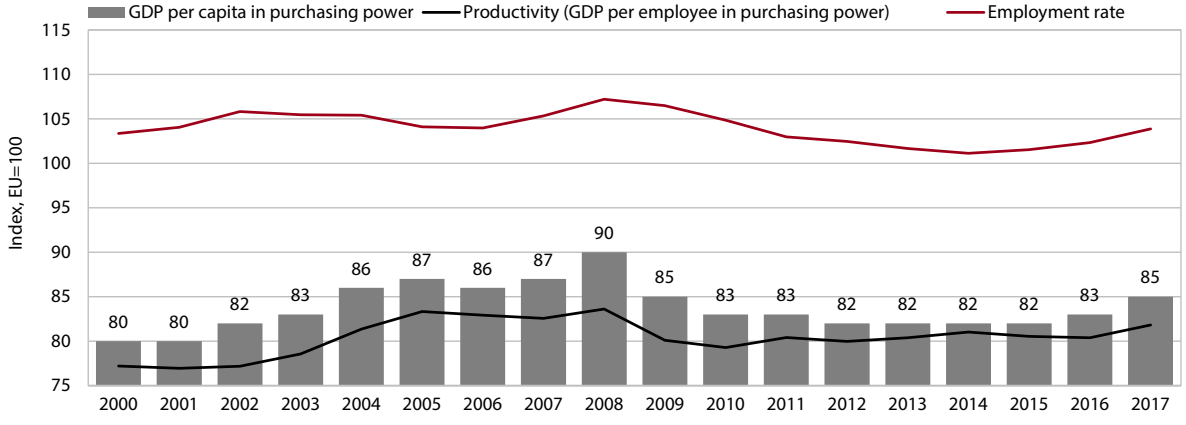
In 2017 eight Member States lagged more behind their pre-crisis peaks than Slovenia. Gross domestic product per capita expressed in relation to the EU average was lower than before the crisis in 13 Member States. In Slovenia it lagged 5 pps behind the highest pre-crisis level in comparison with the EU average, in Greece and Cyprus more than 20 pps, and in the Netherlands, Finland and Italy more than 10 pps. In 2008 the countries closest to Slovenia in terms of GDP per capita in PPS were Greece (93%) and the Czech Republic (84%); in 2017 they were Cyprus (85%) and the Czech Republic (89%). The gap in GDP per capita in PPS in EU Member States has been declining over the years. From the beginning of the previous decade to 2017, the ratio between the most and the least developed Member States dropped from 1:9.3 (Romania/Luxembourg) to 1:5.1 (Bulgaria/Luxembourg).

Table: GDP per capita in purchasing power standards for selected countries (EU=100)

	2000	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	SDS 2030 target
Slovenia	80	87	90	85	83	83	82	82	82	82	83	85	100
EU-15	116	113	111	111	110	110	109	109	109	109	108	108	
Scandinavian countries	129	125	128	126	126	126	126	125	123	123	121	122	
New Member States excluding Slovenia	51	60	67	66	67	68	69	69	70	71	72	74	

Source: Eurostat Portal Page – Purchasing Power Parities, 2018; calculations by IMAD.

Figure: GDP per capita and its components



Source: Eurostat Portal Page – National Accounts, 2018; calculations by IMAD.
Note: The employment rate is the ratio of the number of employed persons to the number of inhabitants.

Real GDP growth 1.2

After four years of higher and higher growth, GDP exceeded its pre-crisis level in 2017; in 2018 its growth started to slow. Following the double-dip recession, real GDP has been rising in Slovenia since 2014. Having strengthened in 2014–2017, economic growth started to ease in 2018, primarily as a consequence of more moderate export growth due to the slowing of economic growth in trading partners and the wearing off of the effect of one-off domestic factors.[1] In 2018 exports remained a significant factor of growth, but growth has been increasingly driven by domestic consumption: (i) in 2013–2016 particularly household consumption, whose moderate growth was still boosted by favourable labour market conditions, and (ii) since 2017 particularly investment in gross fixed capital formation, which had dropped notably in 2009–2012. Investment has been rising in all main segments; last year construction investment increased the most, particularly investment in civil-engineering works, which had rebounded in 2017. The continuation of several-year growth of investment in machinery and equipment was boosted by high capacity utilisation, good business performance and lower corporate indebtedness. With the further relaxation of austerity measures and employment growth in the general government sector, government consumption also rose for the fourth consecutive year.

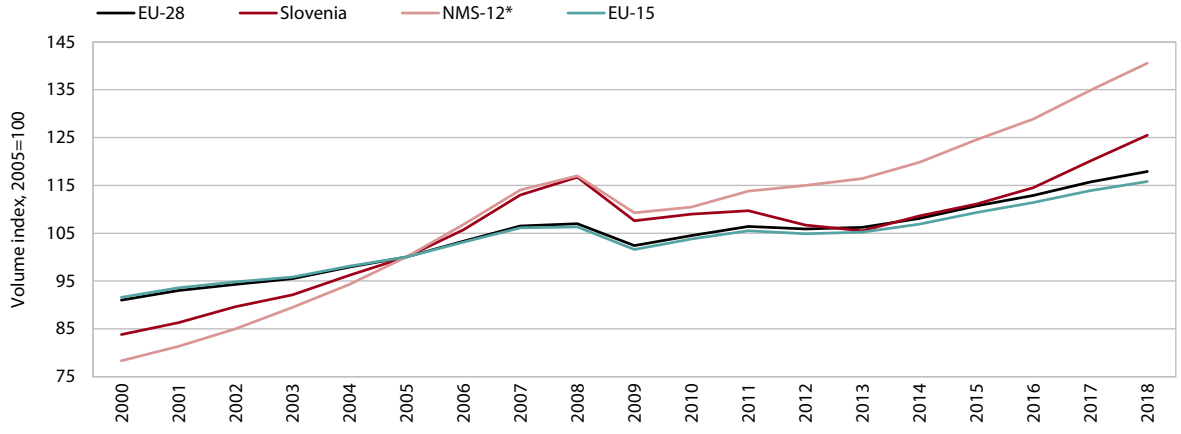
After a relatively deeper decline during the crisis, in 2018 economic growth in Slovenia (4.5%) was significantly higher than in the EU as a whole (1.9%) for the third year in a row. This was attributable primarily to the still relatively strong growth of Slovenian exports, but also, in the last two years, to stronger growth in investment than in the EU overall, following a more pronounced decline during the crisis. Growth was also again higher, on average, than in other new Member States,[2] behind which Slovenia still lagged in terms of the cumulative growth since 2005.

Table: Contribution of expenditure components to GDP change, Slovenia

	2000	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Real GDP growth, in %	4.2	4.0	3.3	–7.8	1.2	0.6	–2.7	–1.1	3.0	2.3	3.1	4.9	4.5
Contribution to GDP growth, in pps													
Total domestic consumption	1.8	1.9	3.1	–9.7	–0.8	–0.6	–5.6	–1.9	1.6	1.7	2.6	3.6	4.2
Private consumption	0.4	1.2	1.2	0.5	0.7	0.0	–1.4	–2.3	1.0	1.2	2.1	1.0	1.1
Government consumption	0.7	0.5	0.9	0.4	–0.1	–0.1	–0.5	–0.4	–0.2	0.4	0.5	0.1	0.5
Gross fixed capital formation	0.7	0.9	2.0	–6.5	–3.2	–1.1	–1.8	0.6	0.2	–0.3	–0.7	1.9	2.0
Changes in inventories	0.0	–0.7	–0.9	–4.0	1.9	0.6	–2.0	0.2	0.5	0.3	0.7	0.6	0.6
External trade balance (goods and services)	2.3	2.1	0.2	1.9	2.0	1.3	3.0	0.8	1.4	0.6	0.5	1.3	0.3
Exports of goods and services	5.6	6.2	2.8	–11.0	5.8	4.4	0.4	2.2	4.2	3.8	5.0	8.4	6.0
Imports of goods and services	–3.2	–4.1	–2.7	12.8	–3.8	–3.1	2.5	–1.4	–2.9	–3.2	–4.5	–7.0	–5.7

Source: SI-STAT Data Portal – Economy – National Accounts, 2019.

Figure: GDP



Source: Eurostat Portal Page – National Accounts, 2019.
Note: * Data for NMS-12 are a non-weighted average for countries that entered the EU in 2004 or later, except Slovenia, which is presented separately.

[1] The start-up of production of a new car model in the middle of 2017.
[2] Those that joined the EU in 2004 or later.

General government debt 1.3

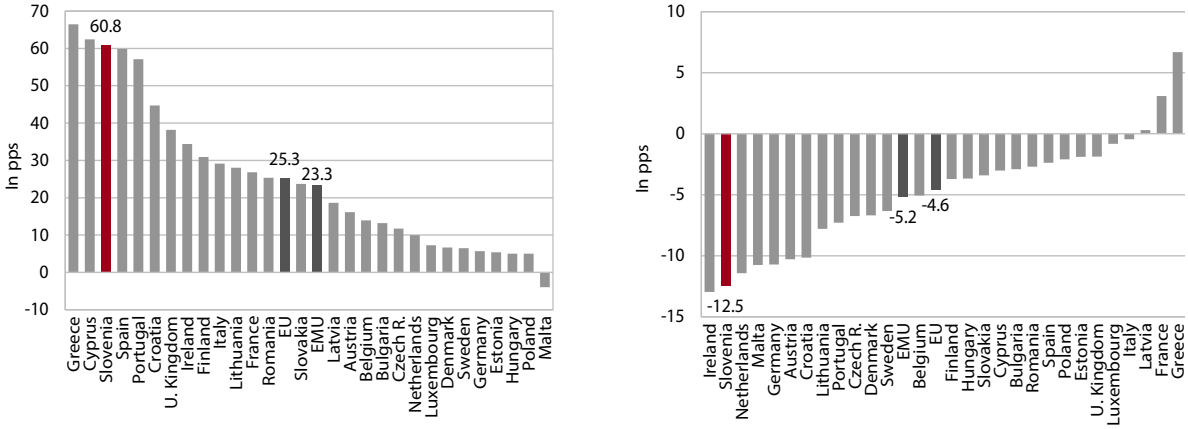
The improvement of the general government balance in circumstances of high economic growth has been reflected in a rapid decline in the general government debt as a share of GDP in recent years. The increase in Slovenia's indebtedness since 2008, one of the largest in the EU, amid double-dip recession and many years of persistently high general government deficits and owing to one-off factors, came to a halt in 2015. Since then the debt-to-GDP ratio has been rapidly falling (also on an international scale), the pace of reduction being even faster than required by the Stability and Growth Pact for the transition period (2016–2018) following the abrogation of the excessive deficit procedure. The debt-to-GDP ratio has declined under the influence of the improvement in the primary balance (in surplus); the contribution of economic growth – which exceeded the counter-effect of interest expenditure in the last three years – has also been favourable. In nominal terms, debt has remained unchanged for several years, partly on account of the strengthening of liquidity reserves[1] for the pre-financing of liabilities in favourable international financial market conditions. In such circumstances and due to active debt management, which continued to involve buy-backs of dollar-denominated bonds with high interest rates issued during the crisis, the implicit interest rate dropped to 2.9% in 2018 (2008: 5.7%).

Table: Consolidated general government debt and breakdown of annual debt change, Slovenia

	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	SDS 2030 target
In EUR billion													
General government	7.7	8.3	12.5	13.9	17.2	19.4	25.5	30.2	32.1	31.8	31.9	32.2	
As a % of GDP													
General government	26.3	21.8	34.6	38.4	46.6	53.8	70.4	80.4	82.6	78.7	74.1	70.1	60.0
In pps													
Debt change, of which	–0.5	–1.0	12.8	3.8	8.2	7.2	16.6	10.0	2.2	–3.9	–4.6	–4.0	
1. Primary balance	–0.2	0.3	4.5	4.0	4.8	2.0	12.1	2.3	–0.4	–1.1	–2.5	–2.6	
2. Snowball effect	0.1	–0.6	2.3	1.6	1.3	3.1	2.3	0.7	0.7	–0.1	–2.3	–2.7	
- Interest payments	1.5	1.1	1.3	1.6	1.9	2.0	2.6	3.2	3.2	3.0	2.5	2.0	
- Effect of GDP growth	–1.0	–0.7	1.8	–0.4	–0.2	1.3	0.6	–2.0	–1.8	–2.5	–3.6	–3.0	
- Effect of inflation*	–0.4	–1.0	–0.8	0.3	–0.4	–0.2	–0.9	–0.5	–0.8	–0.6	–1.2	–1.6	
3. Stock–flow adjustments**	–0.5	–0.8	5.9	–1.8	2.3	2.1	2.2	7.0	2.0	–2.8	0.3	1.5	

Source: SI-STAT Data Portal – Economy – National Accounts – General Government Accounts – Main Aggregates of the General Government, March 2019.
Notes: * Measured by the GDP deflator. ** The change in the debt-to-GDP ratio, which is not a consequence of the primary balance or the snowball effect (loans, currency, deposits and other liabilities). Some calculations may not add up to total due to rounding.

Figure: Change in the general government debt in 2008–2015 (left) and 2015–2018 (right)



Source: SI-STAT Data Portal – Economy – National Accounts – General Government Accounts – Main Aggregates of the General Government, March 2019. For other EU countries, Ameco database, the European Commission, Autumn Forecast 2018.

[1] Investment of the treasury single account reached EUR 6.4 billion (14.1% of GDP) at the end of December 2018.

General government balance 1.4

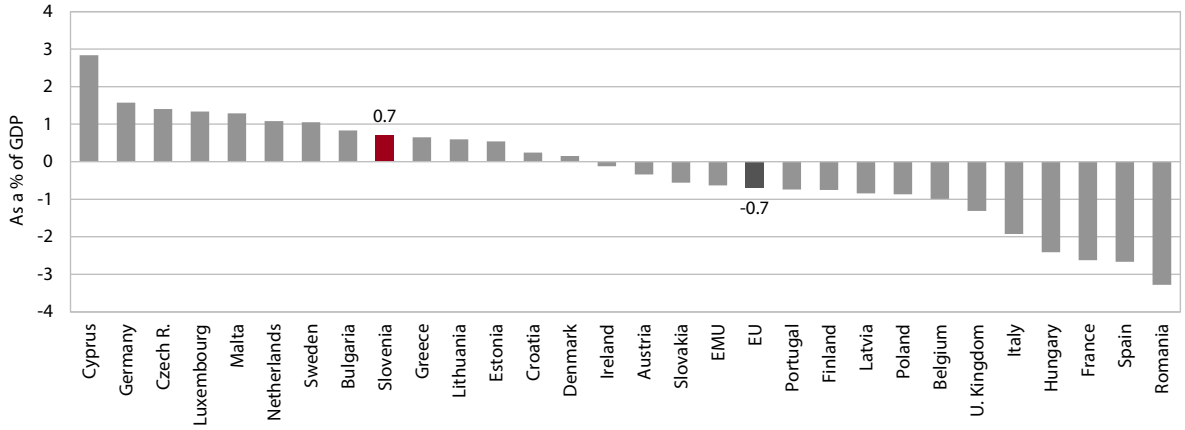
In 2018 the general government budget was in surplus. Slovenia, which was one of the EU countries that took measures for mitigating the growth of general government deficit during the crisis and for its gradual reduction with a delay of several years, significantly improved its fiscal position[1] in the five years to 2018. The steady improvement in Slovenia's balance after 2013, the year when the general government deficit was at its highest due to the economic crisis, can be attributed to stabilisation measures, improved economic conditions and measures for increasing revenue and containing expenditure.[2] The majority of the increased revenue after 2013 arises from higher revenues from taxes (particularly value added tax, personal income tax and corporate income tax) and somewhat less from social contributions. General government revenue from property income also doubled. On the expenditure side, amid more favourable economic conditions, temporary austerity measures began to be relaxed gradually in recent years, particularly in the areas of social benefits and transfers and compensation of employees. This was reflected in stronger growth in primary expenditure in 2017 and 2018, when investment activity also started to rebound. Meanwhile, interest expenditure dropped notably, this as a result of low interest rates and active debt management. The structural deficit, having totalled around 4.2% of GDP in 2008–2011, the most since 2000, was close to the balanced position in 2018.[3]

Table: General government revenue, expenditure and balance (ESA 2010), Slovenia, as a % of GDP

	2000	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Revenue	42.5	43.6	42.5	42.4	43.6	43.3	44.5	44.8	44.4	44.9	43.4	43.2	43.0
Expenditure	46.1	44.9	43.9	48.2	49.3	50.0	48.5	59.5	49.9	47.7	45.3	43.2	42.3
Balance	–3.6	–1.3	–1.4	–5.8	–5.6	–6.7	–4.0	–14.7	–5.5	–2.8	–1.9	0.0	0.7
Primary balance	–1.3	0.2	–0.3	–4.5	–4.0	–4.8	–2.0	–12.1	–2.3	0.4	1.1	2.5	2.6

Source: SI-STAT Data Portal – Economy – National Accounts – General Government Accounts – Main Aggregates of the General Government, March 2019.

Figure: General government balance, 2018



Sources: For Slovenia: SI-STAT Data Portal – Economy – National Accounts – General Government Accounts – Main Aggregates of the General Government, March 2019; for other EU countries: Autumn Forecast 2018, Ameco database (European Commission).

[1] According to the Autumn Forecast of the European Commission for 2018, the fiscal position still records a deficit in the EU on average, particularly in some larger countries (Spain, France and Italy).
[2] For a more detailed description of measures, see Development Report 2018.
[3] Estimates of the structural balance on the basis of SURS data, March 2019, and output gap estimates, Spring Forecast of Economic Trends, IMAD, March 2019.

Current account of the balance of payments and net international investment position 1.5

The surplus of the current account of the balance of payments in 2018 was the highest to date. It totalled EUR 3.2 billion (7.0% of GDP). The current account surplus recorded in Slovenia since 2011 reflects private sector deleveraging (especially during the crisis) and increased saving (particularly in the last few years) amid a still relatively low level of domestic investment. The growth of the surplus can be attributed to favourable conditions internationally and to the improved competitive position of Slovenian exporters, amid modest growth in domestic spending. The surplus also reflects the lower deficit in current transactions of the government sector, which is mainly related to fiscal consolidation. Among the current account sub-balances, the surplus in trade in services is widening further, while the surplus in trade in goods started to decline in 2018 following several years of growth due to faster growth in imports than exports, this related to a deterioration in the terms of trade. The deficit in primary income is narrowing gradually as a result of lower debt-servicing costs, while the deficit in secondary income is relatively stable.

The excess of aggregate savings over investment is reflected in both an increase in external assets and a decline in external liabilities; Slovenia's international net investment position has therefore been improving gradually since 2013. The improvement has been attributable primarily to the net outflow of financial assets in the form of portfolio investment. Commercial banks and mutual and pension funds are stepping up financial investment in foreign debt securities on international financial markets. The Bank of Slovenia has been buying securities based on its investment decisions and in the framework of non-standard monetary policy measures (under the Asset Purchase Programme) coordinated at the level of the Eurosystem and financed through money issuance. Government liabilities to foreign portfolio investors are also declining. Inward FDI flows have been rising in the last few years, partly on account of privatisation, and exceed those of outward FDI flows. Net external liabilities are also higher in the segment of other investment, this as a consequence of the withdrawal of BoS deposits from accounts abroad and higher liabilities within the Eurosystem. The analysis of changes in Slovenia's international investment position shows that the improvement in the net financial position is mainly the result of current account surpluses and the related net capital outflows.

In 2018 Slovenia recorded a negative net financial position in the amount of 26.7% of GDP, which is already considerably below the indicative threshold of external imbalances (35% of GDP).[1] The threshold continues to be exceeded most markedly by the euro area countries that experienced the severest sovereign debt crises (Spain, Portugal, Cyprus, Greece and Ireland).

Table: Slovenia's international investment position, as a % of GDP

	2000	2005	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1 Debt claims	39.4	67.3	77.3	71.9	74.5	72.3	72.0	72.9	72.3	84.4	84.7	82.1	79.3	78.6
2 Equity claims	2.4	12.5	22.1	17.3	20.2	20.6	19.1	20.1	19.8	20.8	24.1	23.6	21.7	20.3
3 Total claims (1+2)	41.8	79.8	99.4	89.2	94.8	92.9	91.0	93.0	92.1	105.2	108.8	105.7	101.1	99.0
4 Gross external debt	43.1	70.4	101.5	106.4	115.2	116.2	112.9	118.8	114.9	125.7	120.0	111.0	101.9	92.5
5 Equity liabilities	10.4	20.2	23.4	22.1	23.2	23.8	23.3	24.3	24.3	25.2	28.4	31.5	31.4	33.2
6 Total liabilities (4+5)	53.5	90.6	124.9	128.5	138.4	140.0	136.2	143.0	139.2	150.9	148.4	142.5	133.3	125.7
7 Net external debt/claims (1–4)	–3.7	–3.1	–24.2	–34.5	–40.7	–43.9	–41.0	–45.9	–42.6	–41.4	–35.3	–29.0	–22.5	–13.8
8 Net equity debt/claims (2–5)	–8.0	–7.7	–1.3	–4.8	–2.9	–3.2	–4.2	–4.2	–4.5	–4.4	–4.3	–7.8	–9.7	–12.9
9 Net financial position (7+8)*	–11.7	–10.8	–25.5	–39.4	–43.6	–47.2	–45.2	–50.1	–47.2	–45.8	–39.6	–36.8	–32.3	–26.7

Source: Bank of Slovenia, 2019; calculations by IMAD.
Note: * A negative (positive) sign in the balance concerned indicates a net debt (credit) external financial position.

[1] MIP Scoreboard: A broad set of indicators for early detection of macroeconomic imbalances (2018)

Financial system development 1.6

Slovenia has a wide gap with the EU average in financial system development; since the onset of the crisis, it has widened particularly in the areas of the capital market and banking system. Growth in financial sector development has not followed economic growth in recent years, meaning that the values of financial system development indicators dropped further. The decline in the banking system's total assets has come to a halt. The volume of corporate loans is still falling at a moderate pace, but this decline has slowed following the intense corporate deleveraging between 2011 and 2016. New lending strengthened somewhat at the end of 2018 but remains low. On the asset side, growth in the banking system's total assets mainly stems from lending to households; on the liability side, non-banking sector deposits are on the rise, particularly overnight deposits, which we consider to be a consequence of the low level of deposit interest rates. The development gap regarding the capital market is even wider. After the onset of the financial crisis, Slovenia's capital market shrank considerably and plays no significant role in financing the economy. Market capitalisation increased by approximately one-fifth in 2018, but only as a consequence of a one-off event,[1] without which market capitalisation would have been 3.1% lower.

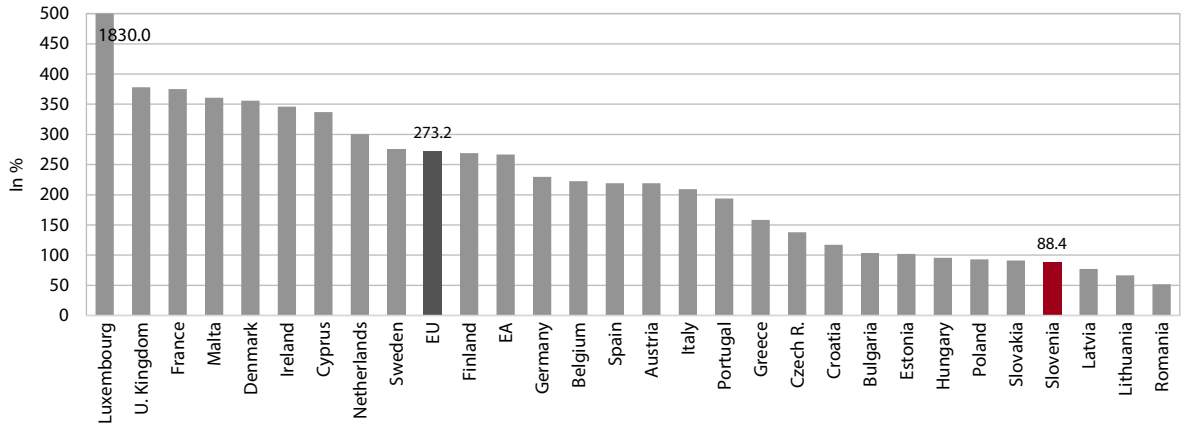
Slovenia has the smallest development gap in the insurance sector. During the crisis, the value of this indicator improved somewhat, which is related to the structure of insurance premiums, where non-life insurance premiums, which are less sensitive to cyclical movements, dominate. In the period of economic growth, the indicator value dropped slightly again and remains just above 5%. In the structure of insurance premiums, Slovenia has the widest gap with the EU average in the share of life-insurance premiums, which, at 15% of GDP, is less than one-third of the EU average.

Table: Indicators of financial system development in Slovenia and the EU

	2000	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Banks' total assets, as a % of GDP													
Slovenia	84.3	103.1	129.1	147.7	146.2	142.1	140.8	127.8	115.9	107.0	99.6	94.1	88.4
EU	233.9	293.7	332.2	348.8	346.7	350.8	337.4	312.3	308.4	292.1	289.0	278.8	273.2
Insurance premiums, as a % of GDP													
Slovenia	5.0	5.3	5.3	5.7	5.8	5.6	5.6	5.5	5.2	5.1	5.1	5.1	N/A
EU-25*		8.7	8.2	8.7	8.7	8.2	8.2	8.3	8.4	8.4	8.2	8.1	N/A
Market capitalisation of shares, as a % of GDP													
Slovenia	17.6	22.9	22.3	23.4	19.4	13.2	13.6	14.3	16.5	14.2	12.4	12.3	13.8
EU	95.6	90.2	42.4	56.9	64.8	56.9	60.9	68.4	69.1	74.4	76.1	78.1	62.8

Sources: Financial Stability Report (various volumes); Annual Statistical Report (Ljubljana Stock Exchange – various volumes); Statistical Insurance Bulletin (Slovenian Insurance Association – various volumes); InsuranceData at http://www.insuranceeurope.eu/insurancedata; European Banking Sector Facts and Figures 2015 (EBF); Company files (London Stock Exchange – various volumes); European Securities Exchange Statistics (Federation of European Securities Exchanges); National Accounts (EUROSTAT); National Accounts (SURS), 2016.
Note: * The indicator of insurance premiums (as a % of GDP) does not include data for the Baltic states; N/A – data not available.

Figure: Banks' total assets as a % of GDP, 2018



Sources: BoS, ECB, SURS, Eurostat.

[1] The shares of one of the banks were listed on the Ljubljana Stock Exchange.

Regional variation in GDP per capita 1.7

GDP per capita is the highest in Osrednjeslovenska, the region that exceeds the Slovenian average by more than 40%. Osrednjeslovenska is the region with the most jobs (more than one-third of all in Slovenia) and, consequently, high daily commuter flows, which raises its GDP per capita. The Slovenian average is also exceeded in Obalno-kraška, which is one of the regions that were most affected during the crisis but also the one that has improved its position the most since 2014. Jugovzhodna Slovenija is also moving closer and closer to the average – it had the highest nominal GDP growth of all regions in 2017. Zasavska, at the tail end of regions for a number of years, exceeded the Slovenian average only slightly in 2017 despite its above-average GDP growth.

In 2017 the western cohesion region exceeded the EU average in terms of GDP per capita for the first time since 2011. The regions that widened their gaps with the EU average in GDP per capita the most during the crisis are Osrednjeslovenska, Obalno-kraška and Zasavska. In the last two years under review, GDP was again rising across all regions, the fastest in the regions of Zahodna Slovenija, which had experienced a relatively greater decline in economic activity in the first years of the crisis. The gaps with the EU average are therefore narrowing. In 2017 Zahodna Slovenija exceeded the EU average again, while Vzhodna Slovenija (at 70%) remained among the less developed EU regions.[1] Among the statistical regions, only Osrednjeslovenska exceeds the EU average, but it is still at the level from 2011.

Since 2015 regional disparities have again been widening slightly. The relative dispersion of GDP per capita[2] had been the highest in 2010, then decreased until 2015 before rising slightly in the last two years. It is still lower than in the pre-crisis period yet higher than its 2000 low (19.6%). The ratio between the regions with the highest and lowest GDP per capita is 2.6:1 and this is slowly yet persistently rising. It was smallest in 2000, at 2:1.

Table: Regional GDP, Slovenia

Cohesion (NUTS 2)/ statistical region (NUTS 3)	GDP per capita								Nominal GDP growth, in % 2017/2016	GDP structure, in % 2017
	Slovenia = 100							EU = 100		
	2008	2010	2013	2014	2015	2016	2017	2017		
Slovenia	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**85**	**6.5**	**100.0**
Zahodna Slovenia (NUTS 2)	**121.2**	**121.2**	**119.4**	**119.0**	**119.1**	**119.5**	**119.7**	**102**	**5.2**	**56.5**
Obalno-kraška	107.1	108.7	98.3	97.4	100.1	101.8	102.1	87	4.7	5.6
Goriška	95.4	93.6	90.7	90.6	91.6	92.0	91.9	78	5.7	5.2
Gorenjska	84.5	82.8	85.9	87.7	87.7	88.3	88.9	76	6.8	8.8
Osrednjeslovenska	145.1	145.3	143.4	142.0	141.1	141.1	141.1	120	10.4	36.9
Vzhodna Slovenia (NUTS 2)	**82.0**	**81.7**	**82.9**	**83.1**	**83.0**	**82.6**	**82.4**	**70**	**4.9**	**43.5**
Primorsko-notranjska	72.3	70.5	70.6	72.0	73.9	73.8	72.1	61	3.8	1.8
Jugovzhodna Slovenia	96.6	95.2	95.0	96.2	96.4	94.9	98.3	84	4.0	6.8
Posavska	80.1	81.6	84.3	84.2	83.7	82.7	83.2	71	6.0	3.0
Zasavska	60.6	61.0	59.1	56.7	54.1	53.6	52.4	45	7.0	1.5
Savinjska	89.5	90.6	91.6	91.3	92.0	92.2	91.5	78	7.2	11.3
Koroška	76.7	74.2	79.7	80.1	80.8	80.7	79.6	68	6.2	2.7
Podravska	83.8	82.5	82.8	83.3	82.8	82.0	80.9	69	7.2	12.6
Pomurska	63.4	64.2	68.5	68.4	67.1	67.6	67.2	57	7.0	3.7
Dispersion of GDP per capita (NUTS 3)	**23.1**	**23.8**	**22.2**	**21.7**	**21.4**	**21.6**	**21.7**			

Source: SI-STAT Data Portal – Economy – National Accounts – Regional Accounts, 2018, Eurostat – General and Regional Statistics, 2019; calculations by IMAD.

[1] Less developed regions are defined as NUTS level 2 regions where GDP per capita is less than 75% of the EU average.

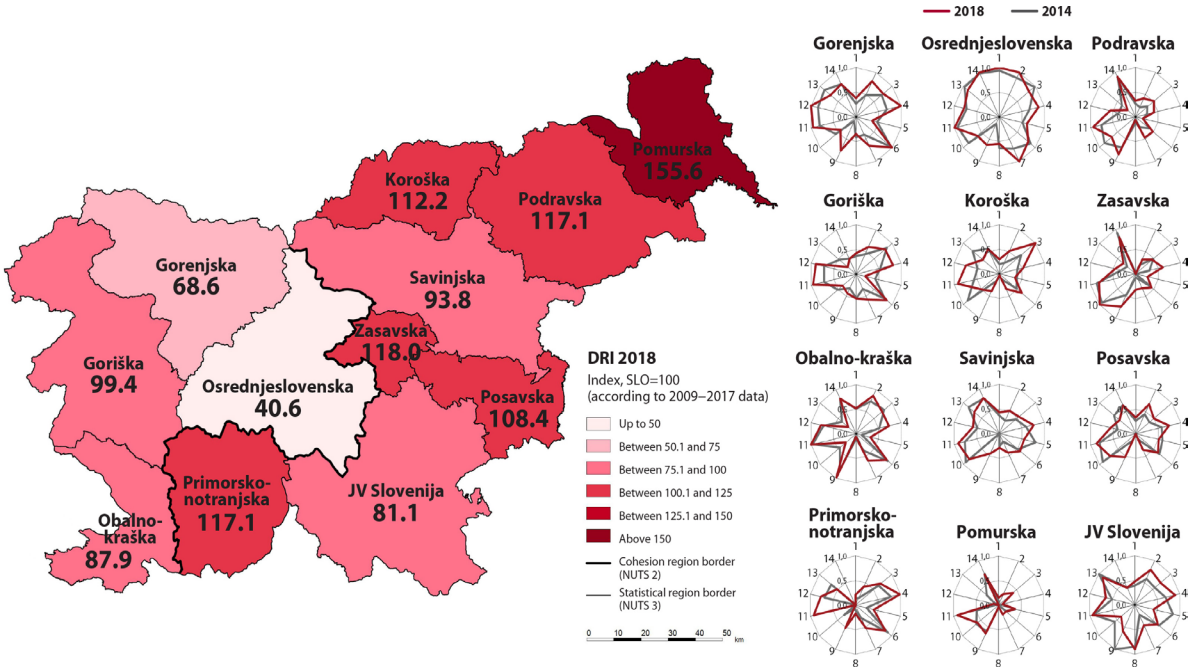
[2] This is one of the indicators of regional disparities. It is measured as the sum of the absolute differences between regional and national GDP per capita weighted by the share of population. It is expressed as a percentage of national GDP per capita.

The development risk index for regions 1.8

The risk to development as measured by the development risk index (DRI)[1] is higher in the regions of Vzhodna Slovenija. It is the highest in the Pomurska region, where it exceeds the Slovenian average almost by 56%. In the Osrednjeslovenska region, it is almost four times smaller, at 40% of the Slovenian average. Osrednjeslovenska has the highest (or almost the highest) values on most indicators, except for investments in fixed assets as a share of GDP and the proportion of protected areas, where its values are somewhat lower, yet still above average. Among the regions of Vzhodna Slovenija, the risk to development is the lowest in Jugovzhodna Slovenija, at just over 80% of the Slovenian average. Closest to the average index is Goriška, although an overview of individual indicators shows somewhat greater deviations from the Slovenian average. This region stands out in a negative way particularly in the areas of population ageing and population density.

Interregional disparities rose somewhat relative to 2014.[2] The DRI values in the Gorenjska and Primorsko-notranjska regions dropped by more than 10 pps. Both regions made progress particularly in the areas of employment, productivity and unemployment. The damage caused by natural disasters was also smaller, particularly in Primorsko-notranjska. The largest increase in the DRI value (by more than 12 pps) was recorded in Jugovzhodna Slovenija, primarily owing to lower investments in fixed assets as a share of GDP, a higher share of protected areas and a lower share of treated wastewaters. The changes in the DRI index values had no significant impact on the regions' rankings or interregional disparities (the coefficient of variation rose from 27% to 27.8% and the ratio between the two extreme regions from 1:3.3 to 1:3.8 (Pečar, 2018)).

Map: Development risk index for regions, 2018



Sources: SMARS, SI-STAT Data Portal, SURS, MOP, Institute of the Republic of Slovenia for Nature Conservation, Administration for Civil Protection and Disaster Relief, MGRT, DRI Investment management; calculations and mapping by IMAD.

[1] The DRI is a composite indicator for monitoring regional development. It encompasses the following indicators: 1) GDP per capita, (2) gross value added per employee, (3) disposable income per capita, (4) the employment rate (20–64 years), (5) investments in fixed assets as a share of GDP, (6) the registered unemployment rate for young people (15–29 years), (7) the proportion of the population with tertiary education (25–64 years), (8) gross domestic expenditure on R&D as a share of GDP, (9) the proportion of wastewater treated with secondary and tertiary treatment, (10) the proportion of protected areas in the region, (11) estimated damage caused by natural disasters as a share of GDP, (12) the registered unemployment rate, (13) the population ageing index, and (14) population density. On the basis of the DRI, the regions are ranked according to level of development for the programming period 2014–2020 (Rules, 2014).

[2] According to data available in 2018.

Productivity 1.9

Slovenia's productivity gap with the EU average remains wider than before the onset of the crisis; the pace of renewed convergence seen in the last years has slowed considerably. The decline in *trend* productivity growth is largely related to the absence of capital deepening. In 2000–2008 capital deepening explained half of productivity growth in Slovenia (significantly more than in the EU overall) and was recorded in almost all sectors. In the absence of this factor in the post-crisis period, trend productivity growth has been solely the result of the contribution of total factor productivity, i.e. more efficient utilisation of capital and labour. In the last years, particularly in 2016 and 2017, total productivity growth was again also supported by *cyclical* factors. Before the crisis, the *structural* shift of employment towards sectors with higher (or more rapidly rising) productivity was still relatively strong in Slovenia, while in the last years, total growth has been based on within-sector productivity growth, i.e. productivity growth in individual sectors (see Section 1.2).

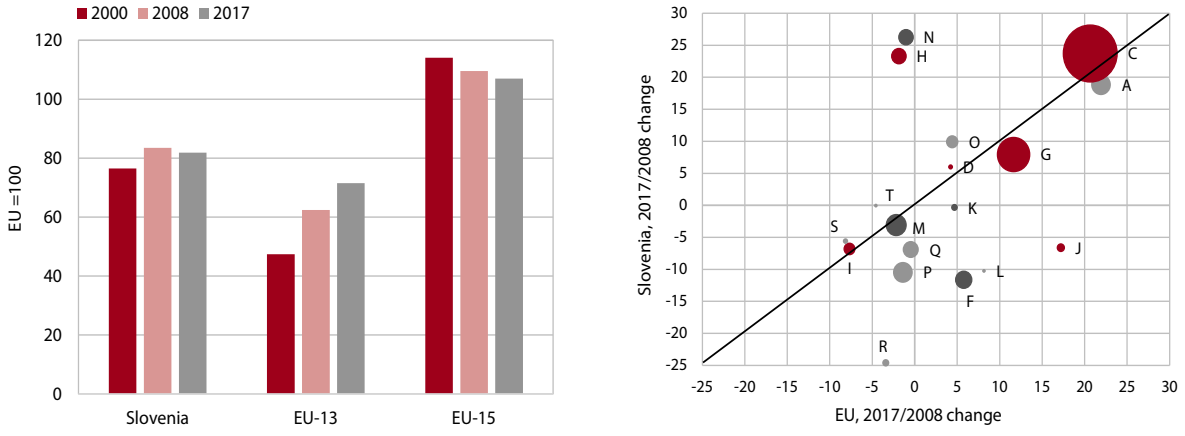
In the business sector, the movement of productivity was largely comparable with the EU average and the level higher than before the crisis; a significant lag is still recorded in construction and ICT activities. Manufacturing, the part of the business sector that is the most exposed to foreign competition, has relatively rapidly offset productivity losses incurred during the crisis, and since 2013 its productivity has mostly been rising faster than in the EU as a whole. More favourable productivity movements than in the EU and in other sectors of the economy were also recorded in transportation (H) and administrative and support service activities (N), particularly in the segment of employment agencies. A significant gap is still evident in construction (which was particularly strongly affected during the crisis), even though. value added per employee rose markedly in 2017 and 2018. Another sector standing out in a negative way in international comparisons is ICT activities, more precisely telecommunications.[1] Total productivity is also being impeded by the non-business part of the economy, which could be due to lower competition. Productivity in these activities is more difficult to measure, however, owing to statistical problems in measuring.[2]

Table: Labour productivity, Slovenia

	2000	2005	2008	2010	2011	2012	2013	2014	2015	2016	2017	2018	SDS 2030 target
Real* productivity growth, in %	2.6	4.5	0.7	3.4	2.4	-1.8	0.0	2.5	1.0	1.2	1.9	1.5	
Productivity level**, EU=100	77	83	84	79	81	80	80	81	81	81	82	N/A	95

Source: SI-STAT Data Portal – National Accounts, 2019; Eurostat Portal Page – Economy and Finance, 2018; calculations by IMAD. * GDP (at constant prices) per employee. ** GDP per employee (in purchasing power standards). Note: N/A – not available.

Figure: Productivity level in the total economy (left) and real productivity growth by sector (right)



Source: Eurostat Portal Page – Economy and Finance, 2019; calculations by IMAD. Note: * The tradable part of the business sector (red): mining (B), manufacturing (C), energy supply (D), public utilities (E), trade (G), transportation (H), accommodation and food service activities (I), and information and communication activities (J); the non-tradable part of the business sector (dark grey): construction (F). financial services (K), professional, scientific and technical activities (M), administrative and support service activities (N); non-business sector (light grey): agriculture (A), real estate (L), public administration (O), education (P), health and social work (Q), arts, entertainment and recreation (R), and other service activities (S). The size of the circles represents the share of persons employed in individual activities in Slovenia in 2017.

[1] In these activities, capital deepening, i.e. capital per person employed (in hours worked), has also been decreasing in the whole period since 2009.
[2] The classification of activities to those where productivity increased (i) faster, (ii) more slowly than or (iii) comparably with the EU average remains unchanged even if 2005 is selected as the base year (this was less marked by cyclical factors than 2008).

Export market share 1.10

The export market share of Slovenian goods on the world market has returned to its pre-crisis peak level. While in 2007 Slovenia met approximately 0.2% of global import demand for goods, in 2008–2012 it was one of the EU countries with the largest market share declines. More than half of the market share decline in that period can be explained by the unfavourable (geographical in particular) orientation of Slovenian exports,[1] although it was also due to the strong deterioration in (cost) competitiveness at the beginning of the crisis. With the rebalancing of price and cost factors and stronger import demand of main trading partners, Slovenian market share has again been rising since 2013, especially since 2016. According to preliminary data, in 2018 the average annual market share growth on the *world market* was still relatively high (3.7%), although negative in the second half of the year, this to a great extent due to the expected year-on-year easing of the otherwise high growth rates in exports to France. Among main trading partners, strong market share growth was recorded in Italy and Switzerland and in Germany, Slovenia's most important market. On the other hand, market share declined in most countries of the former Yugoslavia (for the second consecutive year) and Russia (for the third consecutive year).

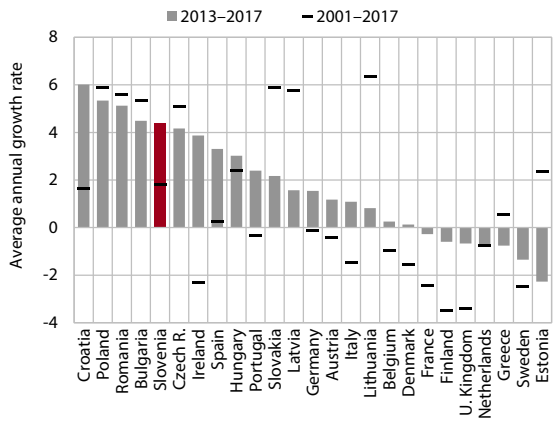
In the absence of the contribution of favourable product specialisation, in 2018 the growth of Slovenia's market share in the EU was based on improved efficiency, but this was declining gradually during the year in most products. In the last 15 years, Slovenia's product specialisation has mostly been unfavourable from the aspect of the composition of global import demand (in the post-crisis years this structural effect was positive in 2014–2016). Data on market share growth in the EU, where Slovenia exports more than 75% of its goods, also show the absence of a favourable impact of product composition in 2018, the 4.1% growth on the EU market being thus based on an increase in efficiency, i.e. an increase in market share of individual products. The quarterly dynamics show that in most major product groups growth rates dropped sharply over the course of the year. This is partly a consequence of the slowdown in the European car industry in mid-2018, which is linked to several other industries and a relatively high share of Slovenian exports. The wearing off of the effect of the introduction of a new production line in the manufacture of vehicles in 2017 had an even greater impact on the dynamics. In 2018 growth rates remained high in machinery specialised for particular industries, scientific and control instruments, and metal waste.[2]

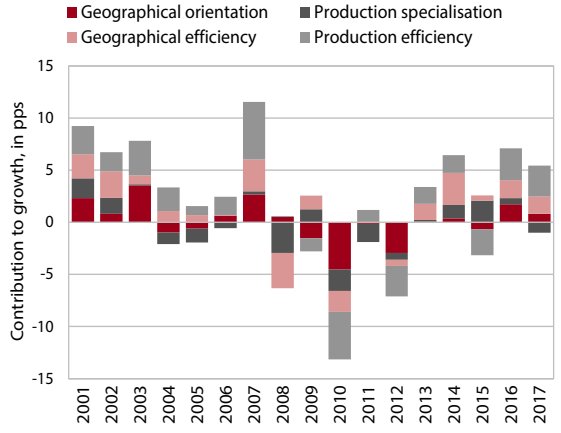
Table: Slovenia's market share in the world and in the EU

	2000	2007	2017	Average annual growth rates, in %			
				2001–2007	2008–2012	2013–2017	2018*
World	0.138	0.195	0.187	5.1	-5.0	4.4	3.7
EU	0.282	0.380	0.434	4.4	-1.4	4.2	4.1

Sources: UN Comtrade, 2019, SI–STAT Data Portal, 2019, Eurostat – International trade in goods, 2019; calculations by IMAD.
Note: * Preliminary data.

Figure: Countries' world merchandise market shares (left) and decomposition of growth in Slovenia's world merchandise market share (right)





Source: United Nations Comtrade, 2019; calculations by IMAD.

[1] Slovenia's above-average orientation of goods exports to markets with modest import demand, particularly EU markets and the markets of the former Yugoslavia.
[2] In addition to these, also in non-ferrous metals and toilet preparations, although in 2018 only that market share in the EU was restored that had been lost in the previous year, and in the second half of the year in petroleum and petroleum derivatives (particularly in Italy) (trading not related to production in Slovenia).

Unit labour costs 1.11

At the level of the economy, there has been no major misalignment between wage growth and productivity growth in recent years. Under the impact of strong wage growth (in 2008 and 2010[1]) and a decline in productivity (2009), Slovenia's cost competitiveness position relative to EU countries deteriorated significantly during the crisis. After the readjustment in 2011–2015, unit labour costs remained more-or-less unchanged in the following three years, at around 2% above the pre-crisis level.

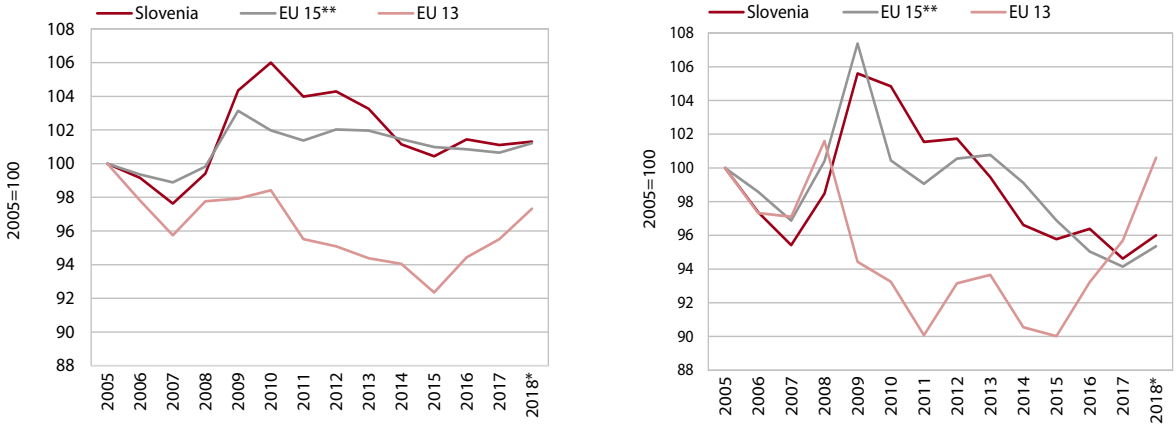
In the more export-oriented part of the business sector, in 2018 cost pressures started to increase gradually. The readjustment of unit labour costs at the beginning of the post-crisis period arose particularly from those parts of the economy that are the most exposed to international competition and foreign demand. By 2014 manufacturing activities had thus already offset the competitiveness losses incurred during the crisis.[2] Signs of a gradual build-up in cost pressures (higher wage growth and stagnant productivity) did start to show last year, but as the movements did not deviate significantly from those in main trading partners, it can be expected that the competitive position of the majority of Slovenian exporters did not deteriorate (notably) in 2018.[3] After a decline in the preceding year, most of the remaining industries and traditional market services recorded moderate growth in unit labour costs in 2018; stronger growth was also seen in ICT activities (all of these being part of the tradable sector of the economy). Unit labour costs in the non-tradable sector, on the other hand, fell last year under the impact of accelerated activity in construction and financial services, thereby reducing the otherwise still wide gap relative to the pre-crisis period and the EU average.

Table: Growth in unit labour costs in Slovenia and the EU

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Slovenia	–0.1	–0.9	–1.5	1.8	5.0	1.6	–1.9	0.3	–1.1	–2.0	–0.7	1.0	–0.3	0.2
EU	–0.7	–0.9	–0.7	0.9	3.3	–1.0	–0.9	0.4	–0.2	–0.6	–0.9	0.0	–0.2	0.6

Source: Eurostat – Economy and Finance, 2019; calculations by IMAD.

Figure: Unit labour costs, entire economy (left) and manufacturing (right)



Source: Eurostat – Economy and Finance, 2019; calculations by IMAD.
Notes: * estimate; ** excluding Ireland.

[1] In 2008 wage growth was a consequence of the adjustment of wages to past high inflation and productivity and the elimination of wage disparities in the public sector; in 2010 it was boosted by the increase in the minimum wage.
[2] Also through adjustments on the labour market (a decline in wages and employment). Similarly, the transportation sector, which is significantly dependent on manufacturing, had also returned to the pre-crisis levels relatively rapidly.
[3] This is also corroborated by the real effective exchange rate deflated by until labour costs or inflation.

Exports of high-technology goods and knowledge-intensive services 1.12

After rising before and during the crisis, the share of high-technology products has been fairly stable in the last five years and somewhat higher than the EU average. The previous decade and the period of the crisis were marked by the restructuring of goods exports towards a higher share of high-technology products amid a concurrent sharp decline in low-technology products. In the years of the economic upturn following the crisis, the shares of both product groups remained close to the levels achieved, which, with regard to the differences in 2000, no longer deviate significantly from the EU average. The share of medium-technology products, which make up the bulk of goods exports, has not changed significantly over the longer term. It dipped during the crisis before strengthening again after 2013, this being the group of products that is highly integrated into global value chains and thus the most vulnerable to fluctuations in foreign demand.

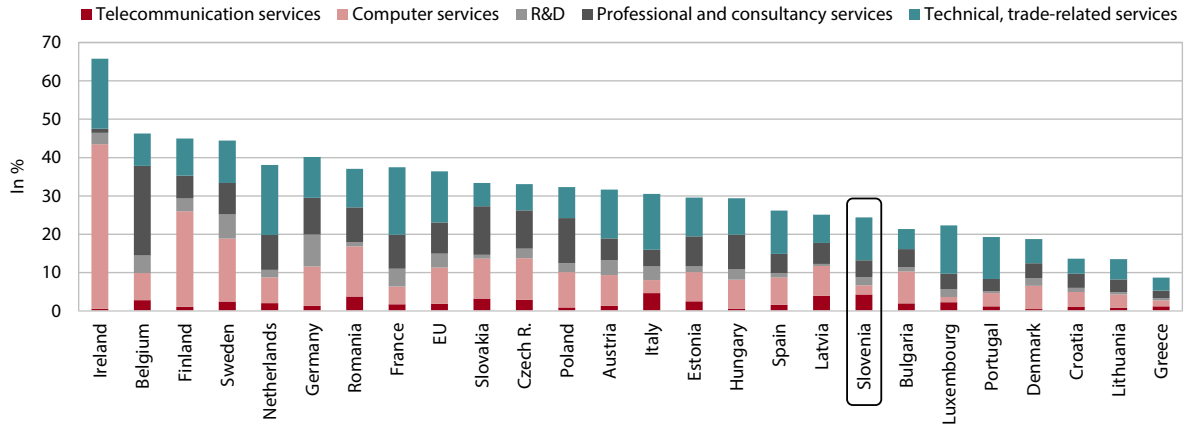
Despite their greater export orientation, the share of knowledge-intensive non-financial market services[1] in total exports of services remains among the lowest in the EU. In 2010 knowledge-intensive services contributed 20.9% to total exports of services, in 2017 4.3 pps more. This increase, however, did not suffice to reduce the wide gap with the EU average, which persisted above 12 pps throughout the period. Most sectors of knowledge-intensive services lagged behind the EU average, particularly computer services (by around 7 pps). A higher share than in the EU was achieved by telecommunication services in particular, but in the last two years their share in total exports of services declined. In 2010–2017 exports of technical, trade-related services increased the most in Slovenia, by 12.3% per year on average. In the EU, meanwhile, exports of information services rose the most during this period, by 15.5% per year. Significantly stronger export growth was recorded particularly in Eastern European Member States (around 20% per year).

Table: Structure of goods exports by factor intensity

		2000	2005	2008	2009	2010	2012	2013	2014	2015	2016	2017
Natural resources	Slovenia	5.3	5.3	6.1	5.6	6.2	5.7	6.1	6.3	6.8	6.5	6.1
	EU	7.1	7.0	7.6	7.7	7.9	8.3	8.8	8.5	7.9	7.5	7.7
Resource-intensive goods	Slovenia	15.2	13.1	13.6	14.1	14.9	16.4	16.7	16.6	15.5	14.9	15.0
	EU	16.3	17.0	17.8	17.3	18.0	19.5	19.2	18.4	17.0	16.6	17.1
Low-technology goods	Slovenia	27.1	23.4	20.8	18.4	18.5	18.1	17.6	18.0	17.9	18.0	17.7
	EU	15.2	14.9	14.7	14.4	14.1	13.8	13.8	14.3	14.5	14.7	14.7
Medium-technology goods	Slovenia	38.1	41.8	41.0	40.7	38.9	36.4	36.0	36.7	37.3	38.5	39.0
	EU	34.9	36.9	36.5	34.5	34.8	35.3	35.4	36.3	37.3	37.9	38.0
High-technology goods	Slovenia	13.1	13.7	16.2	18.5	18.5	19.4	20.0	19.5	19.7	19.6	19.8
	EU	19.8	18.8	16.7	18.8	18.5	17.3	17.0	17.6	18.4	18.7	18.5

Sources: Comtrade UN, SURS, 2019; calculations by IMAD.
Note: The classification of products into individual groups is based on UN methodology (Lall). As the classification does not include all products, the sums of the five product groups for individual countries do not equal 100.

Figure: Share of knowledge-intensive non-financial market services* in total exports of services, 2017



Source: Eurostat – Economy and Finance, 2019; calculations by IMAD.
Note: * Exports of telecommunications, computer and information services (SI) and other business services (SJ). For a more transparent presentation of the results, the share of information services is not shown in the figure, as it is higher than 1% in only four Member States. Data for Ireland and Lithuania are for 2016.

[1] Information and communication activities (J); professional, scientific and technical activities (M) (OECD STI Scoreboard 2013, 2013).

Foreign direct investment 1.13

Since 2014 inward FDI has been rising faster, though still more slowly than in most new EU Member States, while outward FDI has remained modest. The increase in inward FDI is mainly due to accelerated privatisation and the generally higher sales of equity stakes in Slovenian companies. There have also been more expansions of existing foreign-owned companies and new greenfield investments. The results of the 2014–2017 SPIRIT surveys show that in each of the four years more than 35% of the surveyed companies with foreign equity were planning to expand in Slovenia; in 2018 the respective share was 38.2%. Outward FDI, on the other hand, has been rising only modestly since 2014, following a decline in 2010–2013. In 2018 its stock was still significantly lower than its 2009 peak (EUR 6,143 million). The inflows and outflows of equity both rose notably in 2018 relative to 2017 (by 25.5% and 25.8% respectively).

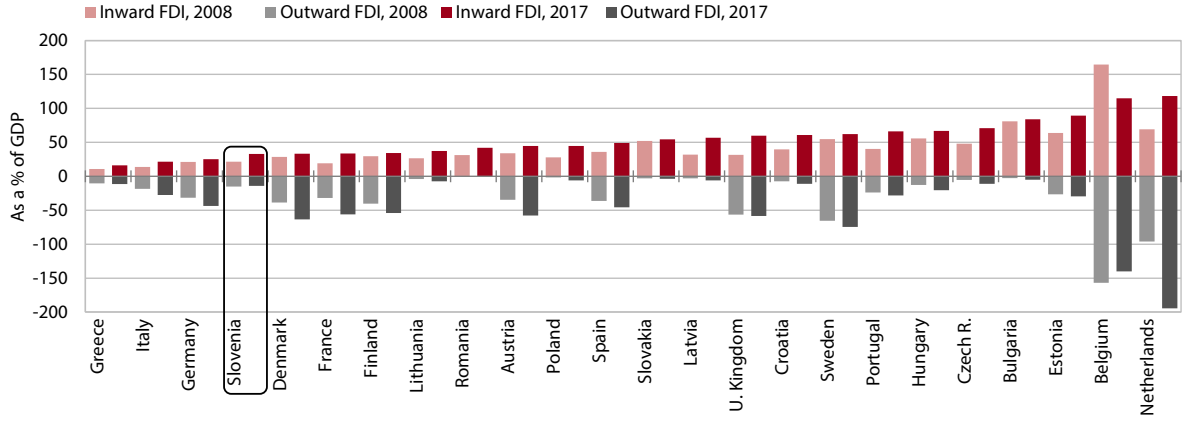
Slovenia remains among the EU countries with the lowest stock of inward FDI as a share of GDP. By 2018 the stock of inward FDI as a percentage of GDP otherwise rose to 31.7% of GDP (which is around 9 pps higher than at the beginning of the crisis), but as only two of the new Member States (Slovakia and Bulgaria) recorded a smaller increase, Slovenia remained one of the EU countries with the smallest FDI stock as a share of GDP. A smaller share than in Slovenia is recorded by Greece, Italy and Germany. Slovenia's outward FDI as a share of GDP dropped from the record 17.0% in 2009 to 12.9% in 2018. Among new EU Member States, Slovenia thus lags only behind Hungary and Estonia in this regard, but both these countries have significantly higher shares.

Table: Flows and stocks[1] of inward and outward FDI[2] in Slovenia

In EUR million	2000	2005	2008	2010	2012	2013	2014	2015	2016	2017	2018
Inward FDI											
Year-end stock	2,567	5,981	8,598	7,983	9,249	8,897	10,202	11,612	12,970	13,675	14,680
Inflow of equity capital[3]	96.3	270.7	380.3	449.9	334.1	441.7	1.436.1	1.344.1	956.0	502.3	630.6
Stock as a % of GDP	11.9	20.5	22.7	22.0	25.7	24.8	27.3	30.0	30.4	31.8	31.7
Outward FDI											
Year-end stock	829	2,777	6,085	6,097	5,710	5,179	5,335	5,508	5,741	5,909	5,894
Outflow of equity capital[3]	54.7	456.0	720.8	181.0	383.9	427.4	133.8	243.9	256.0	180.3	226.9
Stock as a % of GDP	3.8	9.5	16.0	16.8	15.9	14.4	14.3	14.2	14.2	13.7	12.9

Source: Bank of Slovenia, 2019.
Notes: [1] Stocks are calculated by the new BPM6 methodology according to the directional principle used by the Bank of Slovenia since 2014. The stocks calculated according to the new methodology changed significantly owing to changes in the categories taken into account in the calculation. In the case of Slovenia, this holds true particularly for inward FDI: at the end of 2013, the stock of inward FDI amounted to EUR 10,729 million according to the previous and only to EUR 8,926 million according to the new methodology, while the stock of outward FDI totalled EUR 5,121 million according to the previous and EUR 5,172 million according to the new methodology (Direct Investment 2013, 2014). [2] Companies in which an individual foreign investor holds a 10% or higher equity stake. [3] Equity capital without reinvested earnings.

Figure: Stocks of inward and outward FDI, as a % of GDP



Source: UNCTAD FDI/MNE database, 2018.
Note: For better illustration, the figure shows EU countries excluding Cyprus, Malta, Ireland and Luxembourg, which stand out with their very large FDI stocks in comparison with other countries.

Corporate environmental responsibility 1.14

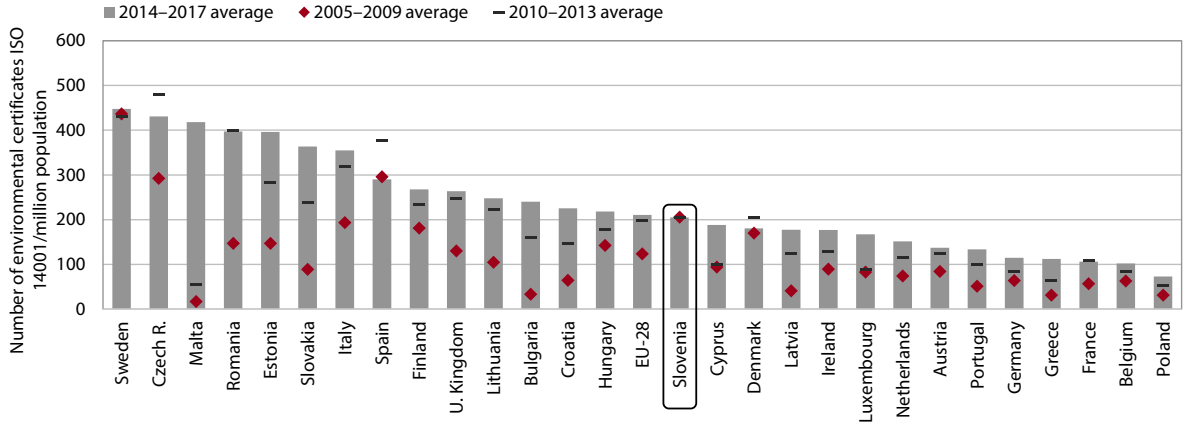
The prevalence of environmental certificates,[1] by which organisations demonstrate that the negative environmental impacts of their business activities are the lowest possible, is roughly on par with the EU average. The number of the otherwise most widely used environmental certificates, ISO 14001, per million inhabitants in Slovenia is similar to the EU average, while the prevalence of Ecolabel (EU Flower) licences is greater and participation in EMAS lower than in the EU as a whole. The number of ISO 14001 certificates has been very close to the EU average for many years. After rising rapidly up to 2006, it mostly hovered around the achieved level in the subsequent ten years. The total number of other environmental certificates (EMAS and EU Ecolabel) has been rising gradually throughout the period. Some EU countries, particularly Germany, Italy, Spain in Austria, where EMAS is the most widespread, are encouraging organisations to participate in EMAS by various incentives. Slovenia is planning to stimulate EMAS uptake through the European LIFE B.R.A.V.E.R. project and include some regulatory relief measures into the existing legislation.[2] The EU Ecolabel (EU Flower) remains more widespread in Slovenia than EMAS. Besides in manufacturing, it is widely used in tourist accommodation. The number of EU Flower licence-holders in this sector is also high in some other Member States, for example France, Italy and Spain.

Table: Number of environmental certificates in Slovenia and the EU, per million inhabitants

		2000	2005	2008	2011	2012	2013	2014	2015	2016	2017
ISO 14001	Slovenia	44.3	208.8	220.9	201.9	200.0	225.9	206.2	173.1	223.3	217.8
	EU	20.4	89.5	143.1	186.6	205.0	210.5	213.7	212.4	216.6	200.5
EMAS	Slovenia	0.0	0.5	0.5	1.5	1.5	0.5	0.5	4.8	4.8	4.8
	EU	7.0	6.2	7.9	8.8	8.8	8.1	8.0	7.7	7.7	7.6
EU Flower	Slovenia	N/A	0.0	1.5	3.4	4.9	7.3	7.3	7.3	7.8	8.7
	EU*	0.1	0.6	1.4	2.0	3.0	4.3	3.8	4.0	3.9	4.2

Sources: Eurostat, ISO, Arso, European EMAS Helpdesk; calculations by IMAD.
Note: Data on EMAS and the Eco-Flower for 2005–2015 and 2000–2010 are available on Eurostat's webpage; data for later periods can be obtained at the European EMAS Helpdesk and at http://ec.europa.eu/environment/ecolabel/news-alerts.html; N/A – data not available. * EU-27 up to 2010.

Figure: Environmental certificates ISO 14001



Sources: Eurostat, ISO; calculations by IMAD.
Note: As data fluctuate significantly over the short term, the countries are arranged according to the average numbers in individual periods.

[1] The international standard ISO 14001 (an environmental management system) and the EU Eco-Management and Audit Scheme (EMAS) are awarded to an organisation's activity. Both certificates have undergone several revisions to adapt to changes in the treatment of the environmental performance of organisations. The revisions also extended the scope of EMAS to organisations outside the industrial sector. The EU Ecolabel or EU Flower, on the other hand, commits the holder to adhere, to the greatest possible extent, to the sustainable environmental protection strategy over the entire life-cycle of its product or service (http://www.arso.gov.si; (http://www.arso.gov.si; www.jrconsultants.co.uk/iso-14001-history/; http://www.greenelement.co.uk/blog/article/a-history-of-iso-14001/).
[2] https://www.stajerskagz.si/povecanje-zakonskih-prednosti-v-podporo-podjetjem-ki-imajo-sistem-emas/.

European Innovation Index 1.15

Slovenia ranks among strong innovators according to the European Innovation Index (EII), but it widened its gap with the EU average in the 2010–2017 period. The EII[1] is a composite indicator measuring performance of national innovation systems in EU countries in four areas: (1) framework conditions for innovation activity external to the enterprise, (2) public and private investment in innovation activities, (3) enterprises' innovation activities, and (4) the impacts of all these innovation activities on employment and sales. On the basis of 27 indicators, countries are classified into four innovation performance groups, from the most to the least innovative. Slovenia is the only Central European country to be ranked in the group of strong innovators, i.e. countries with innovation performance between 90% and 120% of the EU average from 2010.[2] With an EII value rising more slowly in Slovenia than the EU average,[3] Slovenia widened its gap with the best performing countries during this period.

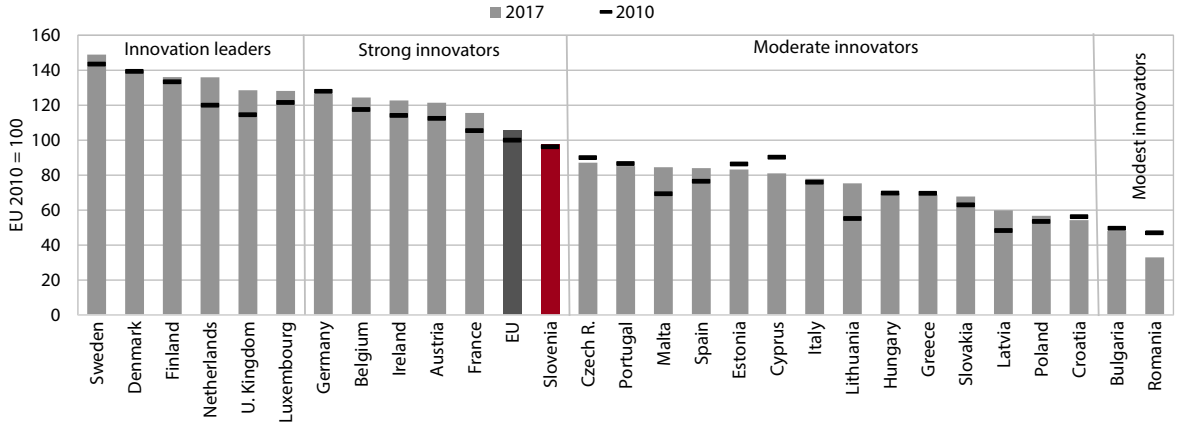
In comparison with the EU average, Slovenia's innovation system is strongest in human resources and business investment in R&D, while it is relatively weakest in public investment in R&D and the impacts of innovation activities. Looking at individual indicators, in 2017[4] Slovenia exceeded the EU average particularly in international scientific co-publications, the number of new doctors of science, the percentage of the population aged 25–34 with tertiary education, and the share of business sector expenditure in R&D expenditure. Its greatest weaknesses relative to the EU are the low values of the following indicators: R&D expenditure in the public sector, venture capital investments (which are important particularly for high-growth high-technology enterprises) and knowledge-intensive services exports (see Indicator 1.14).

Table: European Innovation Index

	2010	2011	2012	2013	2014	2015	2016	2017	SDS 2030 target
Slovenia (index EU 2010 = 100)	96.2	98.4	95.7	96.3	98.0	97.1	98.1	97.6	>120 (ranking among innovation leaders)*
Slovenia (index EU = 100)	96.2	98.1	96.8	96.4	98.2	95.3	93.9	92.2	
Slovenia	0.459	0.469	0.456	0.459	0.467	0.463	0.468	0.465	
EU	0.477	0.478	0.471	0.476	0.476	0.485	0.498	0.504	

Source: European Innovation Scoreboard 2018, 2018.
Note: * Innovation leaders are countries with innovation performance higher than 120% of the EU average recorded in 2010. In 2017 innovation leaders had EII performance scores between 0.611 and 0.710.

Figure: European Innovation Index



Source: European Innovation Scoreboard 2018, 2018.

[1] The methodology of calculating the EII was changed several times in accordance with development trends and priorities of the EU innovation policy, for the last time in 2017 (see the European Innovation Scoreboard 2017, 2017).
[2] Innovation leaders are the countries whose innovation performance is higher than 120% of the EU average in 2010, moderate innovators are those with innovation performance between 50% and 90% of the EU average, while modest innovators are those with performance levels below 50% of the EU average (European Innovation Scoreboard 2018, 2018).
[3] In 2010–2017 Slovenia made some progress only with regard to the EU average in 2010, but the SDS target by 2030 is to exceed this average by 20%.
[4] The data for calculating the EII reflect the situation on the cut-off date of 25 April 2018. The data for the last year (2017) for individual indicators therefore relate to actual performance in 2014, 2015, 2016 or 2017, depending on availability.

R&D expenditure and number of researchers 1.16

After a long period of growth, R&D expenditure has been shrinking since 2014 and was below the EU average in the last two years. The EU average is significantly exceeded in Jugovzhodna Slovenija and the Osrednjeslovenska region; in the former as a consequence of intense R&D investment of the pharmaceutical industry, in the latter also due to the high concentration of research institutions. In 2017 the decline in R&D investment of the public sector came to a halt. Its volume rose by 12.3%, thus compensating for around one-quarter of the decline in 2012–2016. The business sector, the main driver of growth up to 2015, has since reduced investment by 17.1%. The decline in business investment on R&D is a consequence of several factors, such as, in 2013 and 2014, the termination of the financing of R&D in excellence, competence and development centres, which were co-financed by EU funds. After 2015, the amount of R&D tax relief claims also started to decline.[1] Despite the fall in business expenditure on R&D, its share in total R&D expenditure (2017: 63.0%) remains high in comparison with the EU average (2016: 56.6%). Since 2013, R&D expenditure per capita has also been falling in Slovenia, unlike in the EU. In 2017 it totalled around 70% of the EU average in the business and only 46% of the EU average in the public sector.

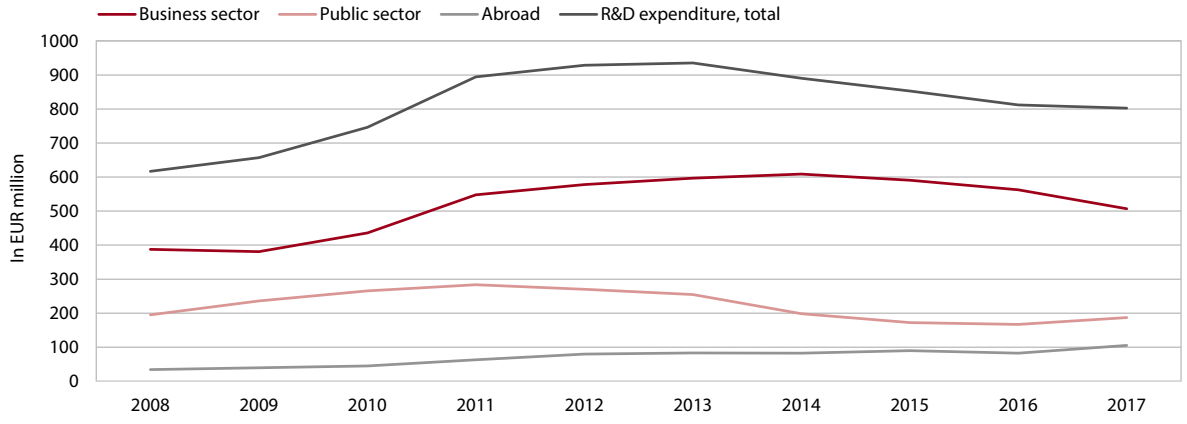
In 2008–2016 the number of researchers[2] rose considerably as a result of growth in the business sector (by 46.8%), where the majority of researchers are employed. Overall, 61.8% of all researchers worked in the business sector in 2016, which is significantly more than on average in the EU average (51.1%) and in some more innovation-active EU Member States (Sweden, the Netherlands and Austria). Owing to methodological changes,[3] the business sector recorded an exceptionally large increase in the number of researchers in 2017. With public sector expenditure on R&D being reduced up to 2016, the trend of decline in the public sector has not yet come to a halt – in 2016 the number of public sector researchers was around 330 lower than in 2008. With a continuing outflow of highly qualified staff[4] and only slow replacement of the retiring older generations of researchers, the problem of insufficient number of public sector researchers may worsen in the future.

Table: R&D expenditure, as a % of GDP

	2000	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Slovenia	1.36	1.41	1.63*	1.82	2.06	2.42*	2.57	2.58	2.37	2.20	2.01	1.86*
EU	1.77	1.74	1.83	1.93	1.92	1.97	2.00	2.02	2.03	2.04	2.04	2.07

Sources: Eurostat Portal Page – Science and Technology – Research and Development, 2018; SI-STAT Data Portal, 2018.
Notes: Data for the EU are Eurostat estimates. * The breaks in the time series in 2008 and 2011 are due to the higher number of reporting units in the business sector. The break in 2017 is a consequence of the harmonisation of data with the revised, internationally recognised methodology, the OECD's Frascati Manual (Research and Development Activity, Slovenia, 2017 – provisional data, 2018).

Figure: R&D expenditure by source of funds, Slovenia



Source: SURS, 2018.

[1] Since 2016 Slovenia has exercised better control over R&D expenditures eligible for tax relief on the basis of more accurate instructions, which make it possible for companies to assess if they are eligible for R&D tax relief. In 2017 the amount of R&D tax relief claimed declined by around 10% relative to 2016.
[2] Expressed on a full-time equivalent basis.
[3] With data for 2017, SURS introduced a changed classification of R&D personnel into three occupational categories (researchers, technicians and other supporting staff) instead of the previous five. This is reflected particularly in the business sector, where more employees are now classified as researchers. This led to a break in the time series (see Research and Development Activity, Slovenia, 2017 – provisional data, 2018).
[4] The reasons may include slow career progress, low salaries of younger researchers, outdated research equipment and the decline of public funds for these purposes.

Innovation activity of enterprises 1.17

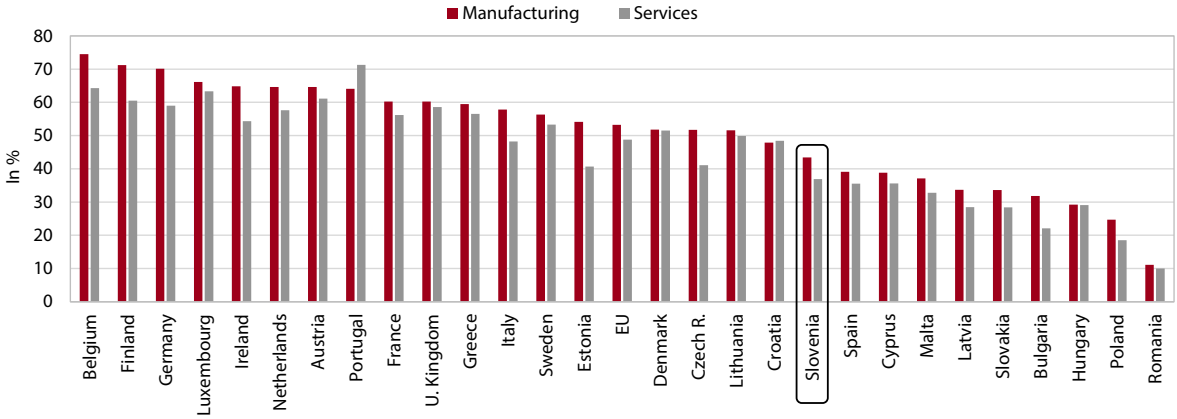
The share of innovation-active enterprises was falling in 2010–2016, so Slovenia's gap with the EU average widened. In 2014–2016 there were 39.8% of innovation-active enterprises (IAEs)[1] in Slovenia, which was a significant regression with regard to the previous three-year period (2012–2014) and the worst result since comparable data have been available.[2] The EU also made very little progress regarding innovation activity, but the most innovation-active Member States increased their lead. Slovenia recorded a decline in the share of IAEs across all enterprise sizes. Among large enterprises, the share of IAEs significantly exceeded the EU average in all periods analysed. The share of innovation-active medium-sized enterprises dropped considerably in the last three-year period, which represents a notable difference from previous periods, when it had exceeded the EU average. The problem remains the low innovation activity of small enterprises and the increasingly wide gap with the EU average. Sales revenues attributable to the introduction of technological innovations tend to be higher in the case of innovations new to the enterprise than those new to the market. In Slovenian IAEs, the share of the former accounted for 10.7% and the share of the latter for 8.2% of total revenues in 2016 (they were around 2 pps higher in manufacturing but much lower in services). Enterprises in manufacturing are traditionally more innovation-active than those in the service sector, but in both the gap with the best performing countries widened over 2010–2016, hovering between 10 and 30 pps, which is reducing their competitiveness. Among service activities, the share of innovation-active enterprises is the largest in computer services (63.2%), but it declined and is significantly lower (by around 10–20 pps) than in leading Member States. The share of IAEs in knowledge-intensive services[3] totalled 53.7% in Slovenia. It was the highest in Portugal (around 20 pps higher). Strengthening innovation activity in these service activities (e.g. ICT services or consultancy services) is also important because of their potential positive impact on innovation capacity in other sectors and thus the competitiveness of the entire economy.

Table: Innovation-active enterprises by enterprise size, as a % of all enterprises

		Total	Small	Medium-sized	Large	Manufacturing	Services
2010–2012	Slovenia	46.5	40.5	62.0	86.9	49.9	43.8
	EU	48.9	45.2	60.5	76.4	51.8	46.8
2012–2014	Slovenia	45.9	39.7	63.1	87.2	49.8	42.2
	EU	49.1	45.0	61.5	78.1	51.3	47.6
2014–2016	Slovenia	39.8	34.0	55.7	82.9	43.4	36.9
	EU*	50.6	46.4	63.2	77.4	53.2	48.8

Sources: Eurostat Portal Page – Science and Technology – Community Innovation Survey, 2019; SURS, 2018.

Figure: Innovation-active enterprises in manufacturing and services, 2014–2016, as a % of all enterprises



Source: Eurostat Portal Page – Science and Technology – Community innovation survey, 2019.

[1] Innovation-active enterprises are enterprises that have introduced one or several technological innovations (i.e. new processes or products, which can be goods or services) and/or non-technological (organisational or marketing) innovations, or enterprises that had on-going or abandoned innovation activities.

[2] A survey on innovation activity that includes a wider set of activities was carried out for the third time, which should be taken into account in comparing and interpreting data for the period before 2010 (see Development Report 2015, p. 122).

[3] These include information and communication activities (J) and professional, scientific and technical activities (M). Enterprises from M activities are significantly less innovation-active than those from J activities.

Intellectual property 1.18

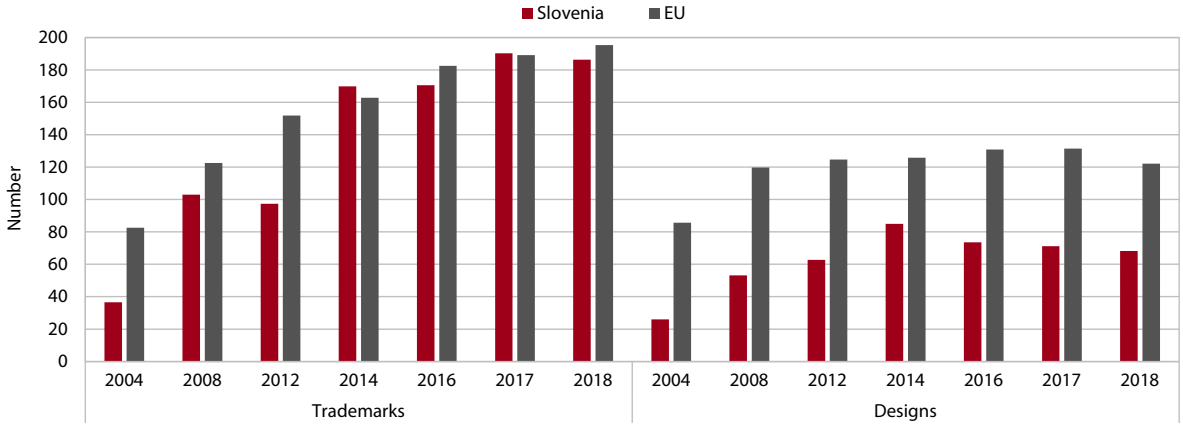
Since the beginning of the crisis, Slovenia has made great progress in terms of EU trademarks, but its gap with the EU average with regard to patents has widened. With regard to the level of patenting activity, as measured by the number of first[1] *patent applications* per million inhabitants, Slovenia ranked around 13th place among EU countries throughout the 2008–2017 period. According to provisional data, Slovenian applicants filed 48 patent applications in 2018, the least since 2003. The intensity of filing patent application is also a reflection of the structure of the economy and technologies[2] used in individual sectors. According to the international WIPO methodology, the most patentable technological fields are medical technology, digital communications, computer technology, and technologies related to electrical energy, machinery and apparatus.[3] More than half of the patent applications filed with the European Patent Office (EPO) in 2010–2018 were from these technological fields and most of them were filed by large enterprises (EPO Annual Report 2018, 2019). In 2008–2013[4] the most first patent applications by Slovenian applicants were filed in the field of technologies for human necessities,[5] this being related to the pharmaceutical industry. In EU *trademark and service mark* legal protection,[6] Slovenia increased the number of applications per million inhabitants in 2008–2018 and thus considerably reduced its gap with the EU average. The gap in the number of Community *designs*[7] per million inhabitants remains wide, indicating insufficient exploitation of the potential of creative industries for enhancing competitiveness. Applicants can obtain EU trademark or Community design protection that is valid throughout the EU by a single application with the EU Intellectual Property Office (EUIPO). As these types of legal protection also involve lower costs and a shorter registration procedure than patent protection, they are increasingly interesting for enterprises in all sectors, particularly those in service activities and for small and micro enterprises.

Table: Patent applications filed with the EPO by year of first filing*, per million inhabitants

	2000	2005	2008	2009	2010	2011	2012	2013**	2014**	2015**	2016**	2017**	2018***
Slovenia	25	54	69	61	52	55	62	62	66	58	54	55	48
EU	106	116	114	113	113	114	112	112	112	113	110	107	N/A

Sources: Eurostat Portal Page – Science and Technology – Patent Statistics, 2019; EPO Annual Report – statistics 2018, 2019.
Notes: * Data for 2018 relate to patent applications which were filed with the EPO in the current year and are not necessarily first filings worldwide (EPO Annual Report – statistics 2018, 2019); ** Eurostat estimate; *** provisional data; N/A – not available.

Figure: Number of EU trademark applications and registered Community designs with the EUIPO, per million inhabitants



Source: EUIPO Web Page, 2019; calculations by IMAD.

[1] The data on patent applications are for the last year taken from the EPO Annual Report, meaning that they refer to the current year. These are not necessarily data on the first patent filings anywhere in the world, which refer to the year closest to the invention date and are released by Eurostat (see Slovenian Economic Mirror, 2/2009).
[2] In patents, it is actually about the exclusive legal protection of technologies (not sectors) and technological procedures and processes in which products are made. The international classification of patents is therefore based on the classification of technologies (Schmoch, 2008).
[3] Among the ten most important technological fields, technologies related to pharmaceuticals rank 7th.
[4] The latest Eurostat data refer to 2013.
[5] According to the international patent classification, the technology section "Human Necessities" also includes medical and veterinary science.
[6] A trademark or service mark is any sign, or any combination of signs, protected by law, capable of distinguishing identical or similar goods or services and of being graphically represented. A trademark is valid for ten years from the date of filing and may be renewed (SIPO Annual Report 2011, 2013).
[7] A design is defined as the external appearance of a product protected by the law. A product qualifies for protection if it is new and has an individual character. Design protection lasts for five years and may be renewed (SIPO Annual Report 2011, 2013).

The Digital Economy and Society Index 1.19

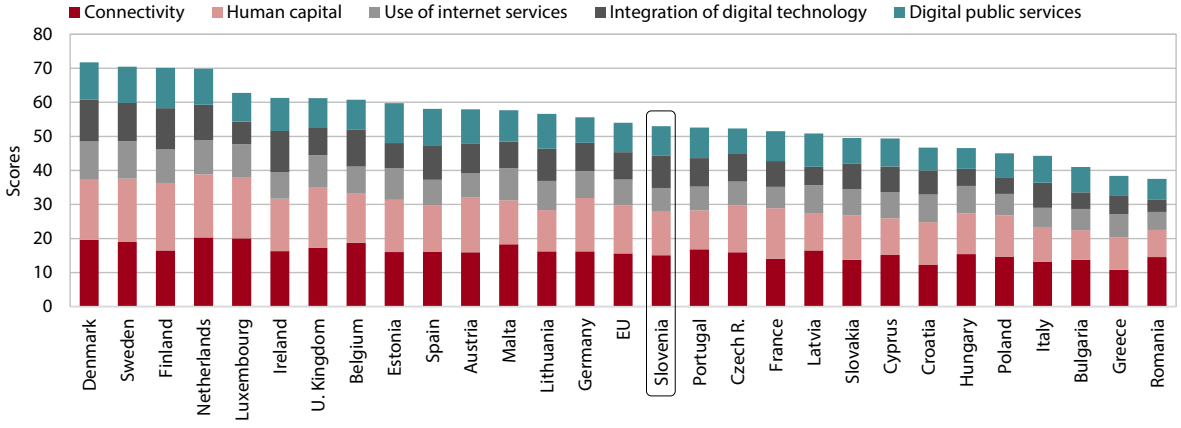
Slovenia belongs to the medium-performing group of EU countries according to the Digital Economy and Society Index; in the last two years its ranking has been gradually improving. The index monitors digital competitiveness of countries in the areas of connectivity, human capital, use of internet services, integration of digital technology and digital public services.[1] In recent years Slovenia has progressed particularly in the *integration of digital technology* and *digital public services*, where it ranks above or close to the EU average. The faster integration of digital technology since 2015 has been mainly due to the introduction of mandatory e-invoicing for suppliers to budgetary users; e-commerce is also increasing gradually.[2] In digital public services, since 2016 Slovenia has made progress regarding open data. In 2018, there has also been a shift in e-government services.[3] Positive changes have also been observed in *connectivity* and the *use of internet services*, yet insufficient for Slovenia to improve its ranking and reduce the lag behind the EU average. Broadband coverage (including fast broadband) is high and its take-up rising, but the relatively high prices of broadband connections remain a problem. In the use of internet services, Slovenia scores relatively low, but the use of internet communication,[4] e-commerce and e-banking – where the gaps with the EU are among the widest – has increased slightly. Regarding *human capital*, Slovenia is close to the EU average, although it slipped in 2018 due to the shrinking share of ICT specialists in the workforce and of science, technology and informatics graduates, which may indicate problems in the supply of labour with advanced digital skills.

Table: Slovenia's ranking on the Digital Economy and Society Index (DESI) among the 28 EU Member States

	2014	2015	2016	2017	2018	SDS 2030 target
The Digital Economy and Society Index (DESI)	17	18	18	16	15	< or = 9
Connectivity	15	18	18	19	20	< or = 9
Human capital	14	15	15	14	15	< or = 9
Use of internet services	19	16	24	23	23	< or = 9
Integration of digital technology	18	19	13	7	8	< or = 9
Digital public services	17	18	19	16	16	< or = 9

Source: European Commission (Digital Single Market), 2014–2018.
Note: Index calculations for individual years are based on data for the preceding year. In 2018 the index methodology was improved and the figures for 2017 were recalculated.

Figure: Digital Economy and Society Index (DESI) and its components, 2018



Source: European Commission (Digital Single Market), 2018.

[1] The connectivity dimension includes broadband coverage and prices. The human capital dimension measures basic and advanced digital skills. The use of the internet dimension comprises indicators of internet use by type of use (content, communication and transactions). The integration of the digital technology dimension includes business digitisation and e-commerce, while the dimension of digital public services measures the availability and use of e-government services.
[2] The percentage of SMEs selling online, revenues from online sales and the percentage of SMEs selling online cross-border are rising.
[3] The percentage of e-government users has increased and the assessments regarding pre-filled forms and the provision of digital public services for businesses improved.
[4] Use of video calls and social networks.

2 Lifelong learning

Knowledge and skills for a high quality of life and work

2.1 Share of the population with tertiary education

2.2 Enrolment in upper secondary and tertiary education

2.3 Graduates from tertiary education

2.4 Performance in reading, mathematics and science (PISA)

2.5 Education expenditure

2.6 Participation in lifelong learning

Culture and language as main factors of national identity

2.7 Attending cultural events

2.8 Share of cultural performances held abroad

Share of the population with tertiary education 2.1

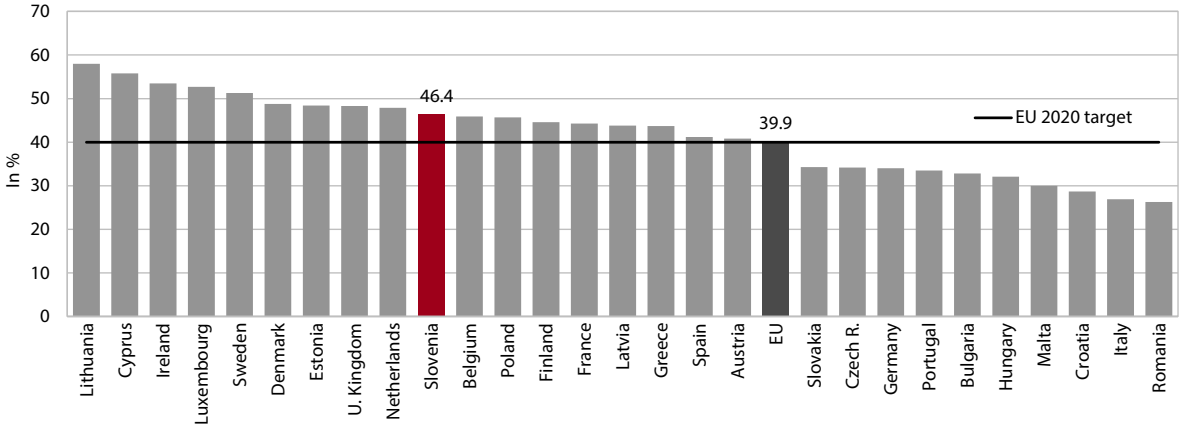
The share of adults (25–64 years) with tertiary education is rising; because of the relatively high share of tertiary-educated women, it is higher than in the EU as a whole. These trends, related to the long-term high participation of young people in tertiary education, are favourable from the aspect of an increase in human capital as a factor of competitiveness and with regard to greater demand for tertiary-educated workforce.[1] The share of tertiary-educated people is higher than the EU average in all age groups except the oldest (55–64 years). The gap is widest in the youngest group (25–34 years), within which the share of young people aged 30–34 has been higher than the Europe 2020 Strategy target for several years. However, given the ageing of the population and mismatches on the labour market, ensuring a sufficient supply of young people with appropriate skills for dealing with development challenges remains a problem despite the favourable trends in tertiary education. Among tertiary-educated people, the share of women exceeds the share of men, the gender gap (in favour of women) being wider than in the EU as a whole. The share of adults (25–64 years) with tertiary education in the cohesion region Zahodna Slovenija (37.5%) is higher than in the cohesion region Vzhodna Slovenija (28.2%). In all years under review, this share has been highest in Osrednjeslovenska, the economically most developed region and the one with Slovenia's largest university centre.

Table: Share of the population aged 25–64 with tertiary education, in %

	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	SDS 2030 target
Slovenia												
Total	20.2	22.6	23.3	23.7	25.1	26.4	27.9	28.6	30.2	30.7	32.5	35.0
Men	17.6	19.0	19.0	19.5	20.3	21.1	22.7	23.4	24.0	24.3	26.0	
Women	22.8	26.4	27.9	28.1	30.1	32.0	33.3	34.1	36.7	37.6	39.4	
20–24 years	3.2	3.8	3.5	5.5	6.4	7.9	9.7	9.5	11.3	11.9	10.7	
25–34 years	24.7	30.0	30.4	31.3	33.8	35.3	37.4	38.0	40.8	43.0	44.5	
30–34 years	24.6	30.9	31.6	34.8	37.9	39.2	40.1	41.0	43.4	44.2	46.4	
55–64 years	16.3	16.1	16.7	16.3	16.4	17.2	18.3	17.9	18.9	19.1	19.7	
EU												
Total	22.5	24.2	25.1	25.9	26.8	27.7	28.6	29.3	30.1	30.7	31.4	
Men	22.7	23.8	24.4	25.1	25.8	26.5	27.1	27.9	28.4	28.9	29.5	
Women	22.3	24.7	25.8	26.7	27.7	28.9	30.0	30.7	31.8	32.5	33.4	
20–24 years	12.6	13.4	13.6	14.3	14.8	15.6	16.3	17.0	17.2	17.6	18.0	
25–34 years	28.3	31.0	32.3	33.3	34.4	35.5	36.4	37.2	37.9	38.2	39.0	
30–34 years	28.1	31.2	32.3	33.8	34.8	36.0	37.1	37.9	38.7	39.1	39.9	
55–64 years	16.8	18.1	18.7	19.1	19.7	20.3	20.9	21.3	21.8	22.3	22.9	

Source: Eurostat Portal Page – Population and Social Conditions – Education and training, 2019.

Figure: Share of the population aged 30–34 with tertiary education, 2017



Source: Eurostat Portal Page – Population and Social Conditions, 2019.

[1] Cedefop projects an increase in demand for professionals and managers in 2016–2030.

Enrolment in upper secondary and tertiary education 2.2

The number of young people enrolled in upper secondary education is falling for demographic reasons. In 2007/2008–2017/2018 it dropped by approximately one-fifth. Such developments, which are set to continue in the coming years according to demographic projections, will be reflected in a lower supply of workforce in the future. Although the share of young people enrolled in vocational programmes increased in 2007/2008–2017/2018 and is above the EU average, employers have already been having difficulty finding appropriately skilled workers for many years, in our view not only because these occupations are less attractive for young people, but also as educational programmes are being too slowly adjusted to labour market needs. Apprenticeship, the type of training programme that could make the education system more responsive to employers' needs, has been in place for the second school year only and the number of pupils enrolled is low, unlike in some other EU countries which have a long tradition in this area.

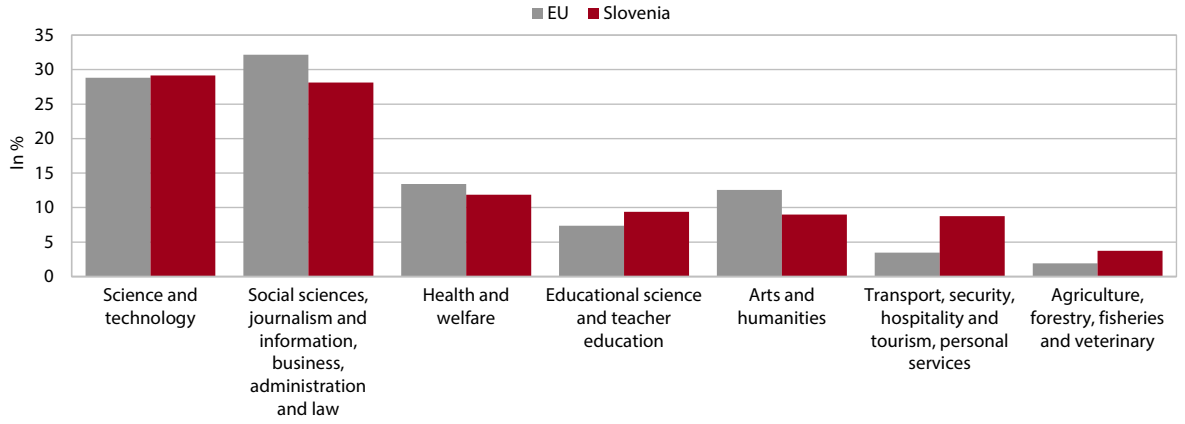
The number of students enrolled in tertiary education has also been falling for demographic reasons for several years. In the 2007/2008–2017/2018 period, enrolment in tertiary education dropped by almost a third, the most in social sciences.[1] It was up only in health and welfare courses, where the share of enrolled students also increased the most (but was nevertheless below the EU average in 2016). The share of students enrolled in science and technology programmes also rose, but their number is nonetheless still falling. Despite these changes in structure, enrolment in tertiary education is responding to the needs of the society and the economy too slowly. The low enrolment in health and welfare courses is problematic in particular, given the demographic trends. It is also lower than the EU average. In the coming years, a greater responsiveness of the tertiary education system could be achieved by establishing a system for monitoring the employability of graduates and helping students gain practical experience and skills at companies.

Table: Young people* enrolled in upper secondary education by field of education, structure in %

		2005	2008	2010	2011	2012	2013	2014	2015	2016
Slovenia	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	General educational programmes	39.1	41.1	41.2	40.7	40.1	39.7	38.4	37.5	36.4
	Vocational programmes	60.9	58.9	58.8	59.3	59.9	60.3	61.6	62.5	63.6
EU	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	General educational programmes	46.7	50.5	50.8	49.5	50.4	54.7	55.6	55.3	54.5
	Vocational programmes	53.3	49.5	49.2	50.5	49.6	45.3	44.4	44.7	45.5

Sources: Eurostat, SURS, calculations by IMAD.
Note: * Full-time students.

Figure: Students enrolled in tertiary education, structure by field of education, in %



Sources: Eurostat, SURS, 2019; calculations by IMAD.

[1] Social sciences, journalism and information, business, administration and law.

Graduates from tertiary education 2.3

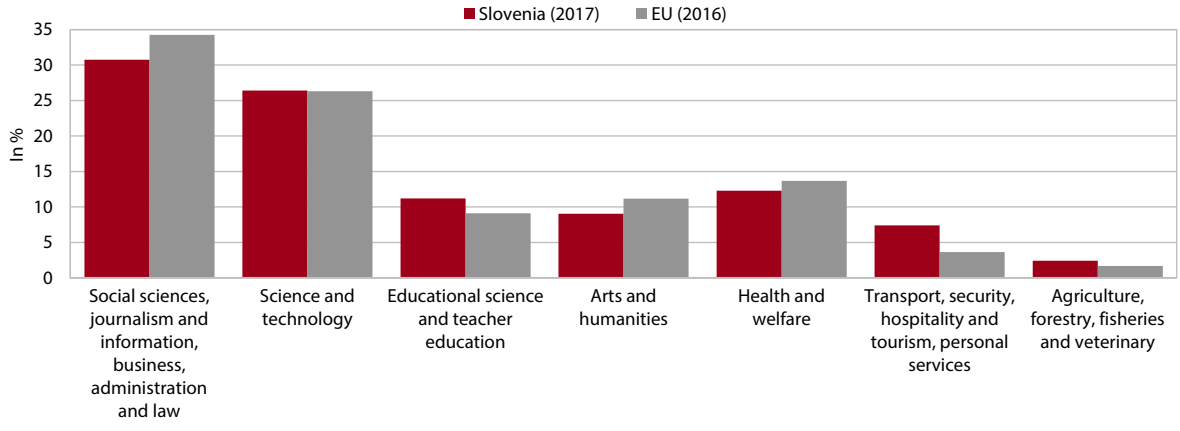
Since 2013 the number of tertiary-level graduates has been falling for demographic reasons, which is reducing their availability on the labour market. Given the decline in the number of enrolled students, these trends will continue in the coming years. The number of graduates increased sharply only in 2016, this being the last year for completing studies under the pre-Bologna study programmes.[1] In the structure of graduates, the share of social science graduates dropped the most in 2012–2017; given the falling enrolment rates, such trends are expected to continue in the future. With increased enrolment in science and technology fields, the share of science and technology graduates rose but was nevertheless below the EU average in 2016. Owing to a decline in their number, the needs of the economy for such persons are no longer being met. Given the needs of a long-lived society, the number of health and welfare graduates increased too modestly. They account for a much smaller share of total graduates than in the EU on average. The possibilities for ensuring an adequate supply of tertiary-educated graduates are being diminished not only by the insufficient responsiveness of the tertiary education system to the needs of society and the economy, but also by the low rate of transition into the second year of study and the relatively high average graduation age. The supply of graduates is also declining due to emigration, given the significant demand for certain educational profiles abroad.[2] The supply of tertiary-level graduates can also benefit from international student mobility, but the share of foreign students in Slovenia is low.[3] The percentage of students studying abroad (which enables them to acquire knowledge and skills that cannot be obtained at home) is roughly the same as in the EU-22.[4] Graduates from short-cycle tertiary education programmes – which in Slovenia include post-secondary vocational education and are meant to strengthen the links between education and the economy – account for a lower share of tertiary-level graduates than in the EU as a whole.

Table: Number of graduates from tertiary education, per million inhabitants

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Slovenia	8,567	8,907	9,621	9,980	10,237	9,314	9,133	9,032	15,002	7,967
EU	8,458	8,167	8,783	9,575	9,604	9,383	9,374	9,065	8,767	N/A

Source: Eurostat Portal Page – Population and Social Conditions – Education and Training, 2019.
Note: N/A – not available.

Figure: Structure of graduates from tertiary education, by field of education



Sources: Eurostat, SURS, 2019; calculations by IMAD.

[1] The deadline for completing studies expired on 30 September 2016. In 2016 the number of tertiary graduates increased by 66.2%.
[2] According to the Manpower Group survey (2018), there is strong global demand for engineers, IT professionals and health personnel and other professionals, for example researchers and project managers.
[3] In 2016 it was 3.3% (EU-22: 8.7%).
[4] In 2016 it was 3.6% (EU-22: 3.5%).

Performance in reading, mathematics and science (PISA) 2.4

The performance of Slovenian 15-year-olds in mathematics, science and reading literacy is good. According to PISA 2015,[1] they scored higher than the EU average in all three literacy types and rank in the upper quarter of EU Member States. One of the 2020 benchmarks for the average performance in the EU set in the Strategic Framework for European Cooperation in Education and Training (Education and Training/ET 2020) is that the share of 15-year-old pupils with low achievement (below proficiency level 2) in reading, mathematics and science should be less than 15% on the respective literacy scale. Slovenia has reached this goal in reading and science but is still below target in mathematics. While overall girls achieve better results in reading and science, boys score higher in mathematics. Between 2012 and 2015, Slovenian 15-year-olds improved their scores in mathematics and, in particular, reading, while their performance in science remained approximately the same.

The good results are related to educational (material and human) resources, an area where Slovenia has a favourable position on most indicators. Material resources include textbooks, library materials and laboratory equipment. As regards human resources, there is no shortage of teachers in Slovenia, Slovenia's favourable position in this area being related to the number of certified teachers (i.e. teachers who have obtained a licence or passed a professional examination) and the pupil/teacher ratio. There is, however, still room for improvement in some indicators, such as class size, teachers' help with homework, equipment of schools with computers and participation of teachers in professional development programmes.

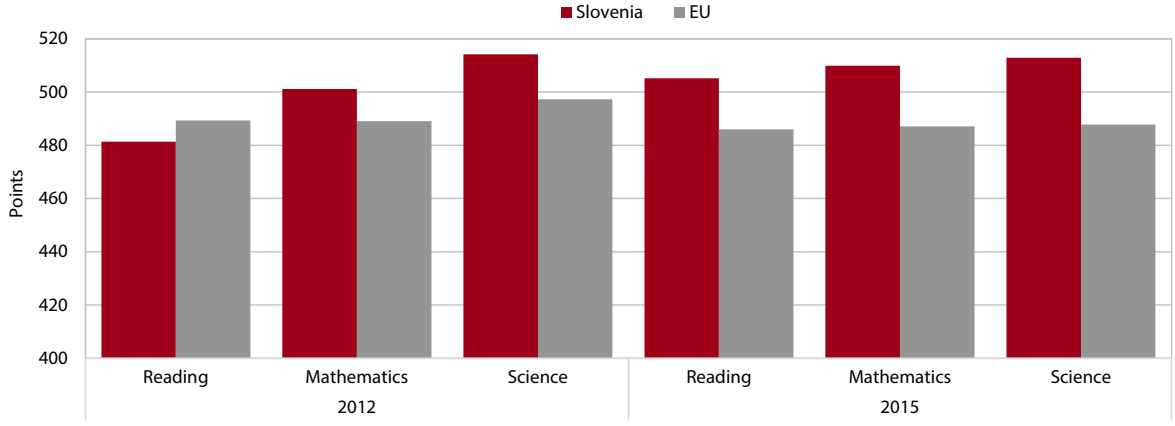
15-year-olds from lower socio-economic backgrounds and those from immigrant backgrounds achieve worse results in mathematics, science and reading. Pupils from the highest socio-economic backgrounds perform the best and those from the lowest perform the worst, but between 2012[2] and 2015 the gap between the two groups narrowed and was smaller than the EU average for all three literacy types. Immigrant pupils achieve worse results in science literacy than their non-immigrant peers, the difference between them being greater than on average in the EU.[3]

Table: Slovenia's ranking in science, mathematics and reading among EU Member States

	2006	2009	2012	2015	SDS 2030 target
Mathematics	4	7	9	5	Ranking in the top quarter of EU Member States
Reading	11	16	21	6	
Science	8	6	7	3	

Source: OECD, PISA (2006, 2009, 2012 and 2015).
Note: In Slovenia the PISA survey has been carried out since 2006.

Figure: Average performance in mathematics, science and reading of 15-year-olds (PISA), Slovenia and the EU*, 2012 and 2015, in points



Source: OECD, PISA 2015.
Note: * Non-weighted average.

[1] PISA (Programme for International Student Assessment) is an international survey of reading, mathematics and science literacy conducted by the OECD. It covers 15-year-old pupils regardless of the school they attend. Carried out in three-year cycles, the survey is aimed at capturing data on pupils' competencies that are needed in professional or private life and are important for individuals and society.
[2] For 2012 only data for mathematical literacy are available.
[3] Data for mathematical and reading literacy are not available.

Education expenditure 2.5

Public expenditure on education[1] (as a % of GDP) is declining and is lower than the EU average; private expenditure is comparable.[2] In 2017 public expenditure amounted to 4.49% of GDP[3] and was the lowest in ten years. The decline in public expenditure on education since 2012 (in relative terms) has been a consequence of the containment of its growth due to government fiscal consolidation measures and some other measures for more rational use of this expenditure and, in recent years, of its lower growth than that of GDP. In the last years analysed, public expenditure dropped for all levels of education, but for primary education particularly. In 2017 the decline in the share of public expenditure in GDP eased notably owing to its significant nominal increase as a consequence of a higher number of employed persons in education, wage rises, increased enrolment in kindergartens and elementary schools (and related investments), and changes in the areas of transfers to households/students. In 2015 (the latest international data), public expenditure on education was below the EU average at all levels of education except pre-primary. The gap was the widest at the tertiary level, despite the higher participation of young people in tertiary education than in the EU as a whole. Private expenditure on education is diminishing. In 2017 it totalled 0.59% of GDP; according to data for 2015, it was comparable with the average for those EU Member States that are also OECD members (i.e. the EU-22).

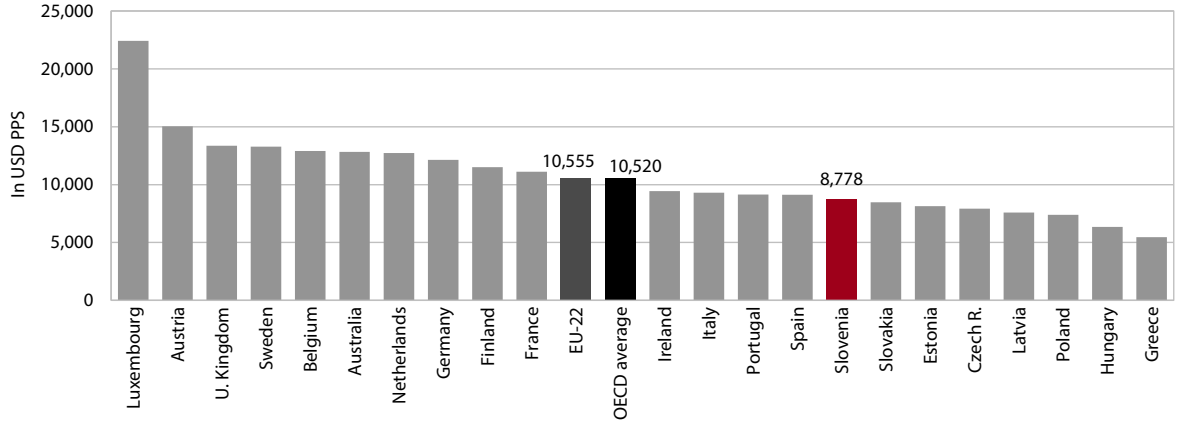
Expenditure (both public[4] and private) per participant in education dropped in 2017 and is low by international comparison. It declined at all levels, but the most for tertiary education, and was the lowest in the last few years. In 2015 (the latest international data), it was below the EU-22 average at all levels of education. The gap was widest in upper secondary and tertiary education, owing to the high participation of young people and, at the tertiary level, also as, unlike in several other EU countries, full-time students enrolled in 1st and 2nd study levels pay no tuition fees. The low expenditure is reducing the possibilities for improving the quality of education. The analysis of the efficiency of education expenditure carried out for Slovenia in comparison with other countries highlighted the possibilities for improving the efficiency of this expenditure, particularly at the primary level of education.[5]

Table: Total public expenditure on education as a share of GDP, in %

	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Slovenia	5.63	5.11	5.57	5.56	5.57	5.33	5.08	4.95	4.61	4.51	4.49
EU	4.92	5.04	5.38	5.41	5.25	5.13	N/A	5.10	5.04	N/A	N/A

Sources: Eurostat, SURS, 2019; calculations by IMAD.
Note: N/A – not available.

Figure: Expenditure (public and private) on educational institutions per participant*, 2015



Source: Education at a Glance (OECD), 2018.
Note: * Including primary, secondary, upper secondary and tertiary levels of education.

[1] Total public expenditure on education comprises the total budgetary expenditure on formal education of young people and adults at government and local levels. It includes direct public expenditure for educational institutions and transfers to households (scholarships, subsidised meals, travel tickets, accommodation, textbooks, etc.).
[2] Data for public expenditure on education are available for the EU average, while data for private expenditure are available only for those Member States that are also OECD members.
[3] Excluding the first age group of the pre-primary level of education. According to the International Standard Classification of Education (ISCED) 2011, which includes this group too, public expenditure on education totalled 4.76% of GDP in 2017.
[4] Public expenditure does not include transfers for students/households.
[5] For more, see Čelebič and Hribernik, 2019.

Participation in lifelong learning 2.6

Following the decline in 2012 and 2013, the participation of adults (aged 25–64) in lifelong learning[1] has stabilised and remains higher than the EU average. In 2017 it stood at 12.0% (EU: 10.9%), lower than at the onset of the crisis and far from both the objective of the Strategic Framework for European Cooperation in Education and Training (Education and Training 2020/ET 2020[2]), which is 15%, and the SDS 2030 target, which is 19%. Particularly problematic is the low participation of low-skilled persons, older people and men and, consequently, their diminished possibilities for successful inclusion in society. Among the cohesion regions, the participation rate is higher in Zahodna Slovenija,[3] which consists of economically stronger regions with a greater and more diverse supply of educational programmes. Among all regions, the economically most developed region, Osrednjeslovenska, had the highest participation rate in all years under review, at 15.1%, and has already exceeded the ET 2020 target. The lowest participation rate is in Pomurska (below 5%), this being one of the economically weakest regions and one with significantly fewer adult education providers.[4]

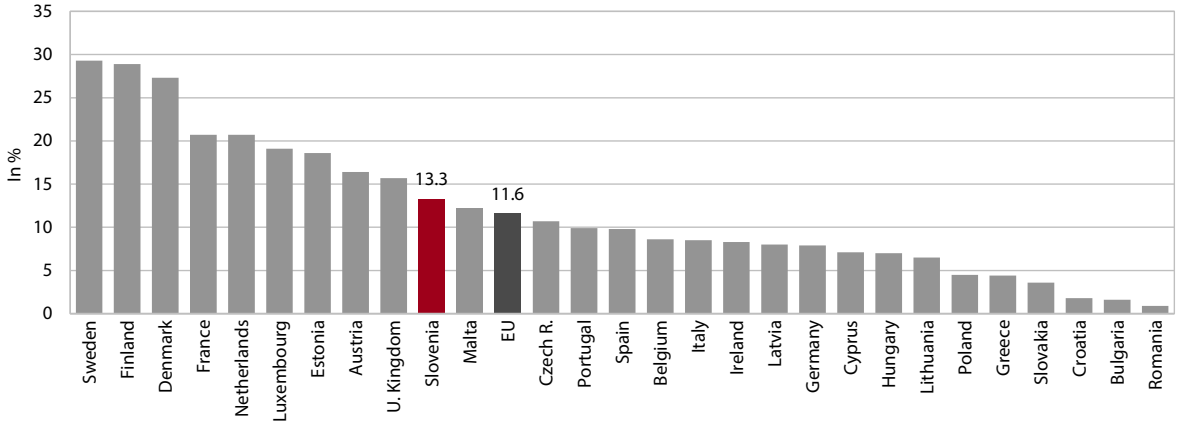
Broken down by activity status, in 2017 participation in lifelong learning was highest among employed people, although it dropped the most in this group in the 2008–2017 period. The low participation rate of inactive people stands out in particular, this being the only rate that is also lower than the EU average.[5] Differences also exist within the employed, low participation in lifelong learning being recorded particularly in those activities and occupational groups that employ larger shares of people with low education. Among all activity statuses, participation in lifelong learning among the employed dropped the most in 2008–2017, across all occupational groups and in most activities, which is however unfavourable from the perspective of employee adaptability to technological change and improvement in business sector competitiveness.

Table: Participation of adults aged 25–64 in lifelong learning, in %

	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	SDS 2030 target
Slovenia	15.3	14.3	14.8	16.4	16.0	13.8	12.5	12.1	11.9	11.6	12.0	19 %
EU	9.6	9.5	9.5	9.3	9.1	9.2	10.7	10.8	10.7	10.8	10.9	

Source: Eurostat Portal Page – Population and Social Conditions – Education and Training, 2019.

Figure: Participation of employed persons aged 25–64 in lifelong learning, 2017



Source: Eurostat Portal Page – Population and Social Conditions – Education and Training, 2019.

[1] Lifelong learning includes formal and non-formal education.
[2] At the European level, the Strategic Framework for Cooperation in Education and Training (ET 2020) from 2019 sets 15% participation of adults in lifelong learning as one of the targets for 2020.
[3] In the cohesion region Zahodna Slovenija it totalled 13.6% in 2017, in the cohesion region Vzhodna Slovenija 10.6%.
[4] Overview of the supply of adult education in Slovenia 2017/2018, 2017.
[5] In 2017 the participation rate of the employed in lifelong learning totalled 13.3% (EU: 11.6%), the participation rate for the unemployed 11.4% (EU: 10.1%) and the participation rate for the non-active population 7.0% (EU: 8.6%).

Attending cultural events 2.7

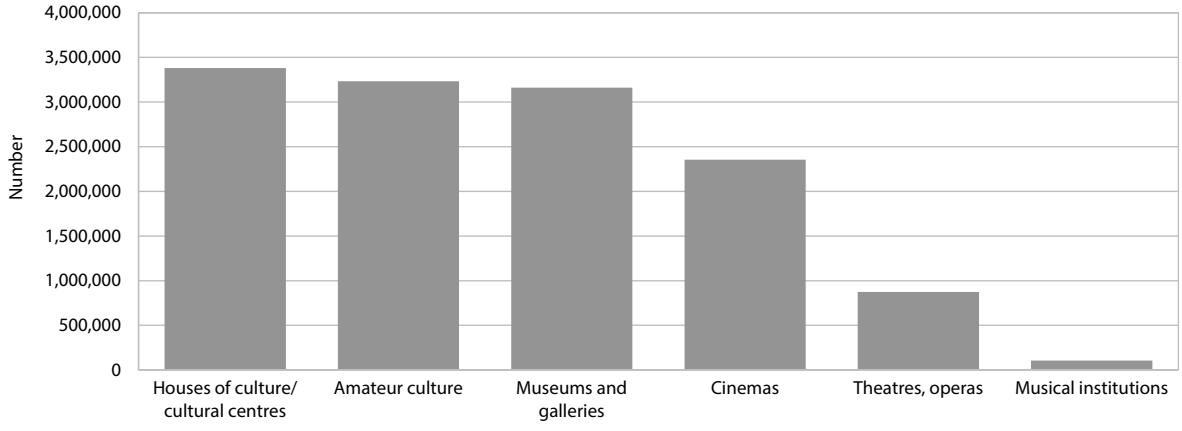
While increasing steadily over the long term,[1] the average attendance at cultural events per inhabitant remained roughly unchanged in the last three years analysed. It was highest in 2012, owing to the many performances hosted by Maribor, the European Capital of Culture that year, while amounting to around 5–6 visits per inhabitant in the remaining years, which is still far below the SDS 2030 target. In 2008–2017, amid a significant increase in the number of cultural performances, attendance in houses of culture and cultural centres increased the most. In 2017 they recorded the highest number of visits of all cultural institutions. Higher attendance was also recorded at events performed by cultural associations, this being related to a higher number of cultural associations and a greater supply of performances. Amid a higher supply of theatrical performances, theatre and opera attendance also went up in the period under review. Only cinema attendance declined, in our estimation partly due to the diversification of the ways films are watched and a shift away from physical cinemas with an increase in broadband internet connections.[2] Attendance at screenings of Slovenian long feature films otherwise increased in 2008–2017.

Table: Average attendance at cultural events per inhabitant

	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	SDS 2030 target
Slovenia	5.0	5.4	5.7	6.0	6.4	9.6	6.2	5.9	6.3	6.2	6.3	8.0

Sources: SURS, Public Fund for Cultural Activities of the Republic of Slovenia, Slovenian Film Centre, 2019; calculations by IMAD.

Figure: Attendance at cultural events, Slovenia, 2017



Sources: SURS, Public Fund for Cultural Activities of the Republic of Slovenia, Slovenian Film Centre, 2019.

[1] As a result of an extensive revision in the methodology, in 2016 there was a break in the data series for the following groups: (i) museums, galleries and exhibition grounds; (ii) theatres; (iii) orchestras and choirs; (iv) houses of culture. Since 2016 data on cultural performances cover (i) museums and galleries, (ii) theatres and operas, (iii) musical institutions, (iv) orchestras and choirs, and (v) amateur culture.

[2] Analysis of the financing of culture, 2017.

Share of cultural performances held abroad 2.8

The share of cultural performances held abroad[1] has been rising in recent years. Touring is an indirect indicator of the quality of cultural production, as invitations to perform abroad generally signify recognition of good work. Developments in this area are difficult to assess because of the short data series, as data are available only for 2015–2017 and the figure for 2015 is SURS's estimate (see note under the table). In 2017 the share of cultural performances held abroad totalled 3.9%. It rose in comparison with the preceding year and was higher than the SDS target for 2030. The share of theatre and opera performances increased the most. Although the share of performances by musical institutions declined significantly, it was still the largest among all cultural institutions, which we assess is related to the nature of their activity and to systematic promotion of international cooperation. Among performances held abroad, those in the EU accounted for the largest share (around 80%), which reflects the geographical attachment of Slovenian culture to this area.

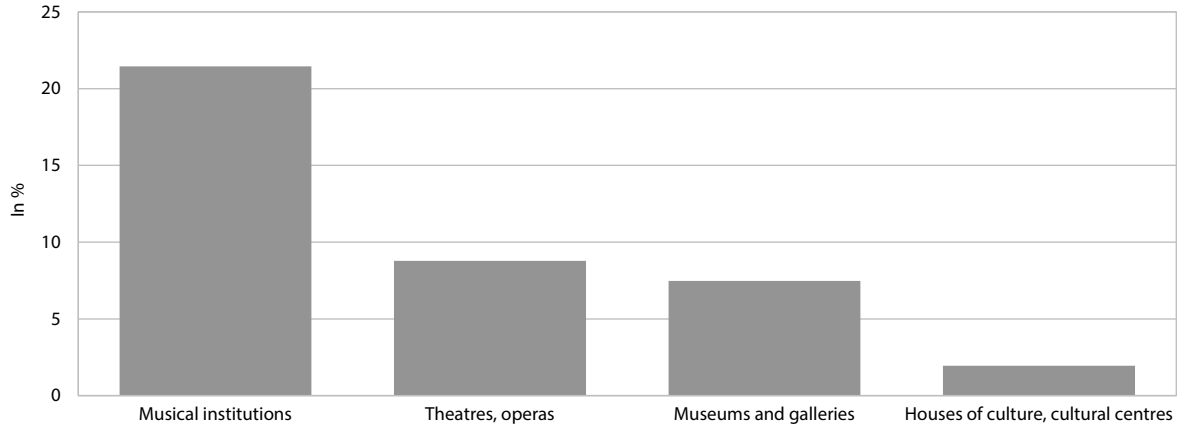
Table: Share of cultural performances on tours abroad in the total number of cultural performances, in %

	2015	2016	2017	SDS 2030 target
Slovenia	2.8 (estimate)*	3.1	3.9	3.5

Source: SURS, 2019.

Note: *As a result of the revision of culture statistics, a break in the data series occurred in 2016. Data for 2015 are therefore estimated, i.e. adjusted to the methodology used in the surveys "Activity of Houses of Culture, Theatres, Operas and Professional Orchestras and Choirs" (KU-ODER) and "Activity of Museums and Galleries" (KU-MZ) for 2016. The estimate was made by SURS. Data for houses of culture up to 2015 were not available. The sources of data were the surveys "Activity of Museums, Museum Collections, Special Museums for Art Heritage and Art Exhibition Grounds" (KU-MZ), "Activity of Theatres, Operas and Ballet" (KU-GL), and "Activity of Professional Orchestras and Choirs" (KU-FO).

Figure: Share of cultural performances on tours abroad, Slovenia, 2017



Source: SURS, 2019.

[1] The indicator of the share of performances on tours abroad in the total number of performances is the ratio of performances held outside Slovenia to all performances held by given cultural institutions. Cultural performances cover: (i) museums, galleries and exhibition grounds; (ii) theatres; (iii) professional orchestras and choirs and opera; and (iv) houses of culture, cultural institutions and other cultural performers (cultural associations). Owing to a significant change in the methodology, a break in the data series occurred in 2016. The sources of data are the surveys "Activity of Cultural Institutions, Theatres, Operas and Professional Orchestras and Choirs" (KU-ODER) and "Activity of Museums and Galleries" (KU-MZ).

3 An inclusive, healthy, safe and responsible society

A decent life for all

3.1 Income inequality

3.2 Median equivalised disposable income

3.3 At-risk-of-social-exclusion rate

3.4 Social protection expenditure

3.5 Material and income deprivation

3.6 Housing deprivation rate

3.7 Experience of discrimination

3.8 Life satisfaction

A healthy and active life

3.9 Life expectancy

3.10 Healthy life years

3.11 Amenable mortality

3.12 Overweight and obesity

3.13 Gender Equality Index

3.14 Unpaid voluntary work

3.15 Health expenditure

3.16 Expenditure on long-term care

An inclusive labour market and high-quality jobs

3.17 Employment rate

3.18 Unemployment and long-term unemployment rates

3.19 Precarious and temporary employment

3.20 At-risk-of-poverty rate of employed persons

3.21 Absence from work due to illness

Income inequality 3.1

In 2017 Slovenia, together with the Czech Republic, recorded the lowest income inequality in the EU. The top 20% of households received 3.4 times as much income as the bottom 20%, while the EU average was 5.1. A further breakdown of income distribution[1] shows that in Slovenia, the gap between the fifth quintile and the third quintile, which includes the median (1.79 in 2017), is somewhat smaller but comparable to the gap between the median and the first quintile (1.91 in 2017). The small changes in income inequality in the last decade were the result of comparable movements at both ends of the income distribution. In the period of 2010 to 2012 the ratio of the fifth to the third quintile otherwise declined, while the ratio of the third to the fifth quintile was increasing throughout the 2009–2014 period, which is a reflection of the poorer households having been much more affected by the crisis and austerity measures. The decline in inequality after 2014 was mostly driven by these households, as their growing incomes pulled closer to the median. Income is furthermore evenly distributed across generations, which indicates that pensions play a strong role in stabilising pensioners' income.

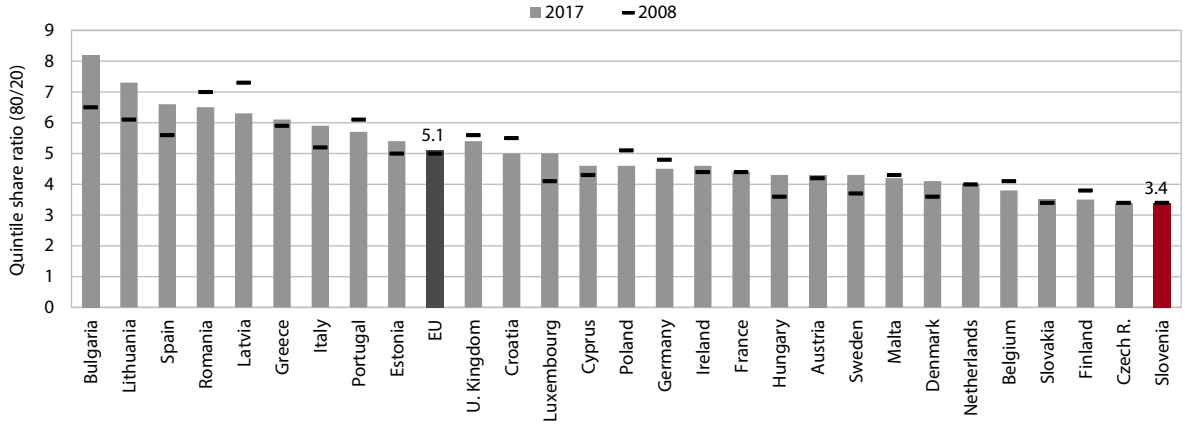
After a slight increase in the years following the crisis, income inequality returned to the pre-crisis level in the last few years. In the period of 2005 to 2012 income distribution changed only marginally. Somewhat bigger movements were seen after 2012, with the adoption of austerity measures, changes in social policy and the increased tax burden on the highest wages. After 2014 income inequality started to decline again, due to rapid economic growth and the phasing out of austerity measures. These two factors had the strongest effect on the level of equivalised disposable income[2] of the households in the lowest quintile, where employment increased the most and the relaxation of austerity measures had the biggest effect. Households from the highest quintile, on the other hand, are highly taxed. The relatively even distribution of household disposable income is due mainly to the progressivity of the tax system (personal income taxes) and, to some extent, to social transfers.[3] The system of income redistribution through taxes and transfers is significantly reducing the dispersion of market income (earnings), from a Gini coefficient of 0.425 to 0.244 in 2016, which is more than in most OECD countries.[4]

Table: Equivalised disposable income distribution, quintile share ratio 80/20

	2000	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	SDS 2030 target
Slovenia	3.2	3.4	3.4	3.2	3.4	3.5	3.4	3.6	3.7	3.6	3.6	3.4	< 3.5
EU	N/A	N/A	N/A	N/A	4.9	5.0	5.0	5.0	5.2	5.2	5.2	5.1	

Source: Eurostat portal Page – Population and Social Conditions – Living Conditions and Welfare – Income and Living Conditions, 2018.
Note: N/A – not available.

Figure: Equivalised disposable income distribution, quintile share ratio 80/20



Source: Eurostat portal Page – Population and Social Conditions – Living Conditions and Welfare – Income and Living Conditions, 2018.
Note: For Croatia, data from 2010 are used for 2008; for Ireland and the UK, data for 2017 are from 2016.

[1] SURS – Demography and Social Statistics – Level of Living – Poverty and Social Exclusion Indicators (SILC), 2018; calculations by IMAD.
[2] Household disposable income includes income from employment and self-employment, income from capital, social transfers and pensions. The equivalised disposable income is determined using the number of household members converted into equivalised adults according to the OECD equivalence scale, which assigns a weight of 1 to the first adult, 0.5 to any other person aged 14 or older, and 0.3 to each child younger than 14.
[3] Executive summary: Income redistribution through taxes and transfers across OECD countries (OECD), 2017.
[4] OECD Income Distribution and Poverty database.

Median equivalised disposable income 3.2

After its rapid growth had been interrupted by the crisis, median equivalised disposable income started increasing again in the last four years analysed. The period of strong and even growth (2005–2009) was followed by a period of negative or low growth rates (2010–2013) as a consequence of the crisis and austerity measures (ZUJF). Since 2014, median equivalised disposable income (expressed in euros) has again been growing, which indicates improvement in the living standard of the population. Despite the period of negative growth rates, the cumulative growth totalled 15.4% over the entire period under review (2005–2017), indicating a positive long-term trend. The developments in the median equivalised disposable income in the EU as a whole are comparable to those in Slovenia, except that incomes in the EU started recovering one year earlier. In the EU, the cumulative real growth over the last four years was somewhat higher than in Slovenia (SI: 6.1%, EU: 6.6%), while year-on-year real growth in 2017 was slightly lower (SI: 1.5%; EU: 0.6%).

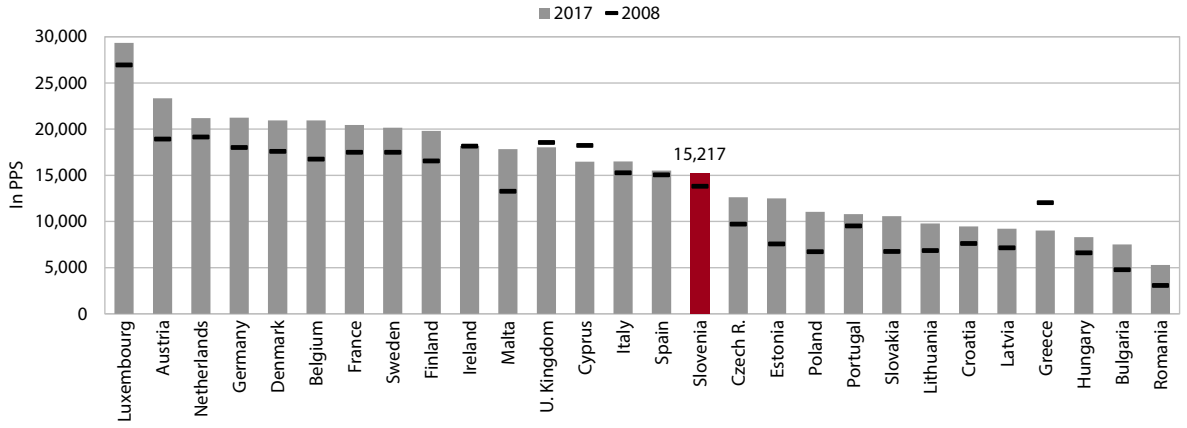
In Slovenia, the lower levels of median equivalised disposable income of people over 65 years of age and a lower premium on higher education stand out in comparison with the EU average. Broken down by age, the highest median income (expressed in euros) is recorded for employed people aged 18 to 64 (13,098 in 2017). It is also similarly high for children aged 18 and under (12,667 in 2017), while it is relatively lower in the group of people over 65 years of age (11,379 in 2017) and even lower for those older than 75. In the EU average, the median equivalised disposable income of those over 65 years of age is 10% lower than that of employed people (13% lower in Slovenia). The gap in the median equivalised disposable income for the age group of 18 and under and the active population in the EU as a whole is 10%, while in Slovenia it is only 3.3%, which is a result of strong policies for protecting the material well-being of children and young people. The median equivalised disposable income of the population with tertiary education in Slovenia has been falling with regard to the total median eqivalised disposable income over the whole period since 2005. In 2005 it was 21.4% higher for this population group, compared with only 7.5% in 2017. Since the pick-up in growth of the total median equivalised disposable income in 2014, the median for people with higher education has been rising at a much slower pace in nominal terms (3.2%) than the medians for those with upper secondary (7.4%) and secondary and low education (8.8%), which indicates a faster improvement in the living standards of lower-skilled persons. In the EU average, the median equivalised disposable income of people with higher education was also falling relative to the total median equivalised disposable income in the 2008–2017 period, but from a higher level and more slowly than in Slovenia (from 46.7% of the total median income in 2008 to 35.0% in 2017).

Table: Median equivalised disposable income, Slovenia and the EU average

	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Amount in EUR – Slovenia	8,797	10,893	11,864	11,736	11,999	12,122	11,852	11,909	12,332	12,327	12,713
Real growth (%) – Slovenia		4.2	8.0	–3.1	0.1	–1.7	–4.1	0.1	4.4	0.2	1.5
Amount in EUR – EU	N/A	14,623	14,775	14,841	14,960	15,456	15,433	15,790	16,138	16,529	16,909
Real growth (%) – EU			0.0	–1.6	–2.2	0.7	–1.6	1.7	2.1	2.2	0.6

Sources: Eurostat Portal Page – Population and Social Conditions – Living Conditions and Welfare – Income and Living Conditions, 2018; Eurostat – HICP; calculations by IMAD. Note: N/A – not available.

Figure: Median equivalised disposable income, 2008 and 2017



Source: Eurostat Portal Page - Population and Social Condition - Living conditions and Welfare - Income and Living Conditions, 2018.
Note: For Croatia, data from 2010 are used for 2008; for Ireland and the UK, data for 2017 are from 2016.

At-risk-of social-exclusion rate 3.3

Slovenia has performed better than the EU average in terms of the risk of social exclusion[1] ever since measurements began; in 2017 it was again at its pre-crisis level. In 2017 the rate of the risk of social exclusion totalled 17.1%, meaning that 345,000 persons were at risk of social exclusion that year, which is 26,000 fewer than in 2016 and in line with the Europe 2020 target.[2] The values of all components of this composite index improved relative to the preceding year[3] in 2017.

Of the three index components, only the at-risk-of-poverty rate[4] is still higher than before the crisis. At 13.3% in 2017, it is still 1 percentage point higher than in 2008. A total of 268,000 persons lived below the poverty threshold[5] in 2017, more than before the crisis. With regard to the preceding year, in 2017 the at-risk-of-poverty rate increased for some of the already very vulnerable groups, i.e. single-parent households (from 25.2% to 30%), self-employed persons (from 23% to 26.8%) and single-person households (from 35.8% to 37.1%).

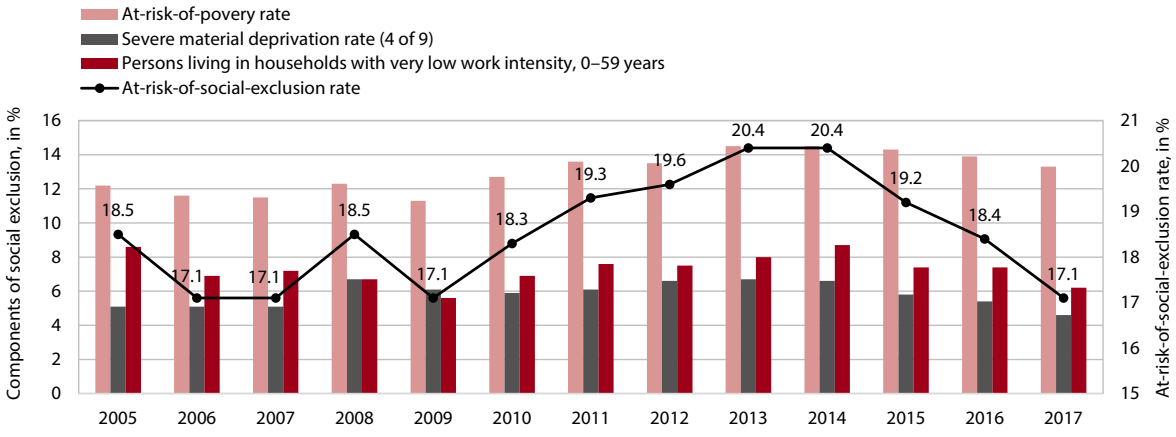
Since 2014 the rate of the risk of social exclusion has been falling across all regions due to the improvement of labour market conditions. The declining of unemployment in 2014–2017 was reflected in a falling of the material deprivation rate and the very low work intensity rate in all regions. The at-risk-of-social-exclusion rate is otherwise still above the Slovenian average in the cohesion region Vzhodna Slovenija (19.3%), but even there it is not higher than the EU average. It does not even exceed the EU average in the statistical regions with the highest rates (Podravska and Posavska, both at 21.1%). It is lowest (half the rate) in the Primorsko-notranjska region, which has a relatively high employment rate.

Table: The at-risk-of-social-exclusion rate, in %

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	SDS 2030 target
Slovenia	18.5	17.1	17.1	18.5	17.1	18.3	19.3	19.6	20.4	20.4	19.2	18.4	17.1	< 16
EU	25.7	25.3	24.4	23.8	23.3	23.7	24.3	24.7	24.5	24.4	23.8	23.5	22.5	

Source: Eurostat Portal Page – Population and Social Conditions – Living Conditions and Welfare – Income and Living Conditions, 2019.

Figure: The at-risk of social exclusion rate, by component, Slovenia



Source: Eurostat Portal Page – Population and social conditions – Living Conditions and Welfare – Income and Living Conditions, 2019.

[1] The rate of the risk of social exclusion is a composite indicator comprising three components: the at-risk-of-poverty rate, the severe material deprivation rate and the proportion of persons living in households with very low work intensity (i.e. less than 20% of a household's total work potential). Persons included in more than one component are counted only once.

[2] The Europe 2020 strategy target being to reduce the number of persons at risk of social exclusion to 320,000 by 2020.

[3] The share of persons living in households with very low work intensity declined by 1.2 pps to 6.2%, the severe material deprivation rate by 0.3 pps to 5.1% and the at-risk-of-poverty rate by 0.6 pps to 13.3%.

[4] The at-risk-of-poverty threshold is calculated as 60% of the median equivalised disposable income. The calculation for 2017 is based on income from 2016 recalculated according to the OECD modified equivalence scale, which assigns a value of 1 to the first adult, 0.5 to any other person aged 14 or older, and 0.3 to each child younger than 14.

[5] In 2017 the at-risk-of-poverty threshold for a single-person household totalled EUR 636 per month, which was EUR 43 higher than in 2008.

Social protection expenditure 3.4

Given the ageing of its population, Slovenia allocated more funds for social protection in 2016 than in 2008, yet still less than the EU average. Social protection expenditure as a share of GDP totalled 23.3% in 2016, up 2.3 pps on 2008, when it had been the lowest since 2000. In 2009–2012, expenditure growth was mainly reflected the rising number of unemployed persons due to the economic crisis. The decline in expenditure since 2012 has been due to austerity measures adopted in the middle of 2012 (ZUJF[1]) and the implementation of new social legislation, which redefined the eligibility criteria for social benefits and family compensation in order to improve their targeting. Particularly expenditure on sickness and healthcare has been rising rapidly in recent years, largely as a consequence of higher expenditure on sickness benefits.[2] In 2008–2016 strong growth was also recorded for expenditure on old age, which is a consequence of the rising number of pensioners.[3] Besides expenditure on old age, that on healthcare (sickness benefits) is also significantly higher than in 2008. Expenditure on unemployment benefits and social exclusion[4] is also somewhat higher.

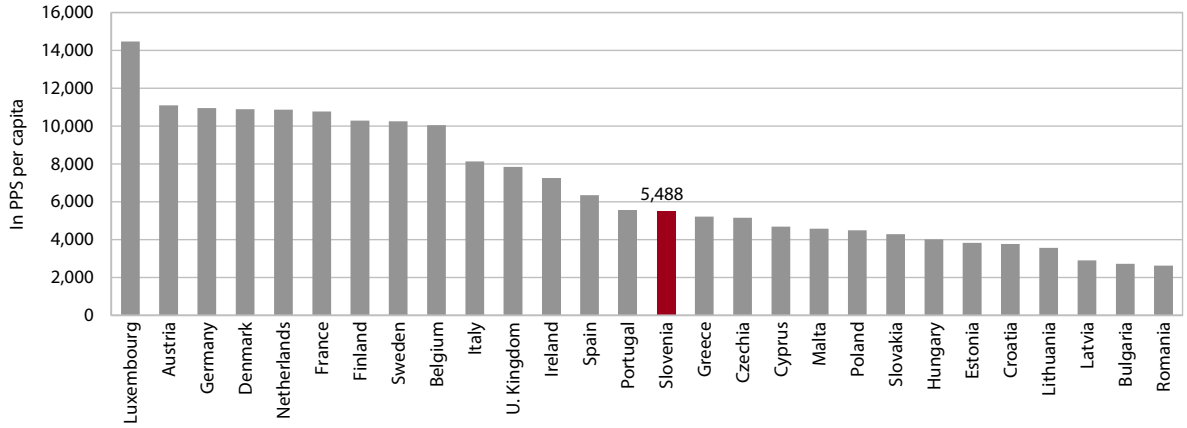
Slovenia lags behind the EU average in terms of social protection expenditure as a share of GDP, most notably in the categories of housing and unemployment, but allocates more funds than the EU average for social exclusion benefits not elsewhere classified. Its social protection system nevertheless ensures relatively good access to health services and reduces the poverty risk. Slovenia has the widest gap with the EU average in its expenditure on unemployment, mainly owing to the small share of unemployment benefit beneficiaries among the unemployed (22.2% in 2016) compared with other EU Member States. The relatively low expenditure on housing is to a great extent attributable to the relatively poorly developed rental housing market and the small share of non-profit housing in Slovenia.

Table: Social protection expenditure, as a % of GDP

	2000	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016
Slovenia	23.7	22.6	21.0	23.7	24.4	24.5	24.9	24.7	23.9	23.7	23.3
EU	N/A	N/A	25.9	28.7	28.6	28.3	28.7	28.9	28.7	N/A	28.2

Source: Eurostat Portal Page – Population and Social Conditions – Social Protection, 2018.
Note: N/A – not available.

Figure: Social protection expenditure in PPS per capita, 2016



Source: Eurostat Portal Page – Population and Social Conditions – Social Protection, 2018.

[1] The Fiscal Balance Act, which limited or froze the payment of certain family and parental benefits.
[2] According to NIJZ data, there were 839,533 cases of sickness leave in 2016, 13.5% more than in 2008, which is also related to the increase in the number of employed and older persons.
[3] In 2016 the share of expenditure on old age was almost 2 pps higher than in 2008.
[4] In 2014, social legislation was amended, facilitating access to cash social assistance. The amendment eased slightly the conditions for reimbursing financial social assistance from inheritance and broadened the general conditions for income support eligibility. Moreover, as of 1 January 2016, the full level of the basic amount of the minimum income took effect.

Material and income deprivation 3.5

The material deprivation rate[1] in Slovenia **has been rapidly falling since 2014; in 2017 it was the lowest thus far.** With 12.1% of materially deprived people, Slovenia was below the EU average in 2017, as in all previous years. The decline in the material deprivation rate since 2014 can be attributed mainly to the rising purchasing power of households. Among the new EU Member States, only the Czech Republic performed better than Slovenia throughout the period analysed. In 2014 Slovenia was outperformed by Estonia and in 2016 by Malta.

Risk of material deprivation in Slovenia rises with age, as do the differences in material deprivation by gender. The material deprivation rate is 12.7% for women and 11.5% for men, the gender gap being slightly wider than on average in the EU.[2] Children were the least materially deprived group in all years under review. The material deprivation rate was highest among people over 65 years of age, except in 2012, when the 18–64 age group recorded a higher rate, and in 2016, when the two groups were equal in this regard. Of all socio-economic groups, women over 65 years of age with incomes below the poverty threshold were the most materially deprived group throughout the period analysed (45.3% in 2017), followed by men of the same age living below the poverty threshold (40.3%). In 2017 the material deprivation rate of people below the poverty line (at 34.7%) was otherwise the lowest and the share of households (59%) able to handle unexpected expenses in the amount of EUR 600[3] the highest since measurements began. Meanwhile, the share of households (8%) making ends meet only with great difficulty is still higher than before the crisis.

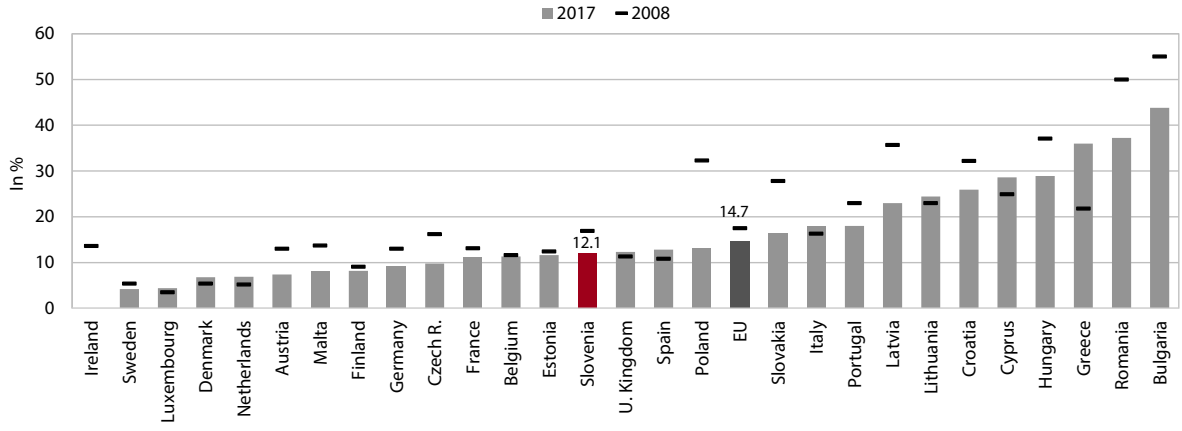
The material deprivation rate is the highest in the economically weakest regions with high unemployment rates. The share of materially deprived people is thus the lowest in Goriška (7.4%) and the highest in Pomurska (19.6%) and Zasavska (19%). The last also has the lowest share of households able to cover unexpected expenses, this lower than in 2008. At the same time, as many as 10% of households in this region were receiving material and/or financial assistance from charities in 2017, which was the most to date. In regions with the lowest unemployment rates (Goriška, Primorsko-notranjska and Osrednjeslovenska), this share is five times lower.

Table: Material deprivation rate, in %

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Slovenia	14.7	14.4	14.3	16.9	16.2	15.8	17.2	16.9	17.0	17.2	14.7	13.5	12.1
EU	20.0	19.2	18.1	17.5	17.3	17.8	18.5	19.8	19.5	18.5	17.0	15.7	14.7

Source: Eurostat Portal Page – Population and Social Conditions – Living Conditions and Welfare – Income and Living Conditions, 2018.

Figure: Material deprivation rate



Source: Eurostat Portal Page – Population and Social Conditions – Living Conditions and Welfare – Income and Living Conditions, 2018.

[1] I.e. deprivation in at least three of the nine material deprivation items. These are the ability (1) to deal with unexpected expenses; (2) to afford a one-week annual holiday away from home; (3) to afford adequate meals; (4) to pay for arrears (mortgage or rent, utility bills, and hire purchase instalments); (5) to keep one's home adequately warm; (6) to afford a washing machine; (7) to afford a colour TV; (8) to afford a telephone/mobile phone; (9) to afford a personal car. Severe material deprivation is deprivation in at least four out of these nine material deprivation items.

[2] 15.2% for women and 14.2% for men.

[3] The amount taken into account from 2011 onwards.

Housing deprivation rate 3.6

Slovenia is among the EU countries with the highest housing deprivation rates.[1] More than one-fifth of its population lived in poor housing conditions in 2017. In 2011–2017 the rate declined both in Slovenia and for the EU as a whole. In Slovenia, it varies significantly between regions, and the gaps are widening. More than one-third of people live in poor housing conditions in Zasavska and the least, yet still more than the EU average, in Koroška (14%). One of the reasons for the still high housing deprivation rate is the relatively old and poorly maintained housing stock, given that as many as 83% of flats were built before 1990. Since then, the construction of new flats has been modest, particularly the construction of public rental flats. Meanwhile, the housing cost overburden rate[2] remained one of the lowest in the EU in 2017, amid growth in disposable income and a high share of owner-occupied flats (SI: 5.2%; EU: 10.2%).

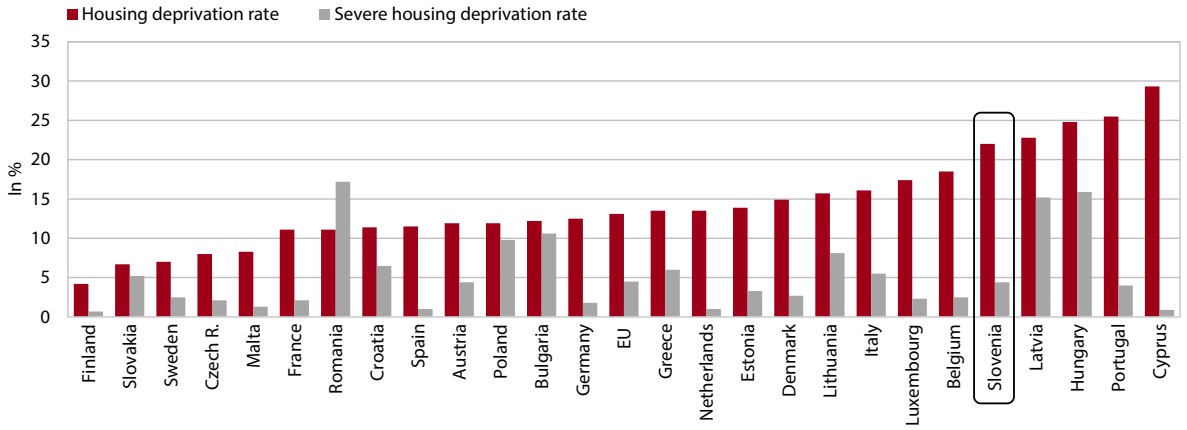
In Slovenia, 4.4% of the population faced severe housing deprivation in 2017.[3] Declining since 2011, the rate of severe housing deprivation has been below the EU average in the last few years. The housing stock has remained almost unchanged, but its quality is improving, with old and unusable flats being eliminated from the housing stock[4] and owing to loans and non-repayable subsidies for environmental investments offered by the Eco Fund. The overcrowding rate[5] is also relatively low. After falling since 2011, it in fact rose by 0.2 pps in 2017 but nevertheless remained lower than the EU average.

Table: Housing deprivation (HD) rate and severe housing deprivation (SHD) rate, in %

	2011		2012		2013		2014		2015		2016		2017	
	SP	HSP	SP	HSP	SP	HSP	SP	HSP	SP	HSP	SP	HSP	SP	HSP
Slovenia	34.8	8.7	31.4	8.2	27.6	6.8	30.5	6.3	27.4	5.6	24.4	4.5	22.3	4.4
EU	15.6	5.3	15.3	5.0	15.6	5.0	15.8	4.9	15.4	4.9	15.6	4.7	13.2	4.5

Source: Eurostat Portal Page – Population and Social Conditions – Living Conditions and Welfare – Income and Living Conditions, 2018.
Note: Estimate for the EU for 2017.

Figure: Housing deprivation rate and severe housing deprivations rate, 2017



Sources: Eurostat: Portal Page – Population and Social Conditions, 2018; Housing Statistics, 2018.
Note: Data for Ireland and the UK not available.

[1] The percentage of the population living in poor housing conditions (in dwellings with certain deficiencies such as a leaking roof, damp walls/foundations/floors or rot in window frames/floor. Source: EU-SILC survey.
[2] The percentage of the population living in a household where total housing costs represent more than 40% of the household's total disposable income.
[3] Persons living in a dwelling which is considered as overcrowded while also exhibiting at least one of the housing deprivation criteria.
[4] After the release of informative calculations of property tax in 2014, many owners amended data on their properties in the Real Estate Register. Around 5,000 flats were removed from the housing stock, while 10,000 were classified as "unsuitable for habitation" (Miklič, 2016).
[5] The percentage of people living in an overcrowded flat, i.e. in a flat with an insufficient number of rooms with regard to the household's size and its members' ages.

Experience of discrimination 3.7

The share of people who have experienced discrimination or harassment[1] is gradually falling in Slovenia. Overall, 10% of respondents experienced discrimination in 2017, which is significantly less than the EU average (16%). Their number was highest in Jugovzhodna Slovenia and also higher than the Slovenian average in the Obalno-kraška, Savinjska and Pomurska regions. The most frequently mentioned reason for discrimination was gender (2%).[2] Discrimination as a result of age (for being over 55 or under 30 years old), religion or beliefs, disability, ethnic origin, sexual orientation, social class, political opinions, or place of residence was experienced by around 1% of respondents, while 4% of respondents were discriminated against for other reasons. All shares were lower than the EU average, except the shares of those feeling discriminated against for being younger than 30 years or because of their sexual orientation or place of residence, which were equal to the EU average.

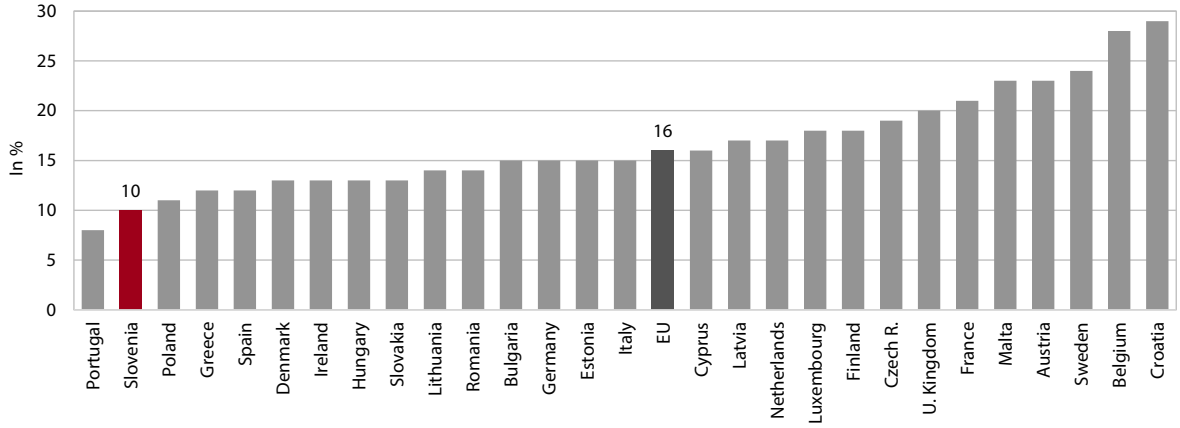
The share of people who felt harassed or discriminated against in Slovenia is among the lowest in the EU. The share of those who have experienced discrimination has in fact fallen in most EU countries, but in 2017 only Portugal (at 8%) had a lower share than Slovenia. In the EU as a whole, the share dropped for all types of discrimination in comparison with 2015, the most for being older than 55 years. Similar holds true for Slovenia, with the exception of discrimination on the grounds of ethnic origin or sexual orientation, where the shares remained unchanged. In fighting discrimination, it is important to inform people of their rights in the event thereof. In Slovenia two-thirds of respondents think that they would know their rights should they fall victim to discrimination or harassment,[3] and more than half of respondents say that diversity is sufficiently reflected in the media, although the perceived diversity varies depending on the group in question.[4]

Table: Total share of those who have experienced some form of discrimination or harassment, in %

	2008	2009	2012	2015	2017	SDS 2030 target
Slovenia	15	16	12	13	10	< 10
EU	15	16	16	21	16	

Source: Special Eurobarometer (2008, 2009, 2012, 2015 and 2017).
Note: Data for the EU for 2008, 2009 and 2012 are for the EU-27, while data for 2015 and 2017 are for the EU-28.

Figure: Experience of discrimination, 2017



Source: Special Eurobarometer 471, 2017.

[1] The source of the data is Special Eurobarometer (2008, 2009, 2012, 2015 and 2017), which is based on public opinion polls on the following question: In the past 12 months have you personally felt discriminated against or harassed on one or more of the following grounds – for ethnic origin, gender, sexual orientation, being over 55 years old, being younger than 30 years old, religion or beliefs, disability, gender identity, or another reason (in the 2017 survey also for social class, political opinions and place of residence)?
[2] In the EU as a whole, the most frequently mentioned reasons for harassment or discrimination are gender and being over 55 years old (both at 3%).
[3] The EU average being 45%.
[4] Special Eurobarometer 437, 2015.

Life satisfaction 3.8

In 2018 life satisfaction, as measured by Eurobarometer,[1] was higher than before the crisis; it has been above the EU average in Slovenia since measurements began. In 2018 it nevertheless declined slightly. The positive assessments of personal financial and employment situation, otherwise by far the highest in all years, declined slightly; expectations for the next year regarding these two areas declined even more.[2]Optimism also dropped at the country level. After several years of more-or-less steady growth following the crisis, all of the above-mentioned measures of satisfaction or optimism[3] indicate a lowering since spring 2018. At the country level, satisfaction with the economic and employment situations nevertheless increased further in 2018. When asked to identify two main issues at the EU level, in autumn 2018 (the most recent data) Slovenian respondents for the first time pointed to immigration (58%) and terrorism (20%) as the two most important problems (and this by far),[4] while the economic situation – whose importance had been falling rapidly in the three years to 2018 – was only the third most frequently mentioned concern (13%). At the country level, social and health security was most frequently cited as the main issue (31%), followed by immigration (24%) then unemployment, the economic situation and pensions. These issues were also perceived as the main concerns at the personal level, with the exception of immigration, which was mentioned by 3% of respondents only.

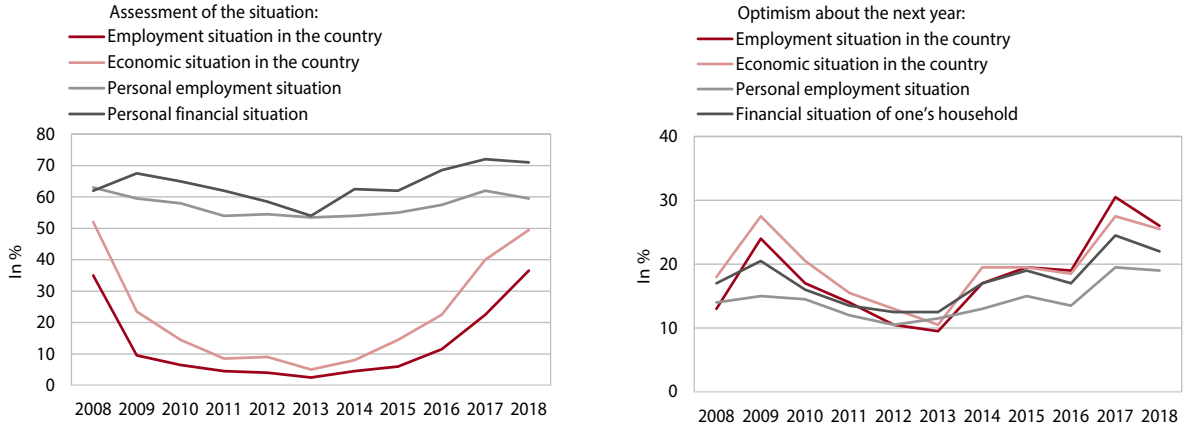
In 2017 Slovenia recorded the highest level of life satisfaction thus far, and this for both genders alike,[5] in contrast to previous years, when life satisfaction had been somewhat lower for men. People with higher education are, on average, more satisfied with life. Regardless of the level of education, people in the cohesion region Vzhodna Slovenia are, in general, less satisfied with life than those in the cohesion region Zahodna Slovenia, the gap being widest among those with lower education. The regions standing out from the Slovenian average (7.2) in all years are Koroška, Posavska, Jugovzhodna Slovenija and Osrednjeslovenska – the first two negatively (6.8 both) and the last two positively (7.4 both).

Table: Life satisfaction, in %

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Slovenia	90	89	88	89	87	86	85	83	85	82	83	84	89	92	91
EU	81	81	82	80	77	78	78	77	77	75	80	76	81	82	83

Source: Standard Eurobarometer, several issues.

Figure: Assessment of the situation and optimism for the next 12 months, by four life satisfaction indicators, Slovenia



Source: Standard Eurobarometer, SB90, 2018.
Note: The annual average is IMAD's calculation based on half-yearly measurements.

[1] The Eurobarometer measures life satisfaction with the following question: All things considered, how satisfied would you say you are with your life these days? In our analysis, the category of satisfied people includes those very satisfied and satisfied.
[2] Expectations for the next 12 months and perceptions of the situation at the country level tend to be more dependent on the presentation of reality in the media than those at the personal level, that reflect one's personal situation.
[3] The share of those expecting improvement in the next 12 months.
[4] When asked to identify two areas (of those listed) they perceived as their greatest concerns at the personal level and at the level of the country and the EU.
[5] SURS started to collect these data in 2012 (the latest data are for 2017). SURS data enable a somewhat more detailed analysis of life satisfaction by socio-demographic group.

Life expectancy 3.9

Life expectancy[1] at birth is rising in Slovenia; it has been above the EU average since 2014.[2] Life expectancy in Slovenia increased by three months per year in the ten years to 2016 (in the EU by two). The improvement in longevity can be attributed to various factors, such as better socio-economic conditions, higher education, healthier lifestyles and advances in medicine.[3] In many EU countries, including Slovenia, life expectancy gains have slowed since 2011, which can be attributed to a slower decline in mortality rates for circulatory diseases, which had been the main reason for life expectancy gains in previous years, and an occasionally higher number of deaths among older people (partly as a result of outbreaks of flu).[4]

Life expectancy at the age of 65 is highest for women and people with tertiary education. In Slovenia women at age 65 can expect to live for a further 21.8 years on average, compared with 17.9 years for men. Life expectancy at age 65 is increasing and has reached the EU average. Broken down by educational attainment, remaining life expectancy among women with low education is 21.4 years and among those with tertiary education 22.3 years. For men, the educational differences are somewhat more pronounced (men with tertiary education can expect to live 2.1 years longer than those with low education (16.9 years)). The gender gap is widest for people with low education, where women can expect to live 4.5 years longer than men.

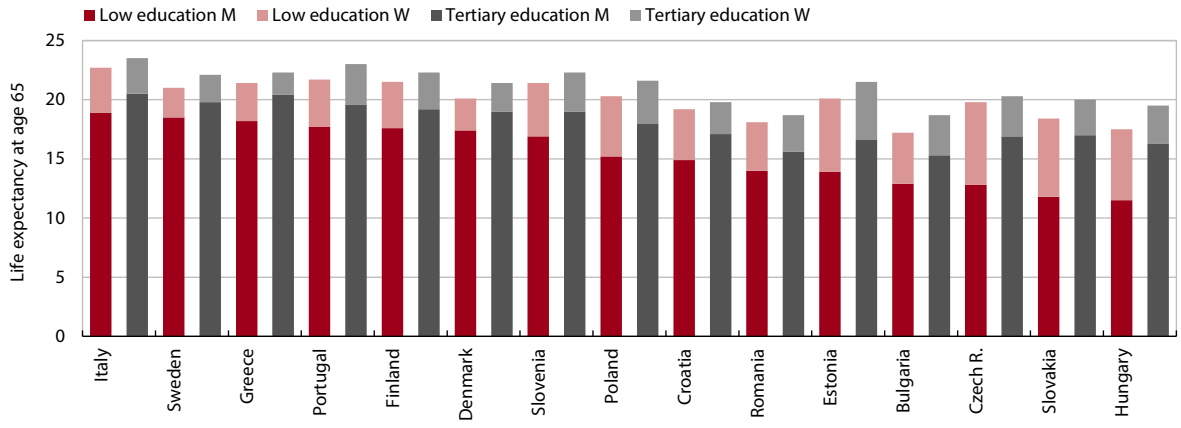
Regional disparities in life expectancy declined in 2011–2017, for woman somewhat more than for men. They reflect regional characteristics, which are linked to the previously mentioned socio-economic factors and the region's position (for example the healthier Mediterranean diet and lifestyle). Women in the Obalno-kraška region thus had the highest life expectancy at birth in 2017, at almost 85 years, which is more than two years longer than women in north-eastern Slovenian regions (for example, 82.3 years in Podravska). Life expectancy for men was the highest in the Primorsko-notranjska region (almost 80 years) and the lowest in Jugovzhodna Slovenija, Savinjska and Pomurska (all 76.7 years).

Table: Life expectancy at birth

		2000	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016
Slovenia	Life expectancy	76.2	77.5	79.1	79.4	79.8	80.1	80.3	80.5	81.2	80.9	81.2
	Men	72.2	73.9	75.5	75.9	76.4	76.8	77.1	77.2	78.2	77.8	78.2
	Women	79.9	80.9	82.6	82.7	83.1	83.3	83.3	83.6	84.1	83.9	84.3
EU	Life expectancy	N/A	78.5	79.4	79.6	79.9	80.2	80.3	80.5	80.9	80.6	81.0
	Men	N/A	75.4	76.3	76.6	76.9	77.3	77.4	77.7	78.1	77.9	78.2
	Women	N/A	81.5	82.3	82.6	82.8	83.1	83.0	83.3	83.6	83.3	83.6

Source: Eurostat Portal Page – Population and Social Conditions – Population – Demography – Mortality, 2018. Note: N/A – not available.

Figure: Life expectancy at age 65, 2016



Source: Eurostat Portal Page – Population and Social Conditions – Population – Demography – Mortality, 2018.
Note: Countries are ranked with regard to the values for men with low education. The graph only includes countries for which data are available.

[1] Life expectancy is the average number of years that a person at age x years can expect to live, under the assumption that age-specific mortality rates remain constant throughout their lifetime (equal to the values in life tables for the observed year).
[2] SURS does not publish data on total life expectancy, while its data on life expectancy by gender differ slightly from those published by Eurostat due to the different methodologies used.
[3] Health at a Glance 2017 (OECD), 2017.
[4] Health at a Glance: Europe 2018 (OECD), 2018.

Healthy life years 3.10

In 2015 and 2016 Slovenia's gap with the EU as regards healthy life expectancy at birth[1] and at the age of 65 widened further. The indicator shows that a person born in Slovenia can, on average, expect slightly more than 58 years of healthy life (in the EU the figure is already slightly more than 64 years). Healthy life expectancy at the age of 65 is 8.3 years in Slovenia on average, compared with 10 years in the EU. The gap for women increased significantly in the last two years, while the gap for men declined slightly. Since 2015 the number of healthy life years in Slovenia has thus been higher for men.[2] Increasing the number of healthy life years in the future – which involves higher investment in preventive care – would significantly contribute not only to the extension of individuals' activity, but also to slower growth in health and long-term care expenditure. Inequalities in terms of healthy life years between people with higher and those with lower education narrowed in 2005–2014 and were roughly on a par with the EU average.[3]

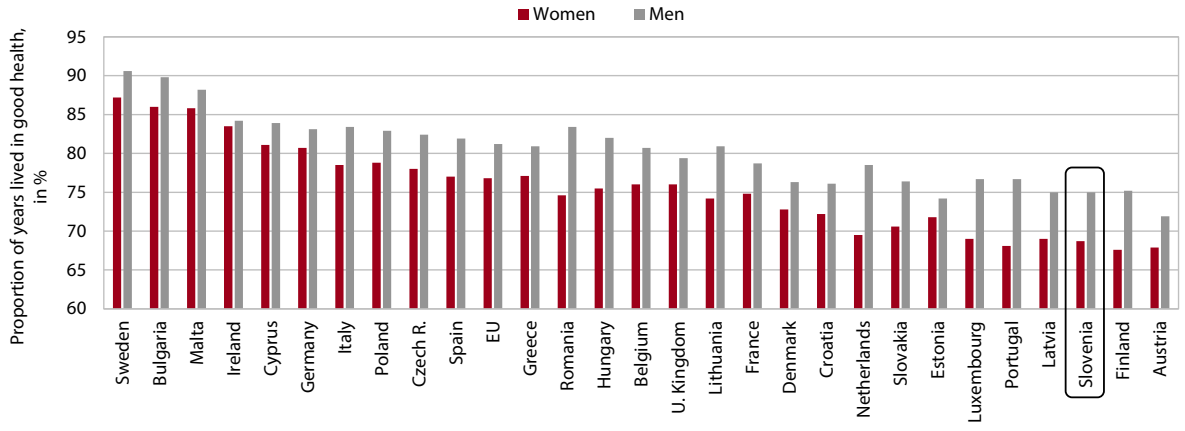
The lag behind the EU in the ratio between healthy life years and life expectancy has also widened further in the last few years.[4] A worse ratio means higher pressure on social protection systems as a result of early retirement and higher demand for health and long-term care services. In 2014–2016, the ratio deteriorated somewhat in Slovenia, following several years of improvement; in the EU it improved markedly. Slovenia's lag behind the EU average is mainly due to the very low number of healthy life years. In all EU countries the ratio is higher for men, though largely on account of their lower life expectancy.

Table: Healthy life years at birth and the proportion of healthy life years in life expectancy

	Number of healthy life years at birth								Proportion of healthy life years in life expectancy, in %					
	Women				Men				Women			Men		
	2010	2015	2016	SDS 2030 target	2010	2015	2016	SDS 2030 target	2010	2016	SDS 2030 target	2010	2016	SDS 2030 target
Slovenia	54.6	57.7	57.9	64.5	53.4	58.5	58.7	64.5	65.7	68.7	75.0	69.8	75.0	80.0
EU	62.6	63.3	64.2		61.8	62.6	63.5		75.6	76.8		80.3	81.2	

Source: Eurostat Portal Page – Population and Social Conditions – Health – Public Health, 2019.

Figure: Proportion of years lived in good health, 2016



Source: Eurostat Portal Page – Population and Social Conditions – Health – Public Health, 2018.
Note: The countries are ranked according to the average share of life that men and women spend in a healthy state.

[1] The indicator of healthy life years measures the number of remaining years that a person of a specific age is expected to live without disability or activity limitations. This is a composite indicator which combines mortality and health status data. The estimate of disability/activity limitations is based on the Global Activity Limitation Indicator (GALI), which, within the EU-SILC survey, measures self-perceived limitations people have experienced, because of health problems, in carrying out their everyday activities for at least six months. As the translation of the EU-SILC survey question on limitations was corrected for Slovenia in 2010, only the time series from 2010 is in fact comparable.

[2] In 2016 this was also the case in seven other EU Member States.

[3] Kofol Bric, T., and Zaletel, M. (2018).

[4] A decline in the ratio of healthy life years to life expectancy means a deterioration; an increase signifies an improvement.vrednosti pa izboljšanje razmerja.

Amenable mortality 3.11

Amenable mortality[1] was similar to the EU average in 2015. In Slovenia in 2015, 128 deaths per 100,000 inhabitants could have been avoided (in the EU, 127). In 2011–2015 the number of amenable deaths in Slovenia declined by 7%, meaning that in 2015, 7% more deaths were avoided through effective healthcare than in 2011. Almost half of amenable deaths were caused by cardiovascular diseases, but there was also a large share of deaths from colon cancer and breast cancer, i.e. deaths that could be effectively prevented through early detection and timely treatment. In all countries, the indicator is significantly higher (i.e. worse) for men; in Slovenia, the lag behind the EU is smaller for women than for men.

With relatively lower investment in healthcare, Slovenia has reached the average level of amenable mortality primarily on account of its good healthcare at primary level. Total health expenditure per capita in Slovenia is close to 75% of the EU average, while the number of amenable deaths is similar. This can be to a great extent attributed to good healthcare provision at the primary level, but the problem remains long waiting times at the secondary level and a lack of coordination and integration across levels and sectors. The lowest amenable mortality rates are recorded in France, Spain and the Netherlands, primarily owing to the very low mortality from cardiovascular diseases, but these countries' investments in health are on average almost 20% higher than the EU average and 45% higher than in Slovenia.

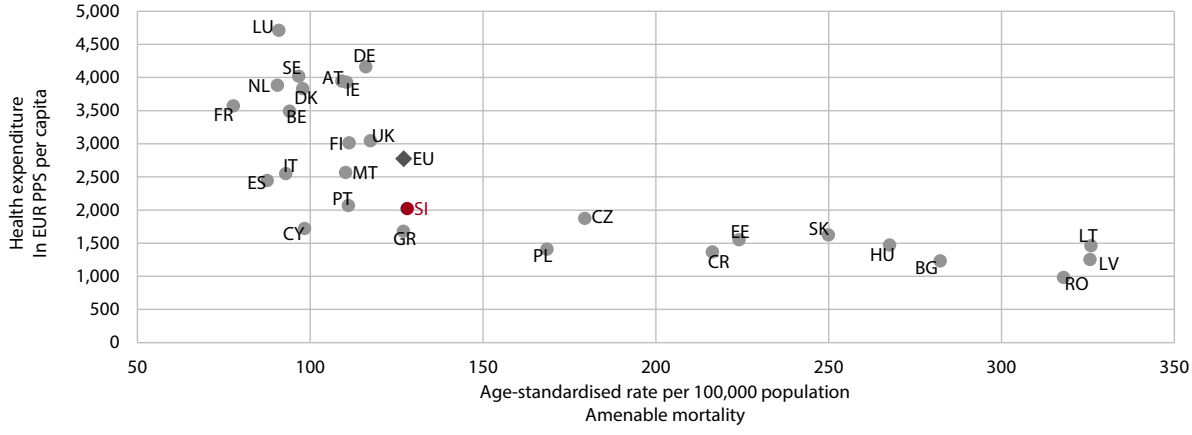
Slovenia has made the most progress in the detection and treatment of breast cancer but could do more to improve cervical cancer treatment and reduce stroke-related mortality. In acute care, Slovenia has reached very good results particularly in terms of 30-day mortality in patients admitted to hospital for acute myocardial infarction, but has very high 30-day mortality for strokes – in 2015 it was almost three times higher than in Denmark and twice as high as in Finland, Sweden and Germany, despite an improvement in recent years. The effectiveness of cancer prevention and treatment improved in Slovenia in 2010–2014, the most for breast cancer, where the 5-year survival rate exceeds the EU average. Slovenia has also made great progress in colon and rectal cancer survival rates, which are also higher than the EU average.

Table: Amenable mortality, age-standardised rates per 100,000 population

	Total				Women			Men		
	2011	2013	2014	2015	2011	2014	2015	2011	2014	2015
Slovenia	137.3	129.7	122.7	128.1	98.6	88.7	94.9	182.6	160.3	165.3
EU	137.9	131.1	126.2	127.1	106.3	97.5	97.6	173.2	158.5	159.9

Source: Eurostat Portal Page – Population and Social Conditions – Health – Public Health, 2018.

Figure: Amenable mortality and health expenditure per capita, Slovenia and EU countries, 2015



Source: Eurostat Portal Page – Population and Social Conditions – Health – Public Health, 2018.

[1] The indicator of amenable mortality indicates the number of premature deaths that could be avoided in a given year through effective and timely healthcare.

Overweight and obesity 3.12

The share of obese adults in Slovenia significantly exceeds the EU average. Overweight[1] and obesity, usually a consequence of excessive food intake and insufficient physical activity, are important risk factors for the development of chronic health conditions and premature mortality. The burden of non-communicable chronic diseases such as hypertension, diabetes and cardiovascular diseases is rapidly rising. Cardiovascular diseases are the main cause of mortality in Slovenia and indeed most developed countries. Obesity can moreover have not only medical but also socioeconomic consequences (social exclusion, lower income, higher unemployment and more working days lost). Although a large share of the population is physically active in Slovenia, both the share of obese and the share of overweight persons (overweight and obese together) significantly exceeded the EU average in 2014. The large share of overweight and obese adults in Slovenia can be attributed to bad dietary habits.[2] Slovenia diverges from the EU average particularly in the high prevalence of obesity in men of all levels of education and women with low education. Unlike men, women with higher education tend to be well aware of the importance of a healthy diet, the share of obese women in this group being significantly lower than in the EU as a whole.

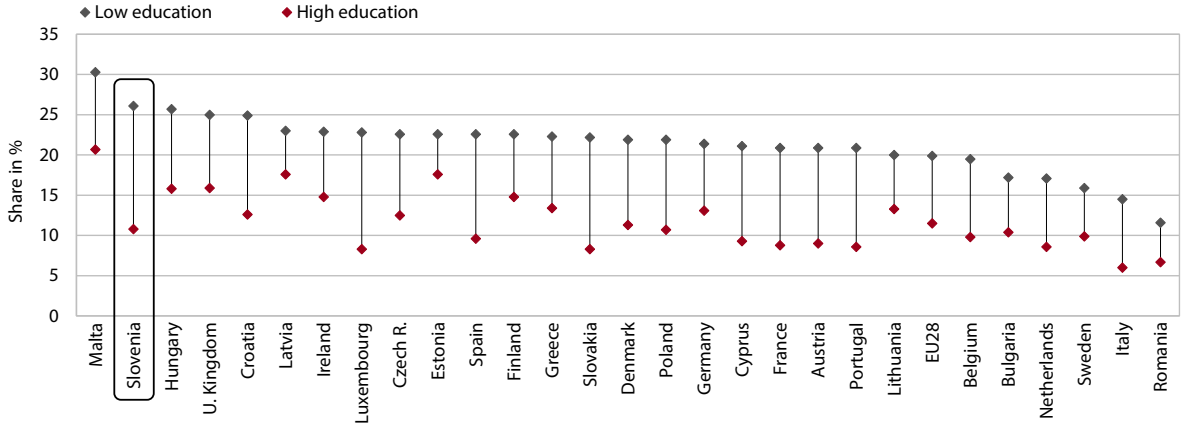
The obesity rate among children declined significantly in Slovenia. Data on the decrease in obesity among children (7–8 years) are more encouraging than the data for adults. The share of obese children dropped from 13% in 2007 to 9% in 2016, thus by more than on average in the 23 countries for which data are available (13% in 2007 and 12% in 2016). All these countries have higher obesity rates for boys than girls (in 2016, SI: boys 10.5% and girls 8.4%; EU-23: boys 13.4% and girls 9.9%).[3] Obesity among children is a significant risk factor for obesity in adulthood. Moreover, it can also lead to poor self-esteem, underachievement at school, depression, eating disorders, and health and economic problems in adulthood.

Table: Overweight and obesity, by gender

		Overweight, in %						Obesity, in %					
		Total		Women		Men		Total		Women		Men	
		2007	2014	2007	2014	2007	2014	2007	2014	2007	2014	2007	2014
Slovenia	Adults	39.8	36.5	30.7	30.3	49.0	42.7	16.8	18.6	16.3	17.0	17.3	20.3
EU	Adults	N/A	34.8	N/A	28.4	N/A	41.7	N/A	15.4	N/A	15.3	N/A	15.6

Source: Eurostat Portal Page – Population and Social Conditions – Health – Public Health, 2018.Notes: Data according to EHIS; N/A – data not available. As for 2007 comparable data according to EHIS are available only for 18 EU Member States, the averages for the EU could not be calculated.

Figure: Share of obese people aged 15 and over by educational attainment, 2014



Source: Eurostat, EHIS 2014, according to OECD Health at a Glance: Europe 2018. Note: Persons with low education include those with primary, secondary and upper secondary education, while those with high education include those with tertiary education.

[1] Adults with a body mass index (BMI) from 25.0 to 29.9 kg/m2 are defined as overweight and those with a BMI of 30 kg/m2 or over as obese. The BMI is a ratio of an individual's weight to the square of his or her height. This is a criterion according to the World Health Organisation (WHO, 2003). The BMI is a good indicator of the amount of body fat, but it has the major limitation that it says nothing about the distribution of body fat or functional muscle mass.

[2] According to the European Health Interview Survey (EHIS), people over 15 years of age in Slovenia had better dietary habits than the OECD average in 2014: 61% of them consumed fruit and vegetables daily and more than 74% were at least moderately physically active (OECD: 57%, 60% and 66% respectively). According to the Health-Related Lifestyle Survey, conducted for the fifth time in Slovenia in 2016 (for the first time in 2001), the dietary habits of Slovenians are improving, but more than half of adults still mostly eat unhealthy food, particularly men, younger adults, people of lower educational level and those from lower social classes. Only half of adults are sufficiently physically active (NIJZ, 2018).

[3] WHO-Europe (Children Obesity Surveillance Initiative). According to OECD Health at a Glance: Europe 2018, 2018.

Gender Equality Index 3.13

According to various indicators that measure gender equality/inequality, Slovenia has been among the best performing EU countries for a long time. In terms of the Gender Equality Index (GEI),[1] it was above the EU average in 2015 (the latest data), exceeding it in all index dimensions except for knowledge. Slovenia scores lowest in the knowledge dimension due to its significant gender differences in enrolment in educational programmes. In terms of gender equality, Slovenia ranks highest in the health and money dimensions. In the last ten years Slovenia, like many other countries, made the most headway regarding the participation of women in political decision-making, which is a consequence of changes to election laws (the introduction of gender quotas on candidate lists). Meanwhile, according to the Global Gender Gap Index,[2] for which more recent data are available, Slovenia slipped by four places, to 11th in the EU, mainly due to a decline in the number of women members of parliament following the elections[3] in 2018, but also, in the economic cooperation and opportunities dimension, due to the increased wage gap between women and men. It remains, however, among the best-performing countries according to this index in the educational attainment and health dimensions.

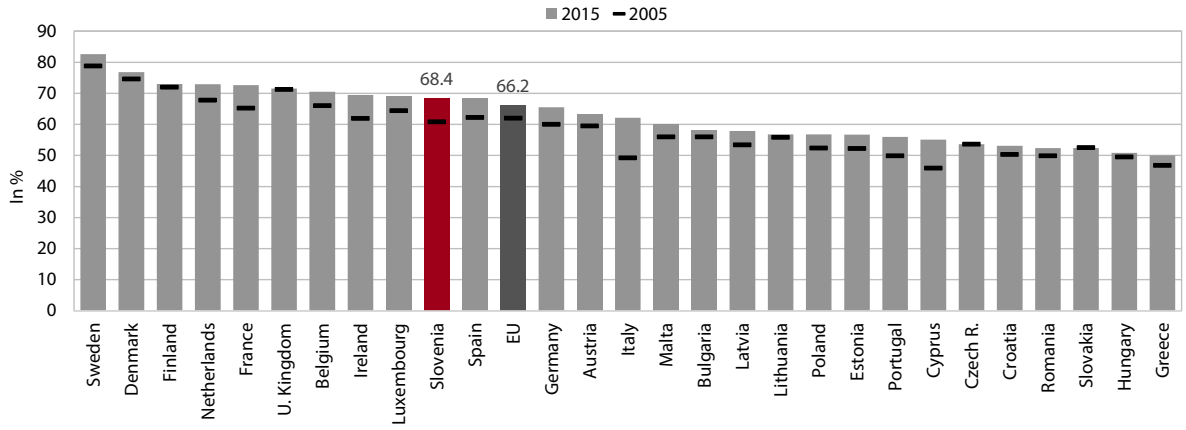
In 2018[4] Slovenia also remained at the top of the EU according to the three UNDP indices of gender (in) equality. According to the Gender Inequality Index (GII)[5] and the Gender Development Index (GDI),[6] it is ranked 5th in the EU. Along with the Baltic countries and Poland, Slovenia is in the group of countries where society is now losing more potential in the male than in the female part of the population. The only country that equally exploits the potential of women and men is Finland. According to the human development index for women (HDIw), Slovenia is in 9th place in the EU, according to the index for men (HDIm) in 13th.

Table: Gender Equality Index

	2005	2010	2012	2015	SDS 2030 target
Slovenia	60.8	62.7	66.1	68.4	> 78
EU	62.0	63.8	65.0	66.2	

Source: Eige Report, 2017.

Figure: Gender Equality Index (GEI)



Source: EIGE Report, 2017.

[1] An index value of 1 means total inequality and 100 full equality. It is calculated on the basis of 31 indicators in six domains: work, money, knowledge, time, power and health.

[2] The Global Gender Gap Index (GGGI) is calculated by the World Economic Forum (WEF). It is based on 14 ratios in four dimensions: economic participation and opportunity, educational attainment, health and survival, and political empowerment.

[3] The number changes after elections with regard to the number of women elected to parliament and, subsequently, their appointment to positions. In 2006 the share of women in the Slovenian parliament was 13.5%; in 2016 it was 35.6%, the most thus far, while in November 2018 it was 26%.

[4] UNDP calculation in 2018 based on data for 2017.

[5] The Gender Inequality Indicator (GII) measures gender inequality in three dimensions: 1) reproductive health, measured by two indicators, i.e. the maternal mortality ratio and the adolescent birth rate; 2) empowerment, measured by the share of women with at least some secondary education and the share of parliamentary seats held by women; and 3) the labour market, measured by the female labour force participation rate.

[6] The Gender Development Index (GDI) was introduced in 2014. It is calculated as the ratio between the human development indices for women and men (HDIw/HDIm); the HDI is calculated on the basis of three dimensions: health, income and education.

Unpaid voluntary work 3.14

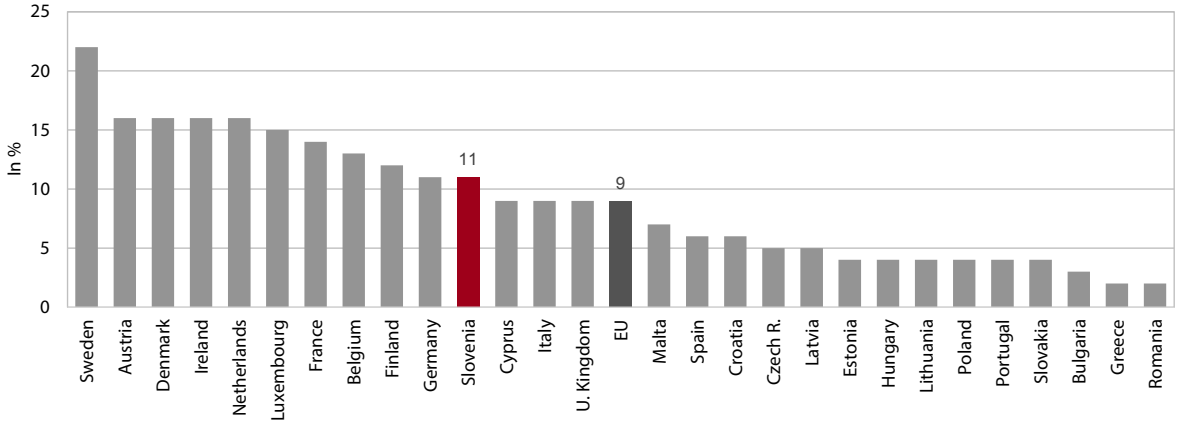
The proportion of people who carry out unpaid voluntary work on a regular basis is slightly above the EU average.[1] The proportion of volunteers engaged in unpaid voluntary work occasionally and the proportion of those doing it regularly or at least once a month increased in 2016 relative to 2012. In Slovenia, 34% of respondents carry out some type of unpaid voluntary work, of which 12% on a regular basis. The most volunteers were involved in regular unpaid voluntary work through educational, cultural, sports or professional associations (11.3%) and other voluntary organisations (5.6%), more than in 2012 and more than on average in the EU. The proportion of volunteers is the highest among young people (18–24 years) and more voluntary work is carried out by men.[2] The proportions of respondents doing voluntary work at least once a month in community and social services[3] (3.9%), social movements[4] (2.4%), and political parties and trade unions (1.1%) are lower (and also lower than the EU average). The proportion of respondents doing voluntary work in community and social services and political parties and trade unions is the highest in the 25–34 age; it is slightly higher for men. Women perform more voluntary work through social movements, the proportion of those involved in regular voluntary activity being the highest in the 65+ age group.

Table: Proportion of people doing unpaid voluntary work, in %

		2012	2016
Regular participation in voluntary work	Slovenia	9	12
	EU	11	10
Occasional participation in voluntary work	Slovenia	18	22
	EU	21	22

Source: Eurofound, European Quality of Life Surveys 2011/2012 and 2016.

Figure: Proportion of people doing unpaid voluntary work through educational, cultural, sports or professional associations, 2016



Source: Eurofound, European Quality of Life Surveys 2011/2012 and 2016.

[1] European Quality of Life Surveys 2011/2012 and 2016. Data are based on answers to the survey question "How often did you do unpaid voluntary work through the following organisations in the last 12 months?" "Regularly/at least once a month" encompasses answer categories "every week" and "every month".
[2] Particularly high is the proportion of men involved in regular unpaid voluntary work through educational, cultural, sports or professional associations.
[3] I.e. organisations assisting older, young, disabled or other people who need help.
[4] Social movements (such as environmental movements and human rights movements) or charities (for example fundraising or charity campaigns).

Health expenditure 3.15

Public health expenditure in Slovenia has been rising more slowly than the EU average in the last few years, which is also reflected in a greater lag in per capita expenditure behind the EU average. In 2013 per capita expenditure in PPS amounted to 83% and in 2017 to 80% of the EU average. In 2009–2013 public health expenditure per capita in Slovenia fell more than in the EU as a whole and since 2013 has increased less. Since 2014 public health expenditure in Slovenia has otherwise increased every year in real terms, in line with stronger growth in employment and wages and hence higher inflows into the health fund. The stronger revenue growth in recent years has allowed for the expansion and more effective evaluation of certain priority programmes (such as model practices, oncology and biological medicines), the reduction of waiting times, and the coverage of the increasing expenditure on sickness benefits. In 2017 and 2018 the additional HIIS revenue was also due to the fact that part of the salaries for trainee physicians and physicians in specialisation training was again paid from the state budget.[1]

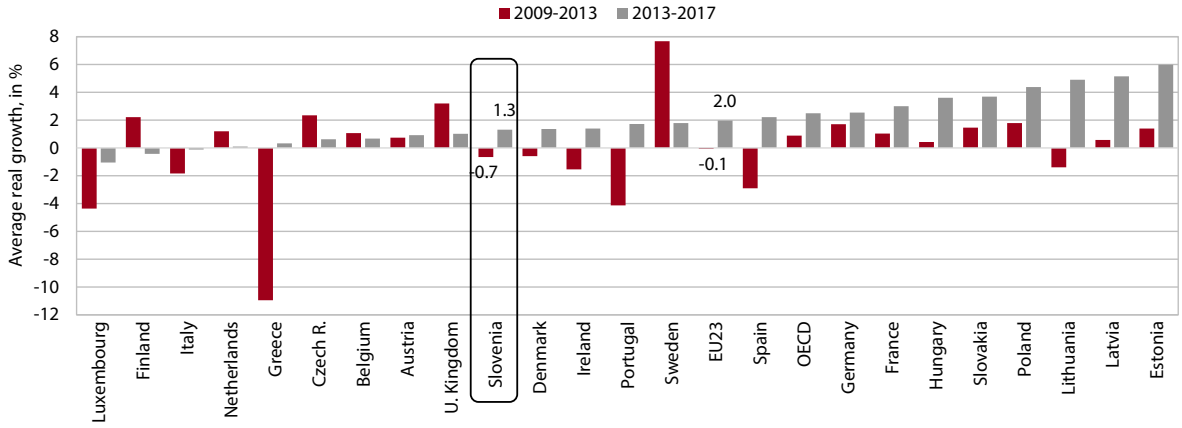
Total health expenditure as a share of GDP is similar to the EU average.[1] With stronger GDP growth in recent years, the ratio between total and public health expenditure relative to GDP dropped somewhat both in Slovenia and in the EU as a whole. In 2018 current health expenditure in Slovenia accounted for 8.0% of GDP, according to the preliminary estimate (in the EU in 2017: 8.3%). Public expenditure in 2018 totalled 5.8% of GDP (in the EU in 2017: 6.0%).

Table: Health expenditure[3]

	Health expenditure, as a % of GDP				Public health expenditure, as a % of GDP**				Private health expenditure, as a share of current health expenditure, in %			Out-of-pocket expenditure as a share of current health expenditure, in %		
	2005	2016	2017	2018	2005	2016	2017	2018	2005	2017	2018	2005	2017	2018
Slovenia *	8.0	8.5	8.2	8.0	5.9	6.1	5.9	5.8	26.5	27.8	27.1	13.0	12.4	12.0
EU 27** (simple average)	7.7	8.4	8.3	N/A	6.0	6.2	6.0	N/A	25.0	27.5	N/A	21.5	22.4	N/A

Sources: OECD Statistics, Eurostat, SI-STAT Data Portal – Health Expenditure and Sources of Funding, 2018. For 2018: HIIS, 2019. Notes: * In the calculation of the share of GDP for Slovenia, the revision of GDP in September 2018 is taken into account (SURS, National Accounts), for 2018 the autumn estimate by IMAD, 2018; ** EU-27 is a simple EU average excluding Malta, IMAD calculation; the data for health expenditure in Slovenia for 2017 and 2018 are a first estimate (see first note). N/A – data not available.

Figure: Average annual real growth in public health expenditure per capita, 2009–2017



Source: OECD Statistics – Health – Health expenditure and financing, 2018.

[1] Amendments to the Medical Practitioners Act adopted in July 2017 shifted the obligation for financing medical and specialist training from the health insurance fund back to the state budget (a total of EUR 23 million in 2017, EUR 40 million in 2018, EUR 60 million in 2019 and EUR 80 million in 2020, when the whole amount will be paid from the state budget (Official Gazette of the Republic of Slovenia, Nos 40/17, 64/17 and 49/18).

[2] An unweighted arithmetic mean of the EU Member States. Sources: OECD Stat; Eurostat for Cyprus, Bulgaria, Romania and Croatia; WHO HFA-DB for Malta.

[3] In 2011 the manual of the System of Health Accounts (OECD, Eurostat and WHO: SHA 2011) was revised, an important change being that the basic indicator of health expenditure now shows only current expenditure on health, excluding capital formation.

Expenditure on long-term care 3.16

Slovenia is widening its gap with the EU average in terms of expenditure on long-term care (LTC). In 2016 (the latest internationally comparable data), LTC expenditure in Slovenia amounted to 1.24% of GDP. International comparison shows that in the 13 EU countries for which data are available,[1] public expenditure averaged 1.5% of GDP, in contrast to only 0.9% in Slovenia. Broken down by source of funding, the share of public expenditure dropped significantly in the ten-year period between 2006 and 2016 (by 2.8 pps); broken down by function, the share of expenditure on the health component of LTC (which is mostly financed by public funds[2]) was falling during this period. In 2016 public expenditure on the social component of LTC rose substantially more than in previous years.

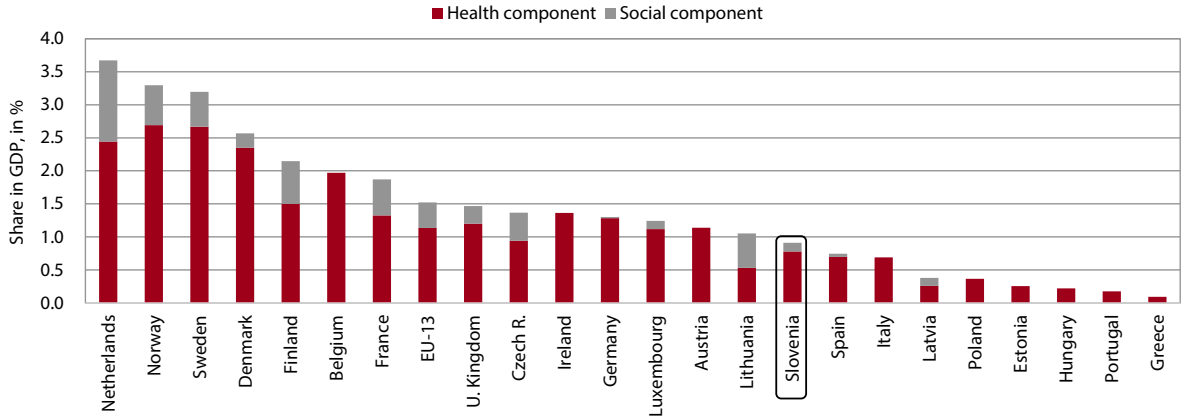
The share of LTC expenditure in total health expenditure is still significantly below the OECD average in Slovenia. After rising rapidly up to 2014, it has been dropping again in the subsequent years (2016: 9.6%; 2014: 10.3%) and is still significantly lower than the OECD average (15%). In some Scandinavian countries LTC expenditure (health component)[3] already accounts for more than 25% of total health expenditure. While more advanced OECD countries are primarily increasing public funding for long-term care at home, in Slovenia the ratio between institutional care and care at home is deteriorating from year to year. In 2016 almost 78.8% of expenditure was allocated for long-term care in institutions (60% for retirement homes, 15% for special social welfare institutions and 4.3% for hospitals) and only 21% for long-term care at home. In OECD countries overall, the ratio between institutional care and care at home is 65:35.

Table: Expenditure on LTC by source of funding and by function

	In EUR million			As a % of GDP			Breakdown, in %			Real growth, in %	Average annual real growth, in %
	2006	2015	2016	2006	2015	2016	2006	2015	2016	2016/2015	2006–2016
Long-term care	327	489	499	1.08	1.26	1.24	100.0	100.0	100.0	1.0	2.5
By source of funding:											
Public expenditure	250	356	368	0.83	0.92	0.91	77.8	72.8	73.7	2.3	2.1
Private expenditure	77	133	131	0.24	0.34	0.33	22.2	27.2	26.3	-2.3	4.9
By function:											
Health care	239	328	329	0.79	0.84	0.82	73.3	66.9	66.0	–0.3	1.5
Social care	87	162	170	0.29	0.42	0.42	26.7	33.1	34.0	3.8	5.1

Source: SI-STAT Data Portal – Long-Term Care (release: December 2017). Note: The conversion into constant prices was made using the GDP implicit deflator.

Figure: Public expenditure on long-term (health and social) care, 2016



Source: OECD Statistics 2018. Note: The EU-13 average includes only those countries that report both health and social components of long-term care.

[1] In the EU only 13 countries report health and social components of long-term care.

[2] The majority of public LTC expenditure (86%) at the same time also falls under health expenditure, statistically, so that an increase in public LTC expenditure usually also means an increase in health expenditure. In 2016 as much as 96% of the health part of LTC (the part that falls under health expenditure) was financed by public funds, of which 52% by HIIS funds.

[3] Expenditure on health-related LTC services, which is included in total health expenditure, encompasses not only medical long-term care, but also personal care related to assistance in performing basic activities of daily living (such as eating, bathing, dressing, getting in and out of bed, using the toilet, and controlling incontinence). It includes benefits in cash and in kind (for example attendance allowance). In 2016, 52.0% of expenditure on the health part of LTC services was financed by the HIIS and the rest by the PDII, the Ministry of Labour, Family and Social Affairs, and local government budgets.

Employment rate 3.17

The employment rate (20–64 years), which has been rising since 2014, exceeded the pre-crisis level in 2018. In the second quarter of 2018 it totalled 75.5% (EU average: 73.4%). The rapid increase was significantly influenced by demographic trends, in addition to favourable economic conditions, increased inclusion of inactive population in the labour market and stronger hiring. The employment rate has been rising particularly fast among young (20–29 years) and older people (55–64), who belong to more vulnerable groups on the labour market and whose employment rates are significantly below the overall rate. Young people were strongly hit by the crisis owing to their high exposure to temporary employment forms and a decline in the volume of student work. The improvement in their labour market situation reflects both the increased hiring in recent years and also demographic trends. Meanwhile, the employment rate of older people in fact rose further during the crisis, partly as a result of the pension reform and demographic effects.[1] Despite this increase, however, it remained among the lowest in the EU.

The employment rate has been rising in all education groups in recent years, the most among low-skilled people and those with secondary and upper secondary education. It was people with low, secondary or upper secondary education who were affected the most during the crisis (also in comparison with the EU average), owing to a significant decline in activity in construction and manufacturing. The improvement in their labour market situation in the last few years is, in addition to long-term changes in the demographic and educational structure,[2] a consequence of the structure of the recovery of economic activity and hiring in sectors where such workforce predominates. The employment rate for those with higher education fell the least during the crisis, mainly due to a smaller contraction of activity in sectors that employ better educated workforce (for example in public service activities).

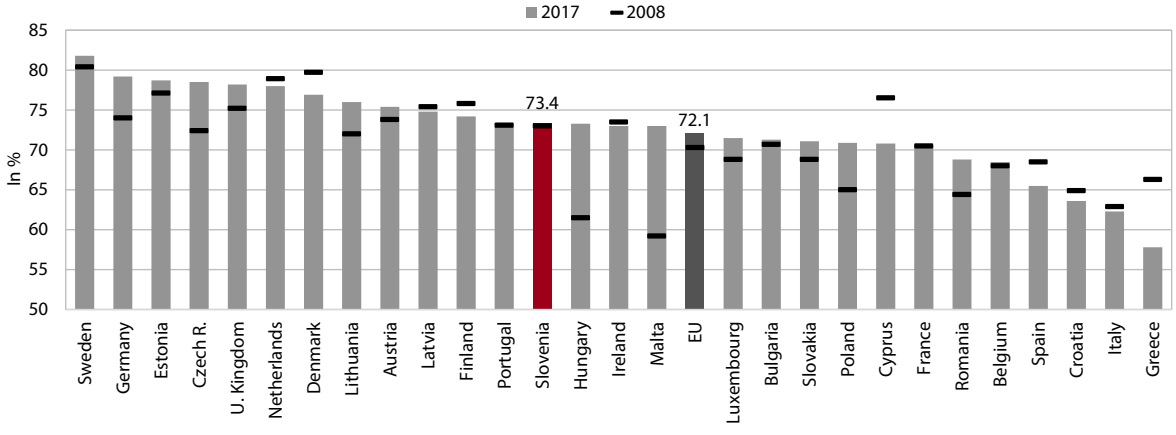
Since 2014 the employment rate has been rising the fastest in the cohesion region of Vzhodna Slovenija, where it is already higher than before the crisis. After deteriorating faster than in the cohesion region Zahodna Slovenija in most years of the crisis, it has also been rising more rapidly since 2014. Vzhodna Slovenija has thus narrowed slightly its gap with Zahodna Slovenija and the Slovenian average, although it still lags significantly behind both. The highest rates are recorded in the statistical regions Posavska and Koroška, where they have already exceeded 75%.

Table: Employment rate (20–64 age group), in %

	2000	2005	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	SDS 2030 target
Slovenia	68.5	71.4	73.1	72.9	72.1	70.7	68.6	68.1	67.1	68.4	69.4	70.6	73.4	75.5	>75.0
EU	N/A	68.0	69.9	70.5	69.1	68.7	68.8	68.6	68.4	69.2	69.9	71.1	72.3	73.4	

Source: Eurostat Portal Page – Population and Social Conditions – Labour Market, 2018. Note: N/A – data not available; data for individual years refer to the second quarter.

Figure: Employment rate, in %



Source: Eurostat Portal Page – Population and social condition – Labour market, 2018.

[1] Demographic effects are increasing the employment rate for the 55–64 age group in two ways: i) through the transition of employed persons from lower age groups into the 55–64 age group and ii) through the exit of older unemployed people from this age group.

[2] Changes in the demographic and educational structure are reflected particularly in the employment rate of low-skilled people, given the decline in the number of working-age population with low education as a consequence of the retiring of older (mostly low-skilled) people and of favourable trends in acquiring higher education among younger generations (see also Indicator 2.1)

Unemployment and long-term unemployment rates 3.18

After rising sharply during the crisis, the unemployment rate has been rapidly falling since 2014 and is significantly lower than the EU average. It had dropped to 5.2% by the second quarter of 2018, which is related to vigorous economic growth and hence stronger employment. In the crisis years the unemployment rate rose more for men (and indeed exceeded the rate for women), but since 2012 it has again been lower for men.[1] Unemployment declined the most among people with low, secondary and upper secondary education, consistent with the structure of the recovery of employment, which was at first the most intense in manufacturing. The crisis was especially hard on young people[2] (15–24 years) – by 2013 their unemployment rate had risen to 24.1%. Since then it has been rapidly falling. In the second quarter of 2018 it totalled 8.1%, which is considerably less than the EU average (15.0%). The decline was attributable to the increased volume of student work and active employment policy programmes targeted at young people (such as the Youth Guarantee Scheme). It was, however, also due to demographic factors, the number of young people already falling for quite a long period of time.

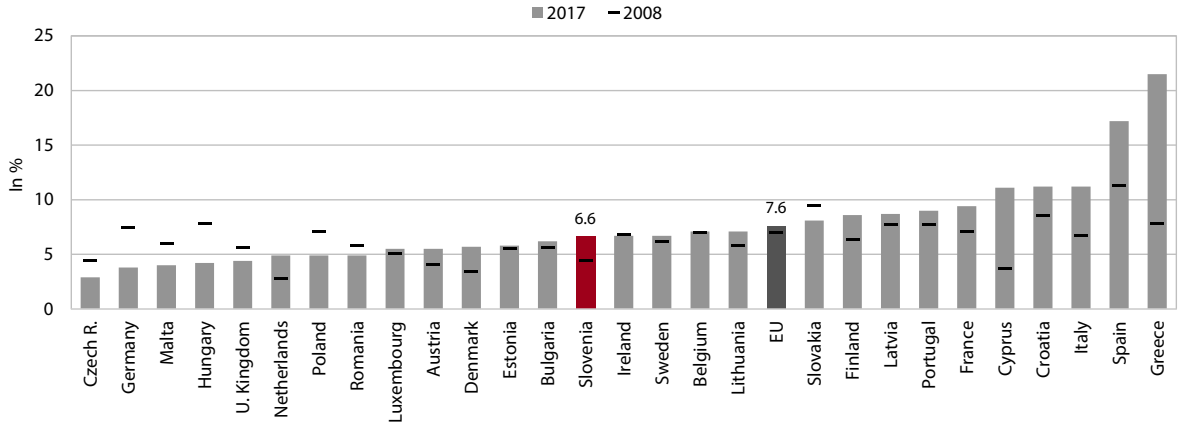
The long-term unemployment rate, dropping for the fourth year in a row, has been below the EU average since 2015. In 2009–2014 it rose sharply as a result of weak labour demand. After the crisis it started to decline amid greater employment opportunities and owing to active employment policy measures – the fall being particularly pronounced in the last two years. The long-term unemployment rate of young people rose the most during the crisis, but it has then also fallen the most in subsequent years. The share of the long-term unemployed in all unemployed also decreased sharply last year and was similar to the EU average in the second quarter of 2018.

Table: Unemployment and long-term unemployment rates (15–74 years), in %

	2000	2005	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Unemployment rate														
Slovenia	6.9	5.8	4.6	4.1	5.6	7.1	7.7	8.2	10.4	9.3	9.2	7.8	6.4	5.2
EU	N/A	8.9	7.0	6.8	8.7	9.5	9.3	10.3	10.8	10.2	9.5	8.6	7.6	6.8
Long-term unemployment rate														
Slovenia	4.4	2.9	2.2	1.9	1.7	3.2	3.5	3.9	5.1	5.3	4.7	4.3	3.3	2.3
EU	N/A	4.1	3.1	2.6	2.8	3.8	4.0	4.5	5.1	5.0	4.6	4.0	3.4	3.0

Source: Eurostat Portal Page – Population and Social Conditions – Labour Market, 2018.
Note: N/A – data not available; data for individual years refer to the second quarter.

Figure: Unemployment rate, annual average



Source: Eurostat Portal Page – Population and social conditions – Labour market, 2018.

[1] The difference between the unemployment rates for men and women decreased significantly in 2018, amounting to 0.9 pps in the second quarter.
[2] This was a result of the high prevalence of temporary forms of employment in this group (during the crisis, employers were not renewing fixed-term employment contracts and also reduced the extent of student work).

Precarious and temporary employment 3.19

The share of precarious employment,[1] one of the indicators of the quality of employment, rose slightly in 2008–2017 and was significantly above the EU average. In 2017 the share of precarious jobs among women aged 20–64 totalled 4.7% (EU: 2.1%). Among men, it was somewhat lower, at 4.4% (EU: 2.2%). As in other countries, precarious jobs are most prevalent in agriculture and fishing (i.e. seasonal work). According to the analysis by the European Commission,[3] young people, women and low-skilled workers are most likely to work in precarious jobs. The European Commission also finds that in Slovenia older workers in atypical employment are at much higher risk of labour market precariousness than younger people (25–39 years), which might be attributed to the better educational structure of younger age groups and poorer opportunities of older people for transition into employment.

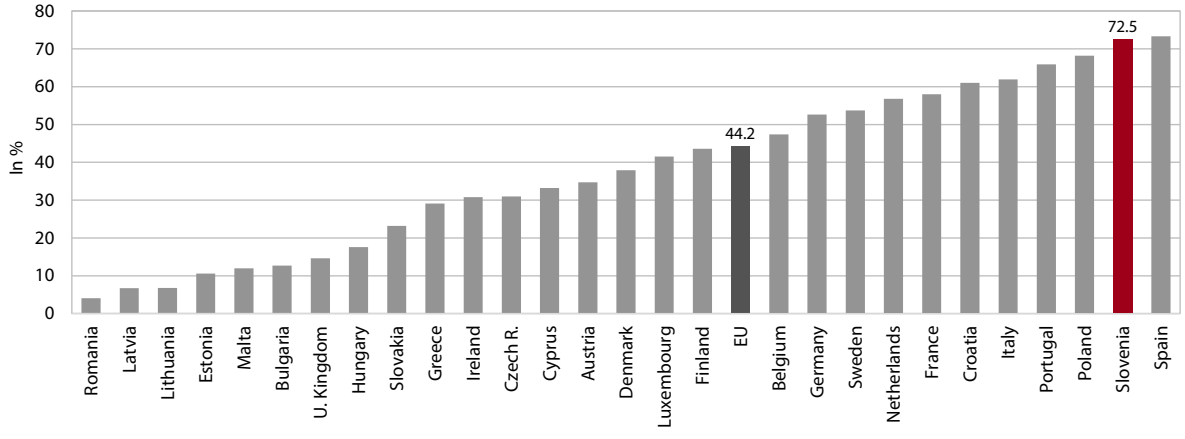
In 2017 the share of temporary jobs was higher than at the onset of the crises; it was above the EU average throughout the period analysed. In the 20–64 age group, it was 18% among women (EU: 13.4%) and 15.7% among men (EU: 12.8%). Temporary jobs are most prevalent among young people, in Slovenia also on account of student work, which is not known in this form elsewhere in the EU. In the last two years analysed (2016 and 2017), the share of temporary jobs declined among young people (15–24 years) in particular,[4] while it remained basically unchanged in other age groups. With several years of stable economic growth, the share of new permanent contracts increased in the last years analysed, but the share of fixed-term contracts remained high.

Table: Share of precarious and temporary employment in total employment (20–64 years), in %

	2000	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Share of precarious employment												
Slovenia	3.6	4.0	3.9	4.1	4.3	4.8	4.4	3.9	4.1	4.6	4.2	4.5
EU	N/A	2.1	2.0	1.9	2.0	2.2	2.1	2.0	2.1	2.2	2.2	2.2
Share of temporary employment												
Slovenia	12.0	16.1	15.9	17.0	15.9	15.2	16.2	17.2	16.5	15.8	16.0	17.1
EU	N/A	12.8	13.0	12.5	12.9	13.1	12.8	12.7	13.0	13.2	13.3	13.4

Source: Eurostat Portal Page – Population and Social Conditions – Labour Market, 2019.
Note: N/A – not available.

Figure: Share of youth temporary employment in total youth employment (15–24 years), 2017



Source: Eurostat Portal Page – Population and social conditions – Labour market, 2019.

[1] Precarious work, which is characterised by low job and income security, does not have a universally accepted definition. According to Eurostat, the term precarious work covers all forms of employment with contract duration of less than three months.
[2] Employment and Social Development in Europe, Annual Review 2017.
[3] Ibidem.
[4] In 2017 the share of temporary employment in the 15–24 age group was 72.5 %, which is 3 pps less than in 2015.

At-risk-of-poverty rate of employed persons 3.20

In Slovenia, the at-risk-of-poverty-rates of employed persons[1] have been above the EU average since measurements began, despite significant fluctuations. Following three years of decline, the at-risk-of-poverty rates of employed persons rose again in Slovenia in 2017 and were higher than before the crisis. The at-risk-of-poverty rate of those aged 18 years or more is 5.2% for women and 7.7% for men.

Among employed persons, in 2017 the at-risk-of-poverty rate rose the most for the self-employed; it was also somewhat higher among employees.[2] The at-risk-of-poverty rate for the self-employed in 2017 was 26.8%, up 3.8 pps from the previous year but still somewhat lower than in 2013, when it was the highest since first measured. The at-risk-of-poverty rate for the employed rose after the crisis; among those with permanent employment contracts (at 3.6% in 2017), it was higher[3] than before the crisis and higher than one year before (the same applying to those working full-time).[4]

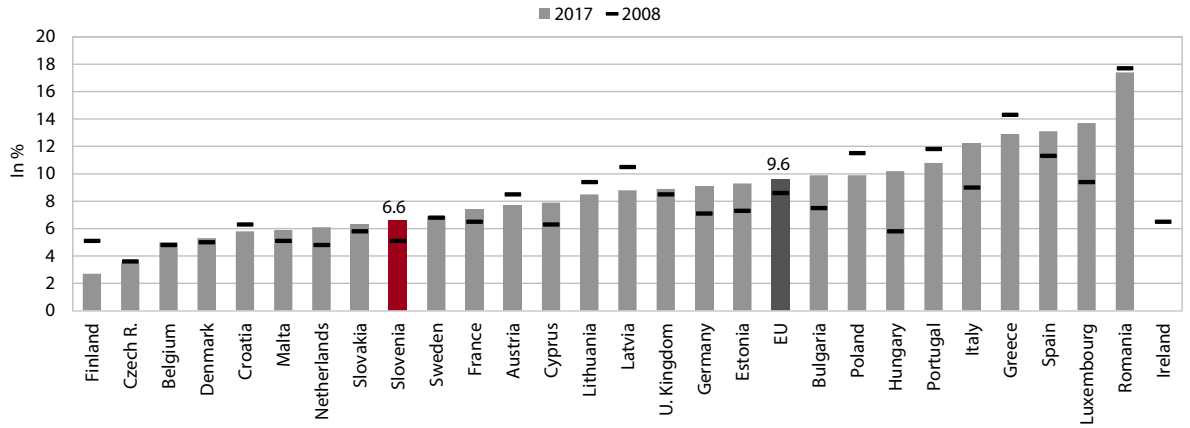
Among employed persons, those in atypical forms of employment face the highest risk. The at-risk-of-poverty rate for people on fixed-term employment contracts is lower than before the crisis, although it rose again in 2017 (to 9.9%). People working shorter hours are the only group among the employed to see the at-risk-of-poverty rate decline year on year in 2017, but at the same time, this is also the group with the greatest increase in the at-risk-of-poverty rate with regard to the pre-crisis period, by 7.1 pps to 15.2% in 2017.

Table: At-risk-of-poverty rate of employed persons aged 18 years or more, in %

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	SDS 2030 target
Slovenia	4.6	4.8	4.7	5.1	4.8	5.3	6.0	6.5	7.1	6.4	6.7	6.1	6.6	< 5
EU	8.2	8.1	8.3	8.6	8.4	8.3	8.8	8.9	9.0	9.5	9.5	9.6	9.6	

Source: Eurostat Portal Page - Population and social condition - Living conditions and welfare, 2018.

Figure: At-risk-of-poverty rate of employed persons aged 18 years or more



Source: Eurostat Portal Page - Population and social condition - Living conditions and welfare, 2018.

[1] The category of employed persons includes: self-employed persons and employees (on fixed-term or permanent employment contracts and those working shorter hours).
[2] In 2017 the at-risk-of-poverty rate for employed persons was 4.2%, compared with 3.5% in 2009 (the first data).
[3] 3.3% in 2008 and 3.4% in 2016.
[4] In 2017, at 5.8%, it was 1.1 pps higher than in 2008 and 0.5 pps higher than in 2016.

Absence from work due to illness 3.21

Following a decline during the crisis, absenteeism[1] has again been rising in Slovenia in recent years. The decline in absence from work in the crisis years can be mainly attributed to the decline in employment and the higher risk of losing employment. Since 2014 absenteeism has been rapidly rising. Among the main reasons for this we note the high level (and growth) of employment, later retirement, prolongation of waiting times and increased participation of children in kindergartens. Absenteeism is significantly higher among women than men and the gap is widening every year. In 2017 persons employed were on average absent from work for 15.3 calendar days, the share of sick leave from work[2] averaging 4.2% (NIJZ, 2019). A further rapid increase in absenteeism is also indicated by data on the number of sick leave cases: it increased by 7.0% in 2018, by 32% in 2015–2018 and by 42% in 2008–2018 (HIIS, 2019). According to HIIS data, the number of long-term absences in particular has surged in recent years, which can be partly explained by the ageing of the active population and changes to pension legislation, but may also be related to the unlimited duration of entitlement to sickness benefits.

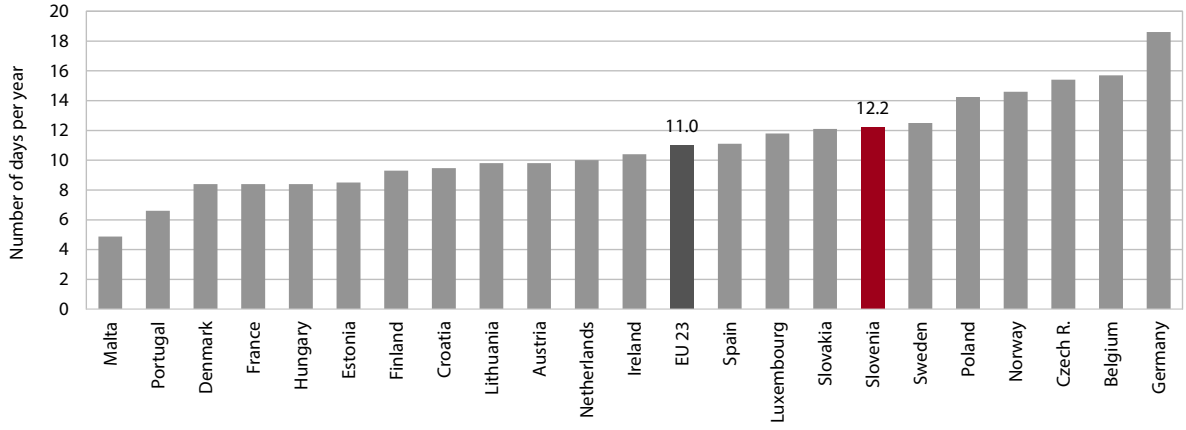
In terms of working days lost, Slovenia exceeds the EU average. After several years of decline during the crisis, the number of working days lost per employed person due to illness, as reported to international databases (excluding the first day of absence and absence to care for a family member), rose in 2015 and 2016. In 2016 the number of compensated work days lost per year due to illness totalled 12.2 in Slovenia and 11 in the 23 EU Member States for which comparable data are available. The international comparability of this indicator is, however, limited because of methodological differences in data capture and the differences in the health and social care systems and in eligibility criteria for sickness benefits.

Table: Absence from work due to illness

		2007	2011	2012	2013	2014	2015	2016	2017
Absence rate (percentage of calendar days lost per full-time worker, in %)	Total	4.40	4.05	4.23	4.08	3.75	3.97	3.96	4.20
	Men	3.76	3.45	3.63	3.46	3.12	3.29	3.24	3.41
	Women	5.22	4.79	4.97	4.84	4.52	4.80	4.83	5.16
Number of calendar days lost per worker	Total	16.06	14.94	14.77	15.44	14.90	13.67	14.48	15.33
	Men	13.73	12.87	12.59	13.25	12.63	11.39	11.99	12.43
	Women	19.04	17.53	17.50	18.12	17.68	16.48	17.51	18.83
Number of working days lost per worker	Slovenia	11.5	12.2	12.2	11.6	11.3	12.0	12.2	N/A
	EU	11.42	11.59	11.74	11.85	11.8	N/A	N/A	N/A

Sources: NIJZ – http://www.nijz.si/sl/podatki/bolniski-stalez, 2019; WHO HFADB, 2017.
Note: N/A – not available.

Figure: Number of working days lost per worker, 2016



Sources: OECD Statistics database – Health – Health Status; WHO HFADB.
Notes: The indicator is published by the OECD, WHO and Eurostat; EU-23: the average for 23 EU Member States..

[1] Temporary absence from work for justified medical reasons, also referred to as sick leave or absenteeism, is one of the indicators for monitoring the health status of the employed (NIJZ, 2016).
[2] The percentage of calendar days of incapacity for work per person employed full-time.

4 A well-preserved natural environment

A low-carbon circular economy

4.1 Resource productivity

4.2 Energy efficiency

4.3 Share of renewable energy sources

4.4 Emission productivity

4.5 Modal split of transport

4.6 Waste

4.7 Environmental taxes

Sustainable natural resource management

4.8 Ecological footprint

4.9 Utilised agricultural area

4.10 Agricultural intensity

4.11 Intensity of tree felling

4.12 Quality of watercourses

4.13 Air quality

4.14 Functionally derelict areas

Resource productivity 4.1

During the crisis, resource productivity improved significantly due to a decline in construction activity, but the rebound in this activity has slowed further improvements. In 2007–2012 productivity expressed as a ratio of GDP to material consumption had been rising faster than in the EU overall, then followed the fluctuations of construction activity and the consumption of non-metallic mineral products.[1] In 2017 it increased again amid strong GDP growth, despite the rebound in construction activity and hence greater material consumption. The lag behind the EU average declined to 13%. As in 2018 construction activity increased further, it can be assumed that growth in material productivity eased.

Material consumption per capita and its structure are comparable with the EU average. Material consumption had been rising until the onset of the crisis, then fell sharply and was around one-fifth lower in 2017 than in 2000. Its level was strongly affected by economic activity, particularly in construction, a sector that uses a large amount of raw materials, particularly gravel and sand. In the breakdown of domestic resources consumed, 57% is sand, gravel, limestone and gypsum, 16% crop residues, 14% lignite, and 11% wood. The proportion of biomass is slightly lower and the proportion of non-metallic minerals slightly higher than in the EU as a whole. Material consumption per capita in Slovenia is similar to the EU average, but lower than in three-quarters of Member States.

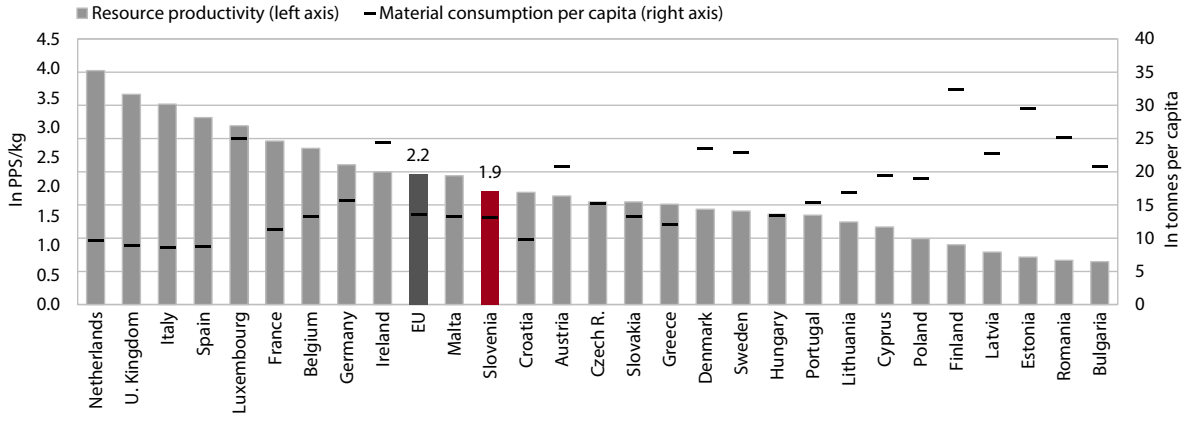
Slovenia's self-sufficiency for materials is rising; it is somewhat higher than the EU average. Like most other EU Member States, Slovenia is a net importer of materials; its net imports account for around 11% of consumption (in the EU overall somewhat more). The bulk of net imports are petroleum products and gas, while in net exports, wood exports have risen significantly in the period following the glaze ice damage. The latter is favourable with regard to the impact on material consumption, though it is economically less desirable from the aspect of efficient use of scarce domestic resources, where value added could be created by domestic manufacturing.

Table: Resource productivity, in PPS/kg

	2000	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	SDS 2030 target
Slovenia	0.92	1.10	1.13	1.23	1.33	1.51	1.75	1.79	1.73	1.79	1.87	1.92	3.5
EU	1.27	1.46	1.58	1.69	1.81	1.79	1.97	2.03	2.07	2.16	2.19	2.21	
Slovenia / EU, index	72.5	75.5	71.2	72.5	73.2	84.2	88.8	88.3	83.7	82.7	85.5	86.9	

Sources: SI-STAT Data Portal – Environment, 2019; Eurostat Portal Page – Environment and Energy, 2019; Eurostat Portal Page – Economy and Finance, 2019; calculations by IMAD. Note: a meaningful comparison in PPS between countries or with the EU average can only be made for individual years and not over a longer time period.

Figure: Resource productivity and material consumption per capita, 2017



Source: Eurostat Portal Page – Population and Social Conditions, 2019.

[1] Non-metallic minerals significantly determine the overall material consumption. In 2007, a year of intense motorway construction, they accounted for two-thirds and in 2017 for 56% of total consumption. Sand and gravel alone accounted for almost 40%, which was one of the highest shares in the EU. In 2014 three-quarters of non-metallic minerals were used as raw materials in construction, a further 17% as raw materials for the building material industry and only 7% in manufacturing (Geological Survey of Slovenia).

Energy efficiency 4.2

After declining in the first half of the decade, primary energy consumption increased again in Slovenia in 2016 and 2017. Following a period of moderate economic activity, changes in thermal power generation[1] and lower demand for heating in some of the years, in 2016 a significant contribution to its annual growth came from higher energy consumption in transport. Total consumption is however also affected by other factors, such as the schedule of regular overhauls in the nuclear power plant[2] and annual river-level fluctuations. In 2017, the year when there was no overhaul, a significant part of the increase in primary energy consumption stemmed from higher consumption of nuclear energy. We assume that in 2018 total primary energy consumption remained more or less unchanged, which is indicated by higher sales of automotive fuels and increased hydropower consumption, amid lower consumption of nuclear energy. Regarding the improvement in energy efficiency, which means reduced energy consumption compared with that projected under the no-policy-change scenario, Slovenia is on track to meeting its Europe 2020 Strategy target.[3]

Over the long term, energy productivity has been rising at roughly the same pace as in the EU as a whole. The growth of energy productivity (defined as the ratio of GDP[4] to total energy consumption) slowed notably only in the first years of the crisis. In 2017 it increased much more than on average in the EU owing to higher growth in GDP. Slovenia's lag thus decreased to around 15% and was the smallest in the last decade.

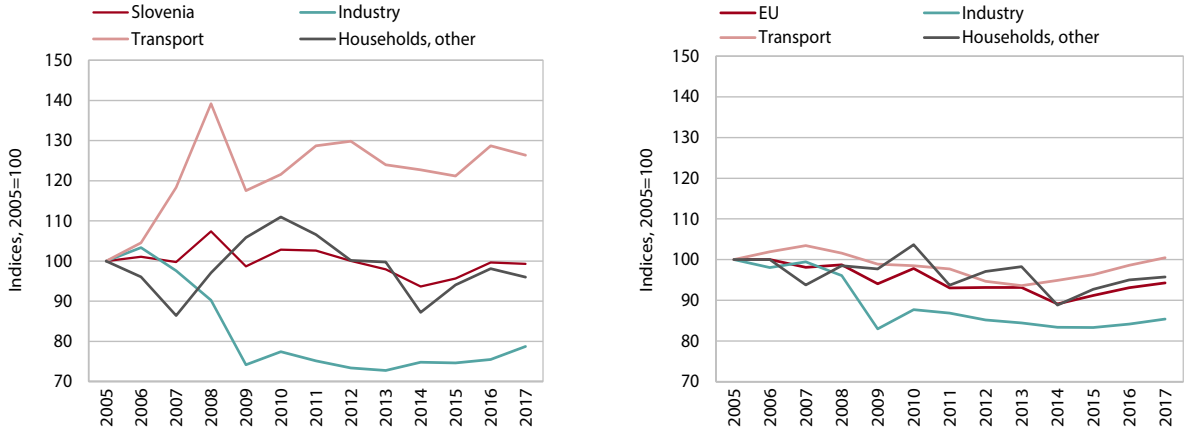
Final energy consumption is significantly influenced by fluctuations in energy consumed in transport and for heating. After falling from 2008, final energy consumption[5] has again risen to the pre-crisis level in the last few years. Broken down by sector, energy consumption fell considerably in industry, particularly due to the modernisation of aluminium production, while rising notably in transport owing to increased transit after EU enlargements.[6] It also dropped in households, mostly as a consequence of higher temperatures during the heating seasons, but also due to the mandatory installation of heat cost allocators, more efficient heating appliances and energy renovation of buildings. In 2017 energy consumption increased in industry, amid strong economic growth, while it declined in other sectors. In recent years total energy consumption also rose on average in the EU, though it remained lower than before the crisis.

Table: Primary energy consumption, index, 2005=100

	2000	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2020*
Slovenia	88.5	100.0	106.8	96.9	99.9	100.9	97.0	94.6	90.8	90.1	93.3	94.7	104.3
EU	94.2	100.0	98.7	92.9	96.5	93.1	92.4	91.5	87.9	89.4	89.9	90.8	86.6

Sources: Eurostat Portal Page – Europe 2020 indicators, 2019; EC Energy Efficiency, Reporting Targets; calculations by IMAD. Note: * One of the EU 2020 Strategy targets.

Figure: Final energy consumption by consumer sector, Slovenia and the EU average



Source: Eurostat Portal Page – Environment and Energy, 2019; calculations by IMAD.

[1] The Šoštanj thermal power plant was technologically modernised while the Trbovlje thermal power plant was shut down.
[2] Every third year there is no regular (monthly) overhaul, which means 10% more nuclear power generated (2 pps higher primary consumption).
[3] One of the three environmental targets of EU Member States for 2020 is improving energy efficiency, i.e. reaching a 20% reduction in energy consumption with regard to the projected consumption according to the baseline scenario with no additional measures. Most EU countries thus actually have to reduce their energy consumption by 2020, while some, including Slovenia, are only required to limit its growth.
[4] In comparisons over time, we use GDP at fixed prices, while in comparisons between countries in individual years, GDP in purchasing power standards is used.
[5] Final energy consumption is primary consumption of energy, excluding energy used by energy transformation processes, by the energy sector itself and losses.
[6] See also Indicator 4.5. Energy consumption in road transport accounts for 38% of final energy consumption in Slovenia (in the EU 29%).

Share of renewable energy sources 4.3

The share of renewable energy sources (RES) in final energy consumption is higher than the EU average, but it has stagnated for several years and is far from the Europe Strategy 2020 target. In recent years it rose markedly only in 2009, when final energy consumption fell by 8% because of the crisis while RES consumption increased by almost one-quarter.[1] Up to 2017 it had grown only marginally – the minor changes were due to fluctuations in RES consumption for heating (because of milder winters) and in the use of hydropower (owing to great differences in annual river flows); the growth of RES consumption was also impeded by declining consumption of biofuels. Between 2004[2] and 2017, RES consumption rose by 35% in Slovenia and by 95% in the EU. Slovenia is one of the seven EU countries whose shares were lower in 2017 than determined in the action plan for meeting the 2020 target.

Slovenia has a relatively large share of traditional RES but a significantly lower consumption of other RES in comparison with the EU. Traditional RES (solid biomass and hydropower) still account for almost 90% of total RES consumption in Slovenia, compared with only around 60% in the EU overall. The extensive consumption of biomass (for heating), however, is not favourable from the aspect of particle pollution. The share of other RES (wind, solar and geothermal energy, biofuels, heat pumps, and biogas) is among the lowest in the EU. Slovenia lags behind the EU average particularly in the use of wind farms and heat pumps, which account for almost one-fifth of RES consumption in the EU. In terms of reaching the EU 2020 target, the low use of biofuels in transport is problematic in particular.

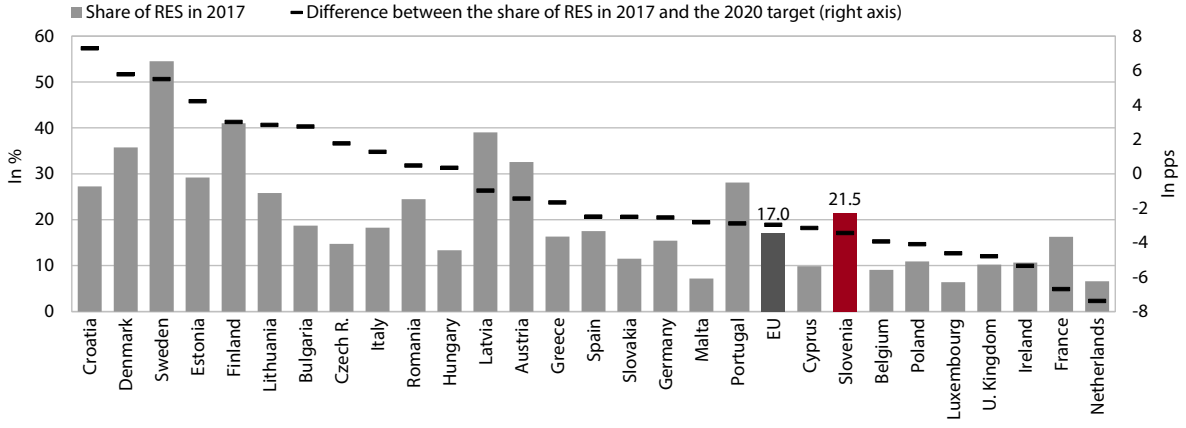
Within the support scheme for electricity from RES, in recent years, three-fifths of support has been granted to solar power plants, though these account for only two-fifths of total electricity generation. In 2018 the total amount of support declined according to data for the first three quarters of the year. With a greater share of solar power plants in the scheme (supports are also provided for electricity generation from biogas, wind, biomass and hydropower plants), the total amount of support per unit of electricity generated also rose significantly (in comparison with that at the beginning of the scheme, when support for small hydropower plants predominated).

Table: Share of RES in gross final energy consumption, in %

		2005	2008	2010	2011	2012	2013	2014	2015	2016	2017	2020*	SDS 2030 target
RES, total	Slovenia	16.0	15.0	20.4	20.3	20.8	22.4	21.5	21.9	21.3	21.5	25.0	27.0
	EU	9.1	11.3	13.1	13.4	14.7	15.4	16.2	16.7	17.0	17.5	20.0	
In electricity	Slovenia	28.7	30.0	32.2	31.0	31.6	33.1	33.9	32.7	32.1	32.4	N/A	
	EU	14.8	17.0	19.7	21.7	23.5	25.3	27.4	28.8	29.6	30.7	N/A	
In transport	Slovenia	0.8	1.8	3.1	2.5	3.3	3.8	2.9	2.2	1.6	2.7	10.0	
	EU	1.8	3.9	5.2	4.0	5.3	5.7	6.1	6.6	7.2	7.6	10.0	
In heating	Slovenia	18.9	19.2	28.1	30.3	31.5	33.4	32.4	33.9	34.0	33.2	N/A	
	EU	11.1	13.8	15.4	16.0	17.0	17.5	18.4	18.8	19.0	19.5	N/A	

Source: Eurostat Portal Page – SHARES (Renewables), 2018. Note: * One of the three EU 2020 Strategy environmental targets; N/A – data not available.

Figure: Share of RES in final energy consumption, 2017



Source: Eurostat Portal Page – SHARES (Renewables), 2019; preračun UMAR.

[1] Also as more statistical data were captured in this period.
[2] The year when Eurostat data calculated according to the same methodology, SHARES (Renewables), became available for all EU Member States.

Emission productivity 4.4

The emission productivity of the economy, though rising, lags behind the EU average. After increasing in times of economic growth owing to faster growth in GDP than greenhouse gas (GHG) emissions,[1] productivity as measured by the ratio of GDP to GHG emissions remained almost unchanged in the first years of the crisis. However, as the EU average increased further during the crisis, Slovenia saw its gap with the EU widen. After the crisis, productivity growth again accelerated. In 2016, when it swung downwards, around 17% less GDP per unit of GHG emissions was generated than on average in the EU.

After having declined during the crisis, as expected, the volume of GHG emissions increased slightly again in subsequent years. After increasing relatively fast during the times of economic boom, emissions dropped owing to lower activity and the shutdown of one of the thermal power plants. In 2014 they were around one-quarter lower than their peak in 2008. Since then they have again been slowly rising, largely owing to the rising energy-related and transport emissions. According to preliminary estimates for 2017, total emissions did not increase that year, primarily owing to lower activity in transportation, the sector that generates the most emissions.

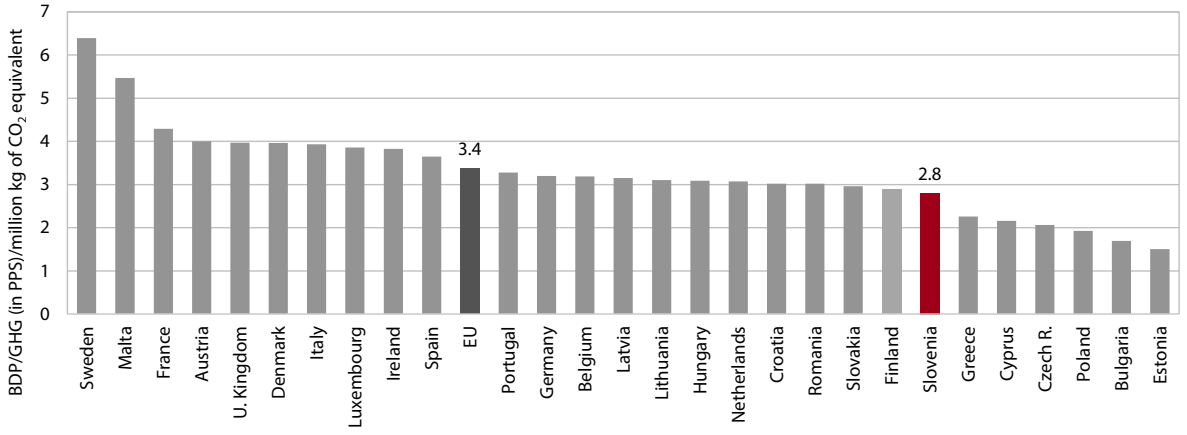
Over the longer term, emissions have been falling across all sectors but transportation. Since 1990 emissions from transportation have nearly doubled, to a great extent owing to stronger international trade flows through Slovenia and advantages granted through tax policies (for example refunding of excise duties). Emissions from all other sectors declined, especially emissions from the consumption of fuels in industrial processes and households and from the energy sector. Around six-tenths of total emissions derive from the energy and transportation sectors, while agriculture (livestock production in particular) and the consumption of fuels in industrial processes contribute one-tenth each. The share of other sectors is relatively modest.

Table: GHG emissions and emission productivity (GDP/GHG emissions ratio)

	2000	2005	2008	2010	2011	2012	2013	2014	2015	2016	2017	SDS 2030 target
Emission productivity in PPS/million kg of CO2 equivalent												
Slovenia	1.6	2.0	2.2	2.2	2.3	2.3	2.4	2.8	2.9	2.8	3.0	to reach the EU average in 2030
EU	1.8	2.2	2.5	2.6	2.8	2.9	3.0	3.2	3.3	3.4	N/A	
Slovenia/EU, index	89.8	91.1	86.3	84.2	81.3	81.5	82.5	88.1	87.2	83.2		
GHG emissions, index 1990=100												
Slovenia	103	110	116	106	106	103	99	90	91	95	94	to reach the EU average in 2030
EU	92	94	91	86	83	82	80	77	78	78	N/A	

Sources: Eurostat Portal Page – Environment and Energy, 2019; Eurostat Portal Page – Economy and Finance, 2019; for 2017 preliminary data by ARSO; calculations by IMAD.
Notes: a meaningful comparison in PPS with the EU average can only be made for individual years and not for a longer time period; N/A – data not available.

Figure: Emission productivity, 2016



Sources: Eurostat Portal Page – Environment and Energy, 2019; Eurostat Portal Page – Economy and Finance, 2019; calculations by IMAD.

[1] In addition to carbon dioxide (CO2), the records of GHG emissions also include methane (CH4), dinitrogen monoxide (N2O) and fluorinated gases (F-gases).

Modal split of transport 4.5

In Slovenia around two-thirds of goods are transported by road, which is less than in the EU as a whole.[1] After 2009 road freight transport stagnated, with an increase in freight transport by rail. Its share in total freight transport therefore declined, while after 2014 its volume started to rise and its share increased slightly again. Owing to its transit location, Slovenia has high levels of freight transport per inhabitant (road transport is a fifth higher than in the EU on average and rail transport 2.5 times as high). The construction of the planned second track of the Divača–Koper railway may contribute to a higher share of transport by rail, which is desirable from the environmental perspective.

Slovenian hauliers already perform almost nine-tenths of their activities abroad, while their share in journeys at home is one of the lowest in the EU. This is related to Slovenia's small size and transit location, but also to the common transport market in the EU, which enables competition of hauliers from different Member States. Slovenian hauliers perform the most journeys in Austria and Italy, in each by almost half more than in Slovenia; they are also among the five most important foreign hauliers in Croatia and Greece. They account for less than one-quarter of journeys performed in Slovenia, followed by hauliers from Hungary, Croatia and Romania (which account for 19%, 15% and 11% respectively).

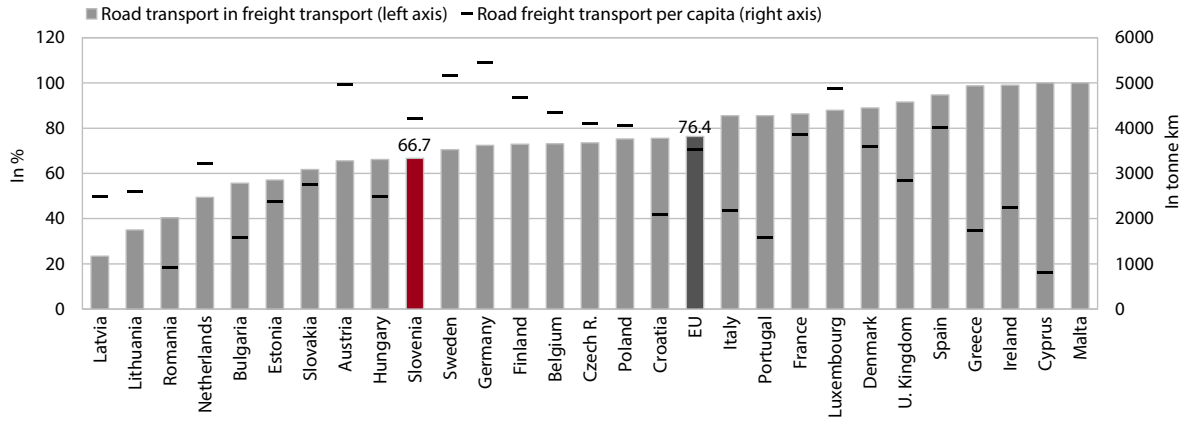
Transport by passenger car is the predominant mode of passenger transport in all EU Member States; Slovenia has one of the highest shares in the EU. This is in part attributable to the diversity of its landscape and its dispersed settlements, which – in spite of subsidies – makes it difficult to extend the network of public transport appropriately and limits its profitability. More people have difficulty in accessing public transport than on average in the EU (in 2012 one-quarter in Slovenia, compared with one-fifth on average in the EU).[2] With such a passenger transport structure (where public transport is relatively little used in comparison with transport by car), passenger transport is generally also more expensive. The share of transport expenditure in total household expenditure in Slovenia is the highest among all EU Member States, at around 16% (the EU average being 13%). Particularly the shares of spending on buying and operating vehicles are relatively high, while the share spent on transport services is relatively low.

Table: Road transport in freight transport and car transport in passenger transport*, in %

		2005	2008	2009	2010	2011	2012	2013	2014	2015	2016
Freight	Slovenia	69.2	70.6	72.2	68.2	66.0	67.2	65.3	64.0	65.0	66.7
	EU	75.6	75.5	77.0	75.7	75.1	74.7	74.9	74.9	75.3	76.4
Passenger	Slovenia	85.6	86.4	86.7	86.8	86.6	86.7	86.3	86.3	86.1	86.3
	EU	83.3	82.8	83.6	83.4	83.2	82.9	82.4	82.6	82.7	82.9

Source: Eurostat Portal Page – Transport, 2019.
Note: * Freight transport comprises transport by road (lorries), rail and inland waterways (in tonne km); passenger transport includes transport by car, bus and train (in passenger km).

Figure: Road freight transport, 2016



Source: Eurostat Portal Page – Population and Social Conditions, Transport, 2019.

[1] Using a new methodology for road freight transport, Eurostat recalculated transport performance according to the nationality of the haulier into transport performance on the basis of where the transport was carried out. These data are completely comparable with data for rail and inland waterways transport.
[2] Sustainable Development in the European Union – Monitoring Report (Eurostat), 2018. Greater difficulties in accessing public transport than in the EU are mainly a consequence of a significantly larger share of rural areas where these problems are more pronounced.

Waste 4.6

The quantity of generated waste, having declined during the crisis, has started to rise again in the last few years. In 2017 it was – for the fifth consecutive year – higher than one year previously and around four-tenths higher than in 2012.[1] In 2012–2017, waste from *production and service activities,* which accounts for around four-fifths of total waste, increased more than *municipal waste.*[2] This contributes the remaining fifth. In terms of the amount generated per person, the quantity of municipal waste approached the EU average. Among total waste, the majority is construction waste (because of its high specific weight), followed by waste from thermal processes and municipal waste. Around 2% of total waste generated is hazardous waste, where chemical waste predominates.[3] Of special importance is food waste, which indicates consumers' attitude to the environment.[4]

With increased recovery, the quantity of landfilled waste is being successfully reduced. In 2017 the total quantity of *recovered* waste was around one-quarter higher than in 2012.[5] Recycling, a very desirable form of recovery from an environmental perspective, rose by one-tenth during this period, but was still significantly lower than during the crisis. *Landfilling*, which is the least favoured option in the waste-management hierarchy, continued to be successfully reduced. Having been rising until the crisis, the quantity of landfilled waste then dropped sharply and accounted for only 3% of the total amount recovered in 2017. The share of landfilled municipal waste also decreased further, to around 7% of generated waste. More than two-thirds of municipal waste was already collected separately and all residual mixed municipal waste was treated before going to landfill.

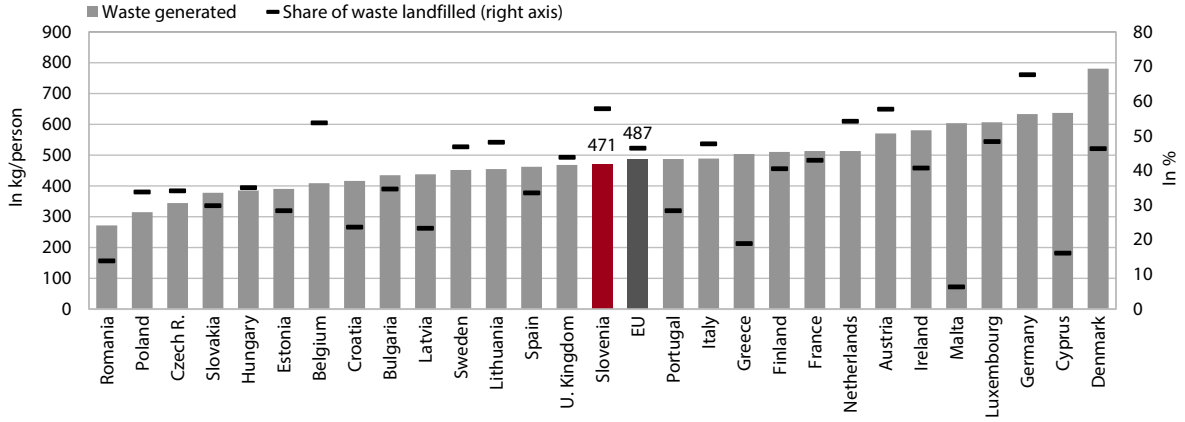
Regarding municipal waste, Slovenia performs better than the EU as a whole. Having increased in recent years, the quantity of municipal waste generated per person has approached the EU average, though it is still slightly lower (in 2017 by 16 kg or around 3%).[6] The structure of waste management is also better than in the EU as a whole, a larger share of municipal waste being recycled (in Slovenia 58%; in the EU as a whole 46%) and a smaller share landfilled. According to the level of recycling municipal waste, Slovenia is in 2nd place together with Austria.

Table: Municipal waste generated per person, 2000=100

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Slovenia	96	101	102	106	102	96	81	71	81	84	88	89	92
EU	99	100	101	100	98	97	95	93	92	92	92	93	93

Source: Eurostat Portal Page – Environment and Energy, 2019; calculations by IMAD.

Figure: Municipal waste generated and landfilled, 2017



Source: Eurostat Portal Page – Environment and Energy, 2019.
Note: Data for Ireland is for 2016.

[1] In 2012 the quantity of generated waste declined by around one-quarter. The decline was, in addition to methodological changes (some waste categories having been reclassified as by-products), also due to a reduction in construction waste.
[2] I.e. waste from households and similar waste managed by the providers of municipal environmental protection public services.
[3] Hazardous waste includes waste oils, salts, acids, waste from organic solvents, paints, varnishes, resins, etc.
[4] In 2017 each inhabitant of Slovenia threw away 64 kg of food on average, 11% more than in 2013, the first year of the survey. In households, food waste accounted for 11% of all waste generated.
[5] The actual amount recovered increased only by 5%, as the share of backfilling and pre-treatment almost doubled.
[6] The most waste per person is generated in the Obalno-kraška region – in 2017 by around one-fifth more than on average in Slovenia, which is in large part a consequence of tourism. The least waste is generated in the Koroška region, in 2017 by around one-fifth less than in Slovenia on average.

Environmental taxes 4.7

The rise in taxes on energy during the crisis significantly increased revenue from environmental taxes, but in the last few years this revenue has been stable. The rise in environmental taxes – which include taxes on energy, transport, and pollution and the use of natural resources – is due to the increase in energy taxes particularly in 2009 and 2012. This was primarily a result of a rise in excise duties on motor fuels and the introduction of a CO_2 tax on energy in 2012, which had mitigated the fall in some other tax revenues in the first years of the crisis. Revenues from transport taxes and taxes on pollution and the use of natural resources did not change much in the last ten years. With the increase in taxes on energy, much greater than the EU average, the share of environmental taxes in GDP has risen relatively more than in the EU as a whole. In Slovenia the level of environmental tax revenues had already been relatively high before, which is a consequence of relatively high purchases and consumption of energy, given its large volume of transit traffic, strong transport sector, dispersed settlement and poorly developed public transport infrastructure.

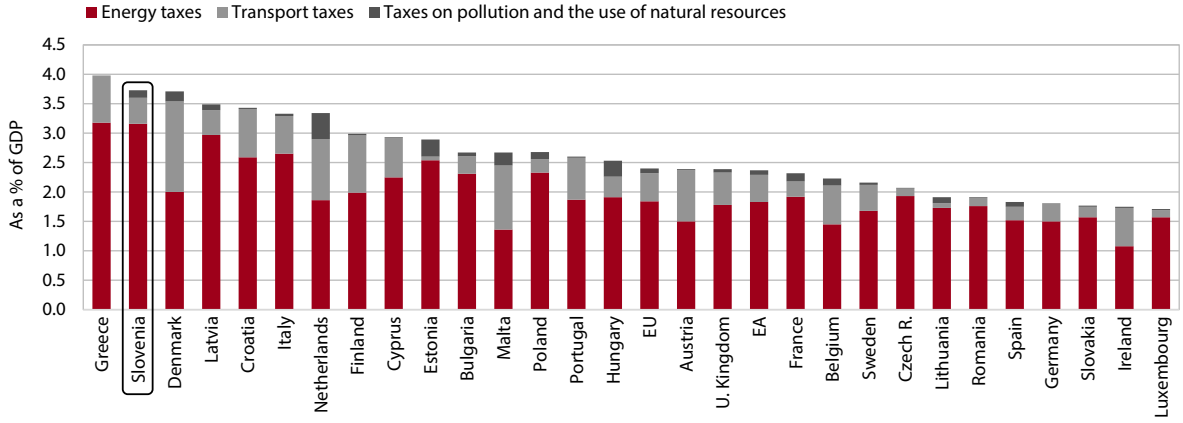
To ensure the competitiveness of individual parts of the economy, Slovenia has retained some tax reliefs that are not contributing to the lowering of the environmental burden. Within the Green Budget Reform, the Government's strategic development project, which ended in 2018, particularly the refunds of excise duties for commercial transport, agricultural and forestry mechanisation, and for industrial and commercial purposes, the ratio between excise duties on unleaded petrol and diesel, and insufficient consideration of environmental measures in motor vehicle taxation were identified as subsidies or incentives[1] that do not help reduce environmental harm. According to simulations, the ending of certain tax reliefs and a thorough revision of motor vehicle taxation could contribute to the achievement of environmental objectives, while in others, these effects would not be achieved due to Slovenia's transit location.[2] This indicates that in order to reduce environmental harm, tax policies need to be complemented with other national policies (development of public transport infrastructure etc.) and coordinated with international environmental policies.

Table: Revenue from environmental taxes, as a % of GDP

	2000	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Slovenia	2.88	3.15	2.95	3.49	3.62	3.46	3.85	3.94	3.86	3.88	3.88	3.73
EU	N/A	2.49	2.28	2.35	2.37	2.40	2.43	2.45	2.45	2.43	2.44	2.40

Source: Eurostat Portal Page – Environment and Energy, Environmental Taxes, 2019.
Note: N/A – not available.

Figure: Revenue from environmental taxes, 2017



Source: Eurostat Portal Page – Environment and Energy, Environmental Taxes, 2019.

[1] "Green Budget Reform; Environmental and Fiscal Aspects of Incentives in Slovenia", 2018. The document examines and analyses the existing tax breaks, subsidies and other incentives that are not contributing to the reduction of the environmental burden.

[2] Simulations show that the ending of the refund of excise duty on commercial transport would lead to a fall in the sale of motor fuels and hence a decline in general government revenue, while – owing to Slovenia's transit location – the impact of this measure on the redirection of flows and hence the achievement of environmental goals would be significantly smaller. More specifically, according to MF data, a large part of the amount for which domestic hauliers demand a refund is in fact used in international transport.

Ecological footprint 4.8

The ecological footprint, a composite indicator of environmental sustainability, is relatively high in Slovenia, much as in the EU as whole. It is expressed in standardised units of biologically productive area, i.e. global hectares (gha).[1] The biologically productive area is the fertile area required to satisfy the needs of the population for food and a particular lifestyle and to absorb and dispose of the wastes generated in the process. The largest component of the ecological footprint is (i) the carbon footprint, which is a result of high carbon dioxide and other GHG emissions. This is followed by (ii) the biological footprint, i.e. the footprint of cropland, forestland, grazing land and other fertile areas, and (iii) the footprint of built-up land (i.e. infrastructure). Slovenia's ecological footprint declined during the recession, following a rapid increase in the period of economic growth. In 2014 it was at approximately the same level as in 2001, similar to the EU average yet larger than in most neighbouring countries (it being larger only in Austria). This indicates economic development with relatively high use of natural resources and environmental pollution.

The ecological footprint should be compared with biological capacity (biocapacity), which is considerable in Slovenia due to its large forest area. Biocapacity, i.e. biological areas with regeneration capacity, is also expressed in global hectares.[2] Each global hectare produces the same quantity of biological materials, its productivity thus equalling the average productivity of the total biologically productive area. Biocapacity is significantly more stable than the ecological footprint and does not change significantly from year to year. The bulk of Slovenia's biocapacity is accounted for by forests, but despite their large surface area, they do not suffice to absorb emissions of carbon dioxide, the largest contributor to the ecological footprint.

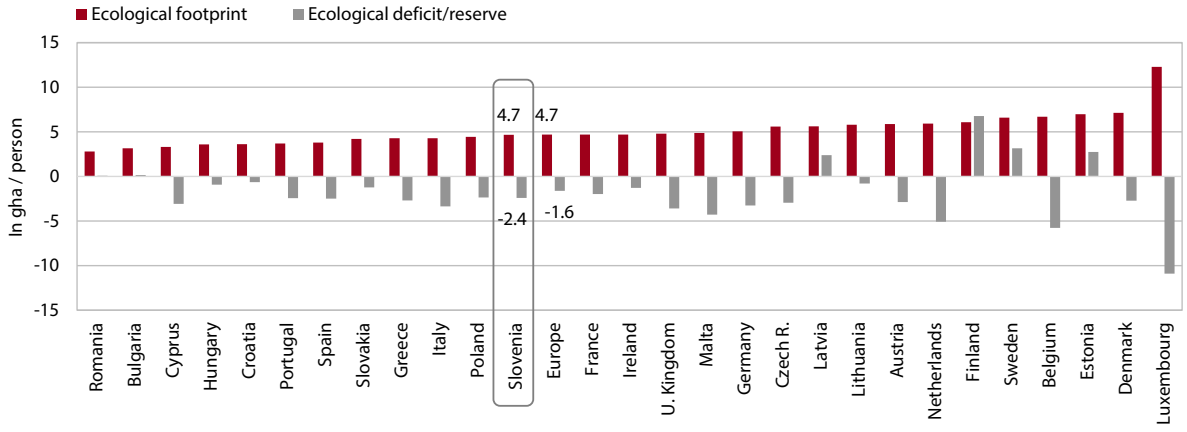
In Slovenia, the difference between ecological footprint and biocapacity has been decreasing since the crisis but is still relatively significant. The results of calculations show that the difference between the two, known as the ecological deficit, is above the EU average. With the current lifestyle in Slovenia, 2.8 planet Earths would be needed to provide the resources we use and to absorb our waste.

Table: Ecological footprint in gha/person

	2000	2005	2007	2008	2009	2010	2011	2012	2013	2014	SDS 2030 target
Slovenia	4.6	5.4	6.0	5.8	5.0	5.2	5.2	4.9	4.7	4.7	3.8
Europe	4.9	5.2	5.4	5.4	4.9	5.0	5.0	4.7	4.8	4.7	
World	2.6	2.8	2.8	2.8	2.8	2.9	2.9	2.8	2.9	2.8	
Slovenia / EU, index	92.9	104.2	111.7	107.4	101.0	102.6	103.4	103.0	99.8	99.8	

Source: National Footprint Accounts, (Global Footprint Network) 2018.

Figure: Ecological footprint and the ecological deficit/reserve, 2014



Source: National Footprint Accounts (Global Footprint Network), 2018.

[1] The ecological footprint is measured by the Global Footprint Network. The results of its calculations are available for around 150 countries (for individual years in the 1961–2014 period).

[2] The total biologically productive area accounts for approximately one-quarter of the Earth's surface, excluding ice masses, deserts and oceans, where renewable resources are not concentrated enough to have a significant impact on overall biocapacity.

Utilised agricultural area 4.9

Agricultural area in Slovenia accounts for less than one-quarter of the total area and this share is decreasing. Total utilised agricultural area (UAA)[1] covers around 480,000 hectares. In the last ten years alone, it has decreased by 3.4%, around 1 pp more than in the EU as a whole. The decline is mostly due to the abandoning of agriculture and the consequent overgrowth of land by trees and shrubs. Forests cover approximately two-thirds of the total land area, which places Slovenia among the most forested countries in the EU. The share of other land categories, which is high particularly in countries with a lot of infertile land or with high population density, is relatively low.

In the structure of agricultural land, permanent grassland (meadows and pastures) predominates, there being relatively little arable land. *Permanent grassland* constitutes around six-tenths of the total agricultural area, which is to a great extent a consequence of natural conditions. The relatively large total production of fodder crops is, in turn, reflected in the relatively large share of livestock breeding in Slovenia's agriculture. The area taken up by fields, the most important type of land from the aspect of food security, is low – Slovenia is one of the four EU countries with the least arable land per person, at around 8 ares (the EU average being around 2.5 times as high). The share dedicated to the growing of vegetables is also relatively low, as a large share of fields is used to grow fodder crops. The area taken up by *permanent crops*, where vineyards predominate, has increased somewhat in the last decade, to around 6% of agricultural area.

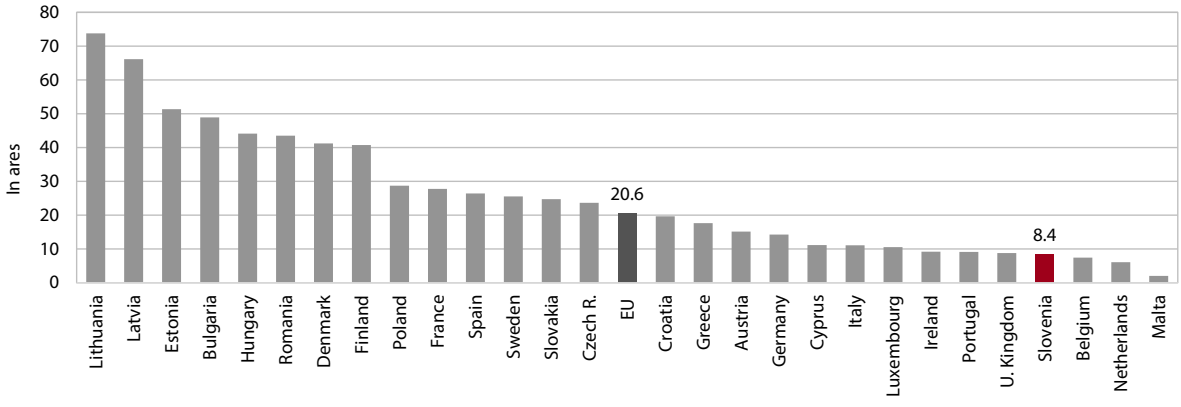
Organic farming, the best form of agricultural production from the environmental perspective, is more widespread in Slovenia than in the EU as a whole and is increasing. Around one-tenth of all agricultural holdings were involved in controlled organic farming in 2017. Permanent meadows and pastures dedicated to the production of fodder account for by far the largest share in the structure of this land, the shares of other categories being relatively low. This is however not in line with demand for ecologically produced food, which is greatest for fresh vegetables, fruit and vegetarian processed foods. There remains significant scope for the further development of organic farming in Slovenia given its natural conditions, i.e. the high share of farms in mountainous and other remote areas where intensive conventional farming is not possible.

Table: Utilised agricultural area (UAA) and share of organic farming

	2005	2008	2010	2011	2012	2013	2014	2015	2016	2017	SDS 2030 target
UAA, share in total area, in %											
Slovenia	25.1	24.3	23.8	22.6	23.7	23.6	23.8	23.5	23.6	23.7	>24.0
EU		41.8	41.2	41.1	40.8	40.8	40.8	41.0	40.9	40.9	
UAA under organic farming, share, in %											
Slovenia	4.6	6.1	6.4	7.0	7.3	8.1	8.6	8.8	9.1	9.6	
EU	N/A	N/A	N/A	N/A	5.6	5.7	5.8	6.2	6.7	7.0	

Source: Eurostat Portal page – Agriculture, Forestry and Fisheries, 2018; calculations by IMAD. Note: N/A – not available.

Figure: Arable land per person, 2017



Source: Eurostat Portal age – Agriculture, forestry and fisheries, 2018.

[1] Utilised agricultural area is the total area taken up by arable land, kitchen gardens, permanent grassland, intensive and extensive orchards, olive plantations, vineyards, nurseries, and vine and root-stock nurseries used by the holding, regardless of the type of tenure and excluding shared pastures and meadows.

Agricultural intensity 4.10

Slovenia is not among the countries with high farming intensity, according to its moderate average yields and the numbers of animals per unit of agricultural area. A comparison with the EU average in *crop production* does not paint a uniform picture. This is evident from the average yields for Slovenia's two most important crops, wheat and maize:. the yield per hectare tends to be lower than the EU average for wheat and higher than the EU average for maize. With improvement in technology, the yields of all crops are rising over the long term, though there are pronounced annual fluctuations due to weather conditions. An increase in yield – as long as it is not too great – is a sign of better exploitation of natural resources than in previous years. The environmental burden of *livestock production*, as measured by the number of animals per unit of agricultural area, is relatively high, partly as a result of natural conditions, but the situation is improving. The relatively low average milk yield per animal, in contrast, is rising, which is favourable from the perspective of the environmental burden per unit of GDP generated. The intensification of agriculture is increasing, which is related to a decline in the number of agricultural holdings and hence greater concentration of crop and animal production, but so is the area under ecological farming, which is particularly desirable from the environmental perspective.

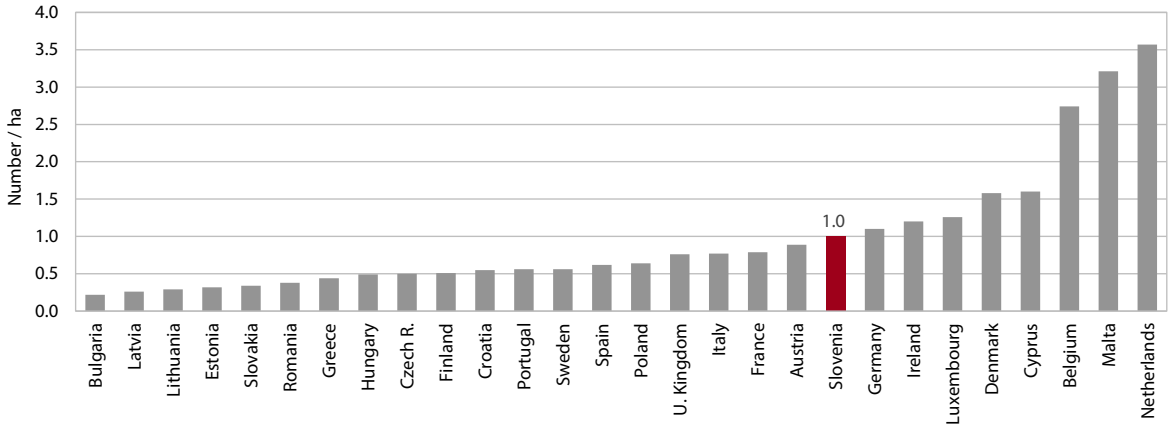
The consumption of main agricultural inputs, mineral fertilisers and pesticides, has declined considerably over the long term. The consumption of main macronutrients (NPK fertilisers, i.e. nitrogen, phosphorus and potassium) per unit of utilised agricultural area had been declining particularly until the end of the previous decade, while since 2012 it has remained roughly the same, with minor annual variations. The *use of pesticides*, measured in terms of the total quantity of active ingredients sold, has also been falling, though fluctuating significantly from year to year due to weather conditions. After three consecutive years of growth, it was approximately at the 2011 level in 2017.[1] The consumption of both inputs is above the EU average, but particularly for pesticides international comparisons are difficult to make, as data on the quantity of pesticides used refer to the sum of active ingredients with different toxicity levels.

Table: Average yields of the main crops and consumption of NPK fertilisers and pesticides

		2005	2008	2010	2011	2012	2013	2014	2015	2016	2017	2018
Average yields of wheat, maize and milk, in tonnes/ha or tonnes/cow												
Wheat	Slovenia	4.7	4.5	4.8	5.2	5.4	4.4	5.2	5.1	5.2	5.0	4.4
	EU	N/A	5.7	5.3	5.3	5.2	5.6	5.9	5.7	5.3	5.8	5.5
Maize for grain	Slovenia	8.3	7.3	8.5	8.7	7.1	5.4	9.2	9.0	9.5	7.1	9.0
	EU	N/A	7.2	7.1	7.6	6.0	6.8	8.1	6.4	7.3	7.8	8.3
Milk yield	Slovenia	5.5	5.6	5.4	5.5	5.7	5.4	5.6	5.9	5.8	6.0	N/A
	EU	N/A	N/A	N/A	N/A	N/A	6.8	6.9	7.2	7.2	7.3	N/A
Fertilisers and pesticides, Slovenia, growth, 2005=0												
NPK fertilisers, total consumption		0.0	–9.0	–10.8	–9.7	–16.8	–14.8	–12.9	–10.4	–13.5	–14.8	N/A
Pesticide sales, in tonnes of active ingredients		0.0	–13.8	–19.8	–20.7	–28.1	–35.1	–28.6	–26.0	–18.2	–23.1	N/A

Source: Eurostat Portal page – Agriculture, Forestry and Fisheries, 2019; calculations by IMAD.

Figure: Number of livestock units* per unit of utilised agricultural area, 2013



Source: Eurostat Portal Page – Tables on EU Policy, 2019. Note: * A livestock unit is a reference unit which facilitates the aggregation of different livestock categories.

[1] Around two-thirds of pesticides are estimated to be used in agriculture. The rest is applied on non-agricultural land such as railway tracks, roads, parks and other green areas, and golf courses and other sports fields.

Intensity of tree felling 4.11

Tree felling, having already been rising in the long term before the glaze ice damage, has been fairly pronounced since. Following the severe glaze ice damage in early 2014, around half more wood mass has been cut in Slovenia forests per year than in 2013 and twice the amount felled on average in the previous decade. The recorded annual tree felling has thus come close to the maximum felling level allowed, after lagging considerably behind.[1] *Tree felling intensity,* expressed as the ratio of annual felling to annual wood increment, rose to around 70% in the three years following the glaze ice damage. This is close to the maximum level set in the Action Plan to Ensure Sustainable Development (75%).[2] However, the structure of cut wood changed significantly: felling for tree-tending purposes, which normally accounts for the largest share and was on the rise before the ice damage, declined, while the scope of sanitary felling increased. The severe tree damage caused by the glaze ice was then exacerbated by the rapid spread of the spruce bark beetle in subsequent years, because of which three times more wood had to be cut then ten years before, when the bark beetle had previously caused the greatest damage.[3] In 2017 total felling declined but was still relatively high.

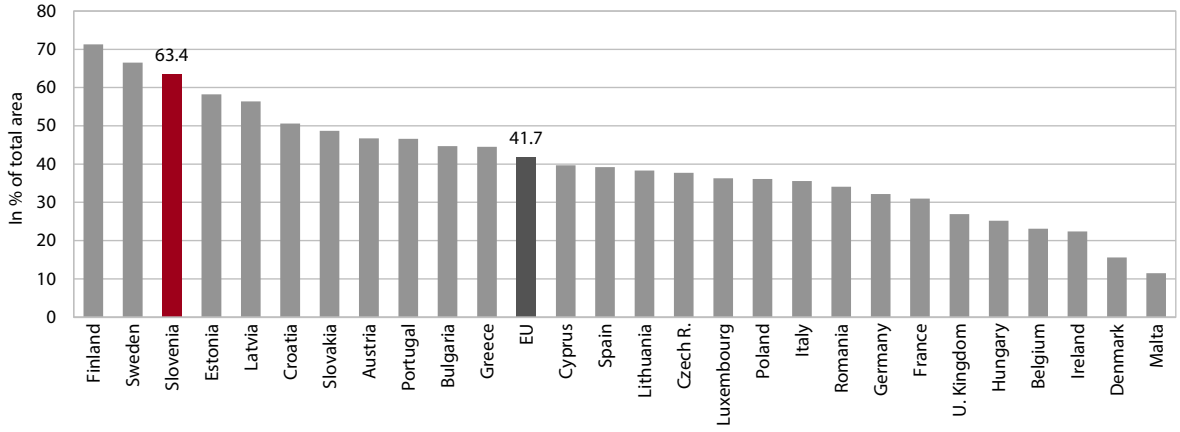
Raw wood production increased, but so did exports of the highest-quality wood, which is an untapped development potential for Slovenia. The utilisation rate of felled wood as measured by the ratio between the production of raw wood categories and felled wood had fallen in the first year after the ice glaze damage, then improved again in subsequent years.[4] After the ice damage, *production* increased for all wood categories, particularly pulpwood but also sawlogs and veneer logs, the highest-quality wood that generates the most value added. However, exports of unprocessed wood increased much more than total production. While imports dropped by around a fifth, exports almost doubled, with exports of the highest-quality wood rising steeply. The share of sawlogs and veneer logs for export in terms of their total production declined only in 2017, this from 67% to 57%. The rapidly rising exports of this high-quality raw material represent a lost opportunity for Slovenia to increase employment and achieve higher value added in other sectors up the forest–wood chain.

Table: Forests and their economic yield, Slovenia

	2000	2005	2010	2011	2012	2013	2014	2015	2016	2017
Forest area (in thousand ha)	1,134.2	1,169.2	1,185.2	1,184.4	1,184.5	1,183.4	1,181.9	1,182.0	1,182.3	1,180.3
Growing stock (in million m^3)	262.8	300.8	331.0	334.1	337.8	342.4	346.1	348.2	350.4	352.9
Annual wood increment (in million m^3)	6.9	7.6	8.1	8.3	8.4	8.5	8.6	8.6	8.7	8.7
Removals (in million m^3)	2.6	3.3	3.4	3.9	3.9	3.9	6.3	6.0	6.1	5.0
Tree felling intensity	38.0	43.0	41.6	47.1	46.4	46.2	74.0	70.1	70.4	57.3

Source: SI-STAT Data Portal – Environment and Natural Resources – Forestry and Hunting, 2019; calculations by IMAD.

Figure: Forest area, 2015



Source: Eurostat Portal Page – Tables on EU policy.

[1] The potential (or allowable) felling is determined with a view to ensuring sustainable development, i.e. the long-term stability of all forests and their habitats irrespective of ownership. In 2017 the recorded tree felling accounted for three-quarters of that allowed under forest management plans.
[2] Action Plan to Increase the Competitiveness of the Forest–Wood Chain in Slovenia by 2020, 2012.
[3] Report of the Forest Service of Slovenia for 2017, 2018.
[4] The utilisation rate of felled wood also depends on the structure of raw wood categories and the types of trees felled. In 2014 it amounted to 83% and in 2017 to 92% of the volume cut.

Quality of watercourses 4.12

The quality of rivers is relatively good in Slovenia; the concentrations of phosphates in rivers and nitrates in groundwater are also lower than the EU average. The quality of rivers as measured by biochemical oxygen demand, which was similar to the EU average at the beginning of the previous decade, has improved significantly since 2005 and was the highest among all EU countries according to the latest data.[1] The decline in organic pollution, which is usually caused by municipal and industrial wastewater discharges and runoff from agricultural land,[2] has been a result of a significant improvement in wastewater treatment and the ending of certain economic activities which had been polluting watercourses with wastewaters in previous years. The concentrations of nitrates in groundwater and phosphates in rivers are also declining and are lower than the EU average.

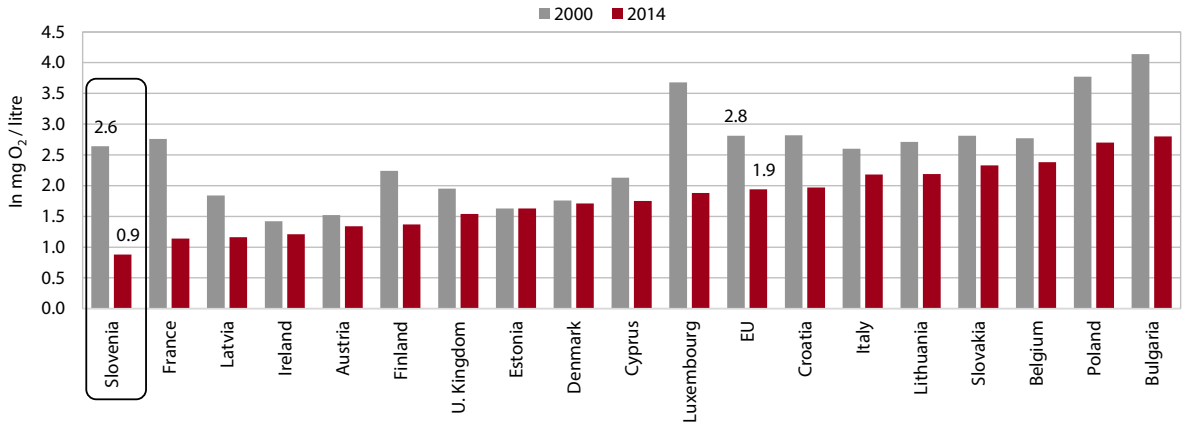
The majority of water is abstracted from surface water sources; around one-fifth of wastewater is treated before discharge. In 2017 around 930 million m^3 of water in total was *abstracted* in Slovenia, which – fairly rich in water resources owing to its diverse natural conditions – has a relatively high amount of freshwater resources available per capita. Four-fifths of water was abstracted from surface waters and used primarily in industry. The remainder was from groundwater resources. Most of this water is intended for the public water supply system, i.e. final consumers such as households, kindergartens, schools and other activities. Around 960 million m^3 of wastewater[3] was *discharged* into the environment. Approximately one-tenth of this water was discharged without treatment and approximately one-fifth was treated; the remaining majority was polluted only thermally, mainly after being used as a coolant in thermal power plants. The share of water treated before discharge is rising, partly owing to assistance from EU funds, and is twice that in 2012.

Table: Water quality indicators

	2000	2005	2008	2009	2010	2011	2012	2013	2014	SDS 2030 target
Biochemical oxygen demand in rivers, in mg O_2/l[1]										
Slovenia	2.6	1.9	1.0	1.0	1.0	1.0	1.0	0.9	0.9	< 1
EU	2.8	2.3	2.2	2.1	2.1	2.1	2.0	2.0	1.9	
Nitrates in groundwater, in mg NO_3/l										
Slovenia	21.9	21.8	20.6	20.4	19.2	18.7	18.5	N/A	N/A	
EU	19.1	19.9	19.7	19.2	19.3	19.0	19.1	N/A	N/A	
Phosphates in rivers, in mg PO_4/l										
Slovenia	0.04	0.03	0.02	0.02	0.01	0.02	0.02	0.02	0.02	
EU	0.09	0.07	0.07	0.07	0.06	0.06	0.07	0.07	0.07	

Source: Eurostat Portal Page – Tables on EU Policy, 2018. Note: N/A – not available.

Figure: Biochemical oxygen demand in rivers



Source: Eurostat Portal Page – Tables on EU Policy, 2019. Note: data for other EU countries not available.

[1] A lower biochemical oxygen demand indicates better water quality.
[2] Environmental indicators, ARSO.
[3] Wastewater is not only water that is released back to the environment after use but also runoff rainwater that flows back to the environment through the sewerage system or is captured and then discharged directly to rivers, streams or soil.

Air quality 4.13

The quality of ambient air in Slovenia is strongly related to excessive particulate matter (PM)[1] pollution, which reflects inappropriate burning of wood biomass and poor ventilation of some areas. The majority of particle pollution (around 60%) is due to emissions from *small combustion sources,* largely owing to households' outdated wood biomass furnaces and the often unfavourable weather conditions in poorly ventilated basins and valleys of the continental part of Slovenia. Owing to pronounced temperature inversions, even a relatively low density of emissions can cause excessive air pollution. As these problems do not occur in the warm half of the year, data on the average annual values show a better picture than those on the number of days with exceeded daily limit value typical of the cold part of the year. Another major source of particle pollution is *road transport,* particularly emissions from diesel-fuelled vehicles, followed by emissions from *energy use in industry*. The general average exposure of the urban population to particle pollution has been declining in recent years, particularly as a result of milder winters, but has remained higher than the EU average.

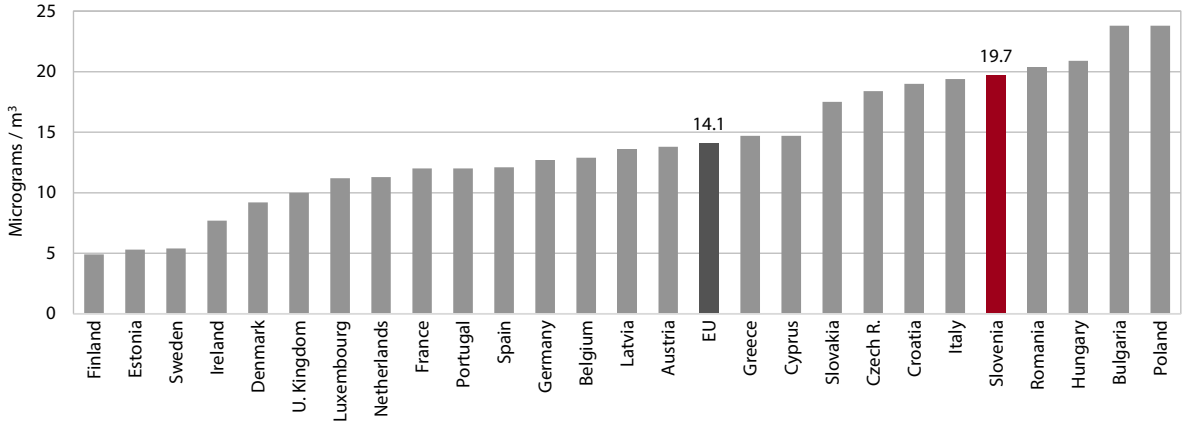
Another problem is the locally high presence of ground-level ozone. As the formation of ozone requires sufficient sunlight, the excessive concentrations of ozone – in contrast to particulate matter – mainly occur during the summer months. They are primarily the result of road traffic, the main source of ground-level ozone precursors. The ambient concentration of ozone in Slovenia (which is significantly affected by transboundary air pollution and hence highly dependent on winds from the west) is the highest in the Primorska region. Owing to strong dependence on weather conditions, the multi-annual series of data does not indicate a clear trend, but the urban population's exposure to ozone is higher than the EU average.

Table: Urban population exposure to particulate matter and ozone*, in micrograms per m3

	2000	2005	2008	2010	2011	2012	2013	2014	2015	2016	2017
PM_{10}											
Slovenia	N/A	36.8	29.1	28.2	31.0	25.4	24.9	22.5	27.7	25.6	24.8
EU	28.8	28.4	26.4	26.3	27.2	24.9	24.1	22.5	22.7	21.2	21.6
$PM_{2.5}$											
Slovenia	N/A	N/A	23.9	21.8	24.1	20.4	20.1	17.5	21.6	21.6	19.7
EU	14.4	15.5	17.5	18.1	18.4	16.8	15.7	15.2	14.6	13.8	14.1
Ozon											
Slovenia	6.806	6.017	5.838	4.497	6.615	6.699	5.528	3.812	N/A	N/A	N/A
EU	3.000	3.669	3.609	3.432	3.749	3.530	3.373	3.243	N/A	N/A	N/A

Source: Eurostat Portal Page – Environment and Energy, 2019.
Note: * Average annual particulate matter/ozone concentrations in urban background locations. N/A – not available.

Figure: Urban population exposure to $PM_{2,5}$, 2017



Source: Eurostat Portal Page – Environment and Energy, 2019.
Note: Data for Greece is for 2016; data for Lithuania and Malta not available

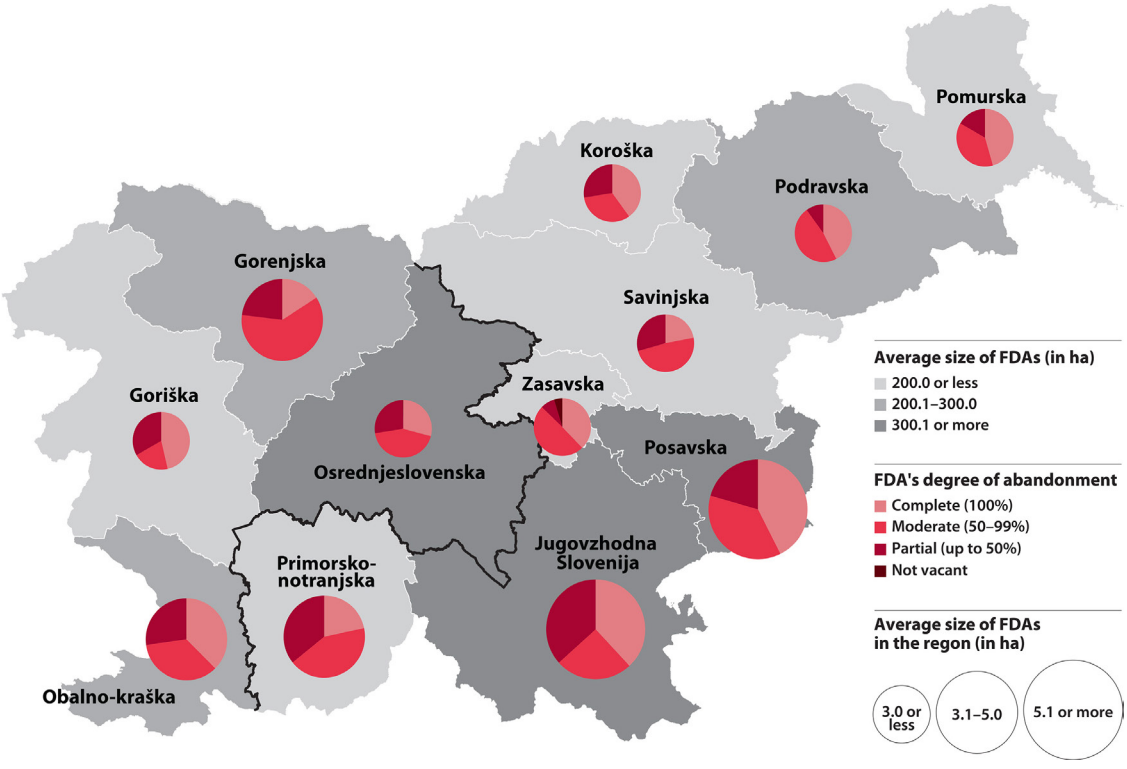
[1] The most frequently measured particles are those sized 10 µm or less (PM_{10}) and 2.5 µm or less ($PM_{2.5}$). These are the most damaging for health, causing increased morbidity and mortality due to respiratory and cardiovascular diseases. The PM_{10} daily concentration limit is 40 µg/m^3 and should not to be exceeded on more than 35 days per calendar year. The annual limit value for the protection of human health over the long term is 20 µg/m^3 (Decree on sulphur dioxide, nitrogen oxides, particulate matter and lead in ambient air, Official Gazette of the Republic of Slovenia, No. 52/2002).

Functionally derelict areas 4.14

The spatial distribution of functionally derelict areas (FDAs) reveals the great extent of functionally degraded land in Slovenia. Underused or abandoned areas with visible signs of former use and reduced economic value can be found in both urbanised and rural areas.[1] Overall 1,081 FDAs were indentified in Slovenia in 2017 (with a total area of 3,400 ha), among which wholly abandoned sites account for more than half (or one-third of the total area).[2] FDAs are a consequence of many factors and social processes. The high rate of land degradation to date has been due to fast social and economic changes and the consequent abandonment of activities and changes in their spatial needs. FDAs can be found in four-fifths of Slovenian municipalities, even in many smaller ones, and indicate changes in the structure of the economy. In terms of surface area, the most are in the Osrednjeslovenska, Jugovzhodna Slovenija and Posavska regions, mainly as a result of the abandonment and poor planning of industrial and commercial activities and, to a lesser extent, the abandonment of service activities. The abandonment of services tends to have a strong negative impact on quality of life. The most FDAs from services activities are in peripheral areas of the north-eastern part of Slovenia.

Rehabilitation plans are in place for a mere 15% of all FDAs, while for as much as 44% of derelict land no plans have yet been made. Functionally derelict areas represent spatial development potential for re-use or new investment which does not require expansion of activities into vacant land. Rehabilitation and revitalisation of an FDA is a difficult task, however, as the low number of adopted revitalisation plans also suggests. The main reason hindering rehabilitation is that it requires a relatively high level of investment and cooperation between different stakeholders, one of the greatest obstacles being heterogeneous ownership. The interest in revitalising an FDA also depends on the type of degradation and the possibility of integrating activities into areas that are partially still operational. In terms of FDA rehabilitation plans, Gorenjska and Goriška are the most successful regions.

Map: FDAs in Slovenian regions by size and degree of abandonment, 2017



Source: Lampič, B., Kušar, S., Zavodnik Lamovšek, A., 2017.

[1] Includes only areas over 0.5 ha (0.2 ha in urban settlements). Nine types of functionally derelict areas have been identified in Slovenia: areas of industrial or commercial activities, areas for infrastructure, agricultural activities, defence, rescue and protection services, transitional use, mineral extraction, services activities, and tourist and sports activities, and areas for housing (Lampič, B., Kušar, S., and Zavodnik Lamovšek, A., 2017).

[2] Situation as on 30 September 2017 (Lampiè, B., Kušar, S., and Zavodnik Lamovšek, A., 2017). More recent data will be available in 2020.

5 A high level of cooperation, training and governance efficiency

Efficient governance and high-quality public service

5.1 Trust in public institutions

5.2 Executive capacity

A trustworthy legal system

5.3 Rule of law index

5.4 Expected time needed to resolve civil litigious and commercial cases

5.5 Corruption Perception Index

A safe and globally responsible Slovenia

5.6 Global Peace Index

5.7 Share of households reporting crime, vandalism or violence in the local area

5.8 Expenditure on official development assistance

Trust in institutions 5.1

In 2013–2018 trust in institutions[2] increased, but it remained low and below the EU average. It was highest and above the EU average in 2006, but since then it has dropped significantly, particularly during the crisis. In most institutions the level of trust was the lowest at the end of the crisis, but in recent years it has been rising, which can be attributed to the improvement in macroeconomic indicators and lower dissatisfaction of respondents with the current economic and general situation in Slovenia.[2] The exception is trust in political parties, which improved slightly only in 2017. At the end of 2018, trust in the Government, Parliament and political parties increased further compared with the preceding year, which can be attributed to political changes (for example the elections to the National Assembly). Trust in local authorities[3] declined, but this is still the institution people trust the most, while the least trusted institution is political parties.

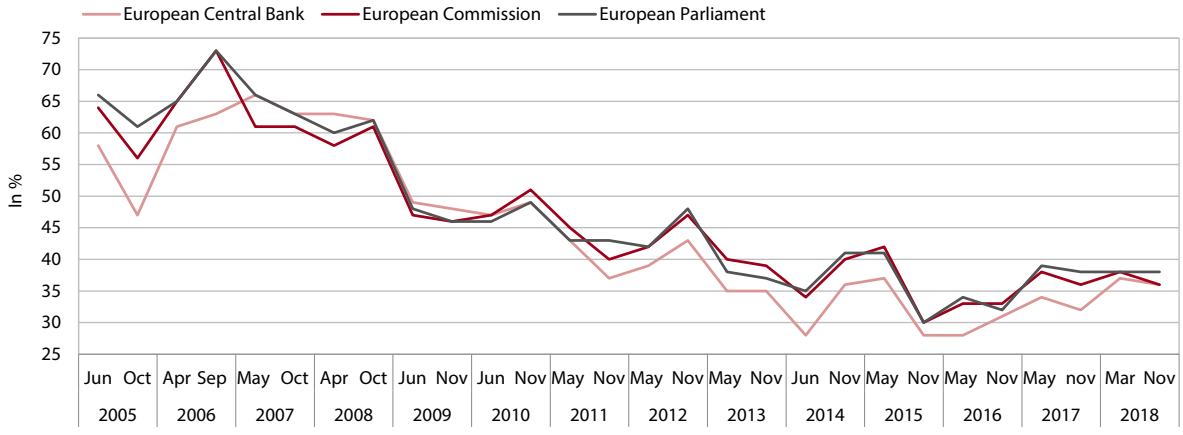
Trust in the EU and its institutions remains below the EU average. It was the highest in 2006, but since 2008 it has dropped strongly. In Slovenia 37% of respondents trust the EU, which is less than the EU average. The largest share of respondents trusts the European Parliament (38%) and slightly fewer trust the European Commission and the European Central Bank (36%). All these shares are below the EU average. In 2018 only trust in the European Central Bank increased relative to 2017.

Table: Trust in institutions, in %

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	SDS 2030 target
Parliament	Slovenia	33	42	31	34	19	23	10	12	6	9	11	14	17	22	At least half of the population trust public institutions (average of the last three years)
	EU	35	33	35	34	30	31	27	28	25	30	28	32	35	35	
Government	Slovenia	39	43	32	36	29	27	12	15	10	13	16	17	17	23	
	EU	31	30	34	34	29	29	24	27	23	29	27	31	36	35	
Local authorities	Slovenia	N/A	N/A	N/A	39	40	39	36	34	29	31	27	38	43	40	
	EU	N/A	N/A	N/A	50	50	47	45	43	44	43	42	47	51	54	
Political parties	Slovenia	14	20	13	17	9	11	7	9	6	6	6	6	8	10	
	EU	17	17	18	20	16	18	14	15	14	14	15	16	18	18	
EU	Slovenia	55	70	65	60	50	47	38	39	37	40	30	37	38	37	
	EU	45	45	48	47	48	42	34	33	31	37	32	36	41	42	

Source: Standard Eurobarometer, several issues.
Notes: The figures for individual years are the latest available data for that year (autumn measurements). For the EU, the figures for 2005 and 2006 are for the EU-25, the figures from 2007 to 2012 are for the EU-27, and the figures for 2013 to 2018 are for the EU-28; N/A – data not available.

Figure: Trust in EU institutions, Slovenia



Source: Standard Eurobarometer, 2018.

[1] The source of data is Eurobarometer, which is based on a public opinion poll on the level of trust in selected institutions, the possible answers being "tend to trust", "tend not to trust" and "don't know".
[2] The share of those assessing the economic and employment situation in the country as good is rising.
[3] 2018 was also a year with local elections, but the level of trust in local authorities cannot be attributed to their impact as the survey at the end of 2018 was carried out during the time of the elections.

Executive capacity 5.2

The executive capacity indicator, which measures strategic governance of public institutions, remains very low in Slovenia compared with other EU Member States. It is a sustainable governance indicator measuring government and institutional performance in eight dimensions: strategic capacity, inter-ministerial cooperation, regulatory impact assessment, societal consultation, policy communication, implementation of set measures, adaptability and the capacity for reforming public administration. Over the last few years the indicator value has not improved significantly. Slovenia thus still lags markedly behind the EU average and ranks almost at the bottom of EU Member States (in 25th place). The low executive capacity score is largely a consequence of the low values of government and institutional performance indicators.

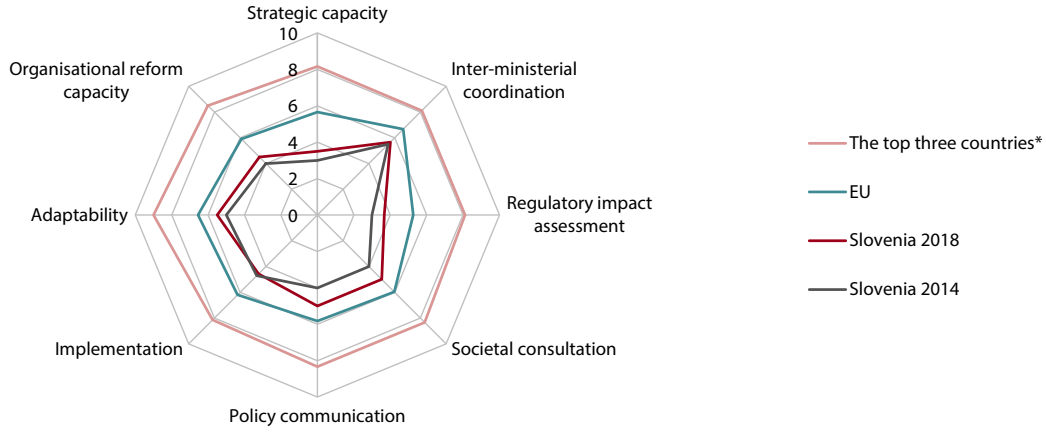
Slovenia lags behind the EU in all indicator dimensions. The score is strongly affected by the absence of effective strategic planning and the low participation of various expert groups in government decision-making processes. Major shortcomings were also observed in inter-ministerial cooperation. Moreover, new legislation is still not subject to regulatory impact analysis (RIA), a systematic and comprehensive assessment of the potential impacts of proposed regulations on public finances, the economy and society. The implementation of policy measures at various government levels is assessed significantly more negatively than in other EU Member States, in particular owing to excessive political interference in recruiting in the state administration, even at expert levels.

Table: Indicator of executive capacity, Slovenia and the EU

	2014	2015	2016	2017	2018	SDS 2030 target
Slovenia*	4.37	4.55	4.72	4.67	4.71	EU average in 2030
EU	6.07	6.09	6.11	6.10	6.10	

Source: Sustainable Governance Indicators 2018, 2018; calculations by IMAD.
Notes: Scores between 1 and 10; a higher score indicates a better outcome; * for Slovenia, the indicator was calculated for the first time in 2014.

Figure: Indicator of executive capacity by dimension, 2018



Source: Sustainable Governance Indicators 2018, 2018; calculations by IMAD.
Notes: The top three countries are Sweden, Finland and Denmark. A higher score indicates a better outcome, the highest score being 10.

Rule of Law Index 5.3

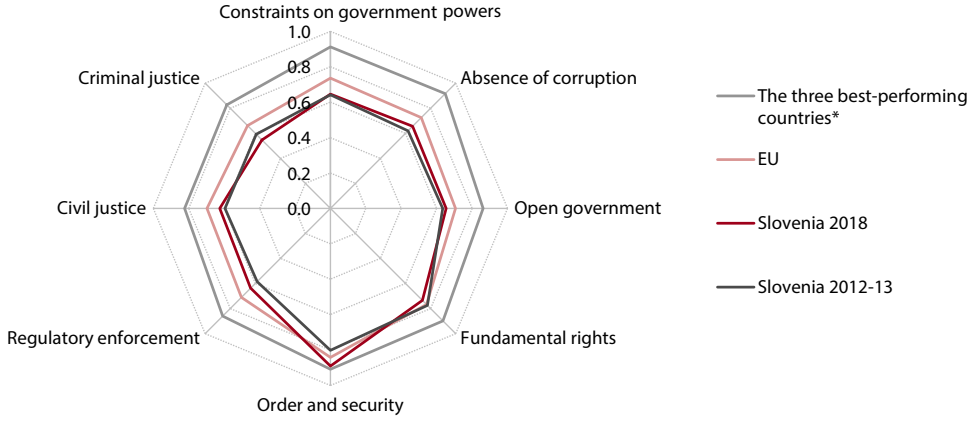
Slovenia being ranked in the lower half of EU countries on the Rule of Law Index points to weaknesses in the adherence to the rule of law. The rule of law highlights the principle of equality before the law and emphasises the inviolability of the authority of laws and rules. This means that the government itself respects the law, that the functioning of government bodies is bound by law, and that fundamental human rights and freedoms are ensured. Slovenia was placed 14th among 21 EU countries according the Rule of Law Index in 2018, its ranking not having changed significantly in the last few years. It scores best in the category of order and safety, where it is close to the top-ranking Scandinavian countries. The only other category where Slovenia ranks around the EU average is fundamental rights, where it scores well on the indicators of absence of discrimination, right to life and security, and freedom of expression and religion. On the other hand, it lags significantly behind the EU average in the area of criminal justice, the indicators in this area reflecting mistrust in the justice system, especially in its independence and timeliness. The weaknesses in the adherence to the rule of law are also indicated by low indicator values in the areas of constraints on government powers (for example the sanctions for official misconduct indicator) and absence of corruption (for example the risk of corruption in the executive branch and in the legislature).

Table: Rule of Law Index, Slovenia and the EU

	2012–13	2014	2015	2016	2017	2018	SDS 2030 target
Ranking among 21 EU Member States							
Slovenia	15	15	15	15	15	14	To be ranked among the first half of EU Member States
Indicator value							
Slovenia	0.66	0.65	0.66	0.67	0.67	0.67	
EU*	0.72	0.72	0.72	0.73	0.73	0.73	

Source: WJP Rule of Law Index 2019, 2019.
Notes: Scores between 0 and 1, higher meaning better; data for the overall index are available from 2012 onwards; * data available only for 21 EU Member States.

Figure: Rule of Lax Index by sub-components, 2018



Source: WJP Rule of Law Index 2019, 2019.
Notes: Scores between 0 and 1, higher meaning better; data are for 21 EU Member States; the three best performing countries are Denmark, Finland and Sweden.

Expected time needed to resolve civil litigious and commercial cases 5.4

The estimated time needed to resolve civil litigious and commercial cases[1] has not changed significantly in recent years and is longer than the EU average. By implementing the Lukenda Project and other structural reforms (such as new solvency legislation), Slovenia shortened the expected duration of civil litigious and commercial cases by more than 40% in 2008–2014. Since 2015 the time needed to resolve a case has remained unchanged (280 days in 2016), but the number of cases has declined. Despite the shortening of the length of proceedings in the previous decade, Slovenia still lags behind the EU average. However, owing to the different methodology and data used in the calculation, the expected disposition time differs from the time actually taken by the courts to resolve a case.

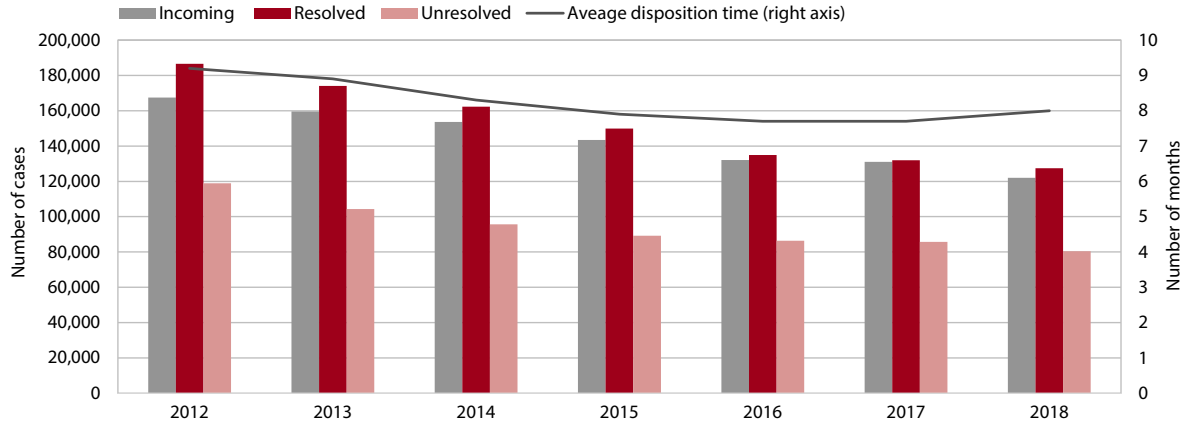
The average actual disposition time for major cases[2] has not changed significantly in the last three years; in 2018 it was eight months. Up to 2016 the time needed to resolve a major case was rapidly decreasing, largely a consequence of a smaller incoming caseload and greater efficiency on the part of the courts. As in the previous period, the clearance rate[3] for major cases has exceeded 100% in the last three years, meaning that the courts are resolving more cases than come in. The time needed to resolve a major case has stopped decreasing in the last three years, which can be attributed to a larger number of more demanding proceedings and new competences given to the courts with changes of legislation. The share of pending major cases in total unresolved cases is therefore increasing (it was 56% in 2018). The average time needed to resolve a case fell further, to 1.8 months. Although it is reasonable to expect that the average time needed to resolve a case will shorten further, it should be noted that excessive shortening of the length of proceedings may be detrimental to the parties concerned (violating their right to be heard, for example) and have a negative effect on the quality of justice (proceedings conducted in a fair and reasonable manner to reach a fair decision).

Table: Estimated time needed to resolve civil litigious and commercial cases, in days

	2008	2010	2012	2013	2014	2015	2016	SDS 2030 target
Slovenia	460	315	318	301	270	277	280	200 days
EU	299	288	278	300	253	244	244	

Source: The 2018 EU Justice Scoreboard (CEPEJ), 2018.

Figure: Major cases at courts, Slovenia



Source: Opening of the Jucidical Year 2018 (Supreme court), 2019.

[1] The expected length of proceedings indicates the estimated time (in days) needed to resolve a case in court, i.e. the time taken by the court to reach a decision at first instance.

[2] Major cases, which account for around 15% of the total caseload, are all cases defined as such in the methodology for recording statistical data published at http://www.mp.gov.si/si/obrazci_evidence_mnenja_storitve/uporabni_seznami_imeniki_in_evidence/sodna_statistika/

[3] The clearance rate is the ratio of the number of resolved cases over the number of incoming cases in the last 12 months expressed in %.

Corruption Perception Index 5.5

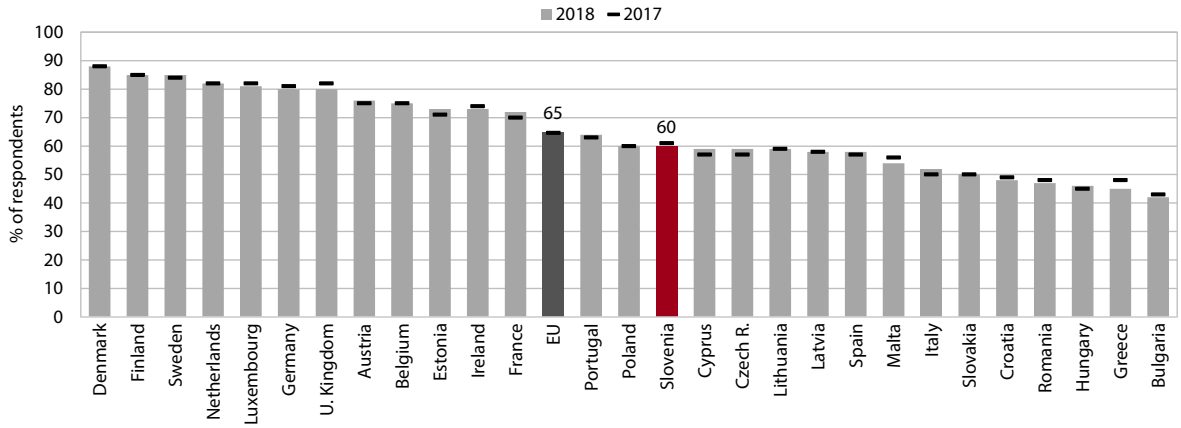
The perception of corruption has not declined significantly in the last few years and remains higher than the EU average. The Corruption Perception Index (CPI) is based on the rate of public sector corruption as perceived by businesspeople, experts and analysts. After 2011 the perceived level of corruption rose markedly in Slovenia (the number of reports of suspected corruption increasing significantly), which can, in part, be attributed to the more visible role of the Commission of the Prevention of Corruption and hence greater awareness of corruption and more corruption cases reported. The Commission meanwhile finds that the most corruption in the public sector is perceived to exist in public procurement (around 15% of all incidences reported), in administrative procedures, in circumstances that represent a conflict of interest, in procedures regarding the disposal of physical assets owned by the government or municipalities, and in healthcare and pharmacy. The perceptions of corruption have not changed significantly over the last few years, as, according to Transparency International, there have been no key systemic changes towards improving the prevention and persecution of corruption. According to Eurobarometer,[1] 89% of persons asked think that corruption is widespread in Slovenia, but at the same time, a large majority of respondents have no personal experience[2] of corruption. The high perception of corruption in Slovenia can to a great extent be attributed to respondents believing that high-profile and major cases of corruption are not adequately sanctioned. In 2018 Slovenia was ranked 36th among 180 countries and 15th in the EU. The perceived levels of corruption are the lowest in the Scandinavian countries and the highest in Hungary, Greece and Bulgaria.

Table: Corruption Perception Index

	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Slovenia	61	67	66	64 (13)	59 (16)	61 (16)	57 (17)	58 (17)	60 (16)	61 (15)	61 (14)	60 (15)
EU	62	64	63	62	62	63	63	64	66	**65**	65	65

Source: Corruption Perception Index 2018 (Transparency International), 2019.
Note: The index scale ranges from 0 to 100, where 0 means that a country is perceived to be highly corrupt and 100 means that a country is perceived to be "very clean". The figure in brackets shows Slovenia's rank among EU Member States.

Figure: Corruption Perception Index



Source: Corruption Perception Index 2018 (Transparency International), 2019.
Note: The index scale ranges from 0 to 100, where 0 means that a country is perceived to be highly corrupt and 100 means that a country is perceived to be "very clean".

[1] Special Eurobarometer 470, 2017.
[2] In Slovenia fewer than 10% of respondents have experienced corruption, according to the Eurobarometer survey.

Global Peace Index 5.6

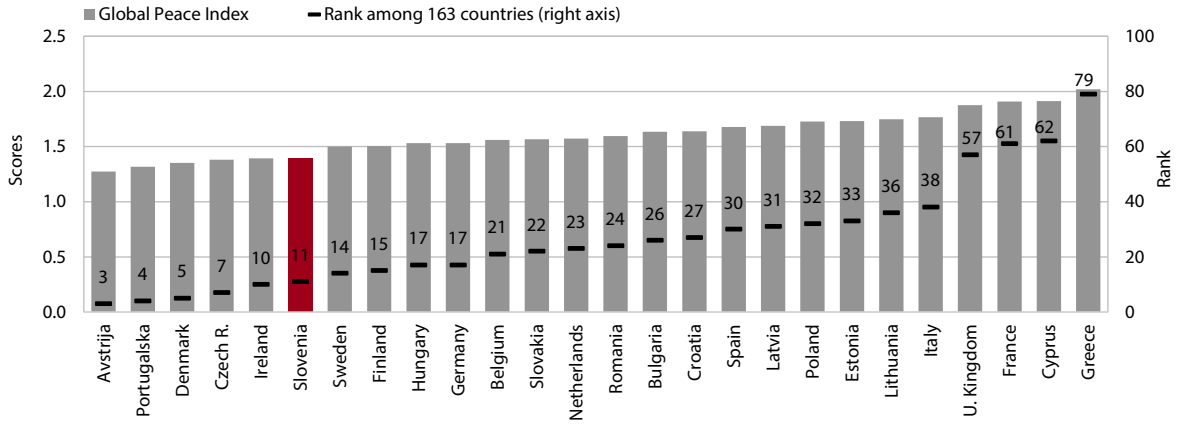
Slovenia is ranked among the most peaceful countries in the world. Its position has not changed significantly in the last six years. In 2018 it was placed 11th among all 163 countries on the Global Peace Index[1] list and 7th among EU Member States. It ranks the highest in the area of militarisation (4th), although its position has deteriorated on the indicator of cooperation at UN peacekeeping operations in the last year. It also scores high regarding societal safety and security (12th position), while its position has deteriorated in the domestic and international conflict area (to 62th), this mainly owing to the worse assessment of relations with neighbouring countries and the intensity of organised internal conflict. It has also slipped slightly on the indicators of the number of internal security officers and police per 100,000 people, the level of perceived criminality in society, and the likelihood of violent demonstrations.[2] Slovenia nevertheless ranks relatively high in these areas compared with other countries, the slightly lower scores pointing only to certain weaknesses that do not jeopardise peace in the country. The Global Peace Index shows that Europe remains the most peaceful region in the world, with six of the ten most peaceful countries in the world coming from this region (of which 5 are EU Member States). Iceland remains the most peaceful country in the world and Syria the least. The results of the Global Peace Index otherwise deteriorated over the ten-year period, primarily owing to the intensifying of conflicts in the Middle East and terrorism.

Table: Global Peace Index, Slovenia

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	SDS 2030 target
Rank among 163 countries												To maintain the rank among the top 10 countries in the world and the top 5 in the EU.
Global Peace Index	7	6	5	5	10	11	11	11	10	7	11	
Number of scores												
Global Peace Index	1.392	1.398	1.376	1.392	1.452	1.450	1.444	1.434	1.408	1.364	1.396	
Militarisation	1.2	1.2	1.2	1.2	1.4	1.4	1.4	1.4	1.3	1.2	1.3	
Societal security and safety	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	
Domestic and international conflict	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.4	

Source: 2018 Global Peace Index (Institute for Economics and Peace), 2018.
Note: Number of scores from 1 to 5; a lower score indicates a better outcome.

Figure: Global Peace Index, 2018



Source: 2018 Global Peace Index (Institute for Economics and Peace), 2018.
Notes: Data for 26 EU Member States (data for Malta and Luxembourg not available); number of scores from 1 to 5, a lower score indicating a better outcome.

[1] The Institute for Economics and Peace (IEP), in cooperation with the Economist Intelligence Unit (EIU), produces the Global Peace Index each year; this evaluates countries according to their levels of peacefulness. The GPI includes 23 qualitative and quantitative indicators on a scale of 1–5, grouped in three thematic domains: militarisation (7 indicators), societal safety and security (10 indicators), and ongoing domestic and international conflict (6 indicators).

[2] All three indicators fall under the area of societal safety and security.

Share of households reporting problems with crime, vandalism or violence in the local area 5.7

In 2017 the share of households[1] reporting problems with crime, vandalism or violence in the local area declined for the third consecutive year and remained below the EU average. In Slovenia it totalled 8.0% and was, like the EU average (11.6%), the lowest in the last ten-year period. The share of persons having had a personal experience with crime in the local area is low, but there are significant differences between the regions. More problems with crime are reported in the western part[2] of Slovenia. Osrednjeslovenska stands out with the highest share of all regions, while Obalno-kraška also exceeds the Slovenian average. In the eastern part of Slovenia,[3] the Slovenian average is exceeded in Jugovzhodna Slovenija and in Podravska. The lowest values, four times lower than in Osrednjeslovenska, are in Pomurska. Problems with crime, violence or vandalism in the local area were most frequently reported by single persons with dependent children (12.7%), followed by households of two adults and two children (9.5%), and households of two adults where at least one is older than 65 years (9.4%). All these shares are lower than the EU average.

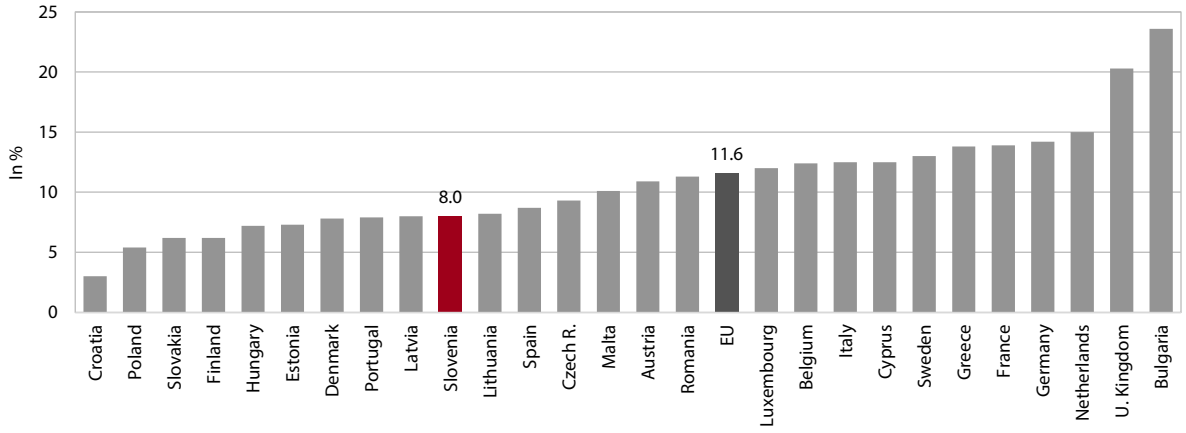
Slovenia remains a safe country compared with other countries in the EU, which has a positive impact on the quality of life. The results of the European Social Survey for 2016 indicate that 9% of respondents had a personal experience with burglary or physical assault in 2016, which is less than in previous years and lower than the average for countries included in the survey.[4] In 2017, 97% of Slovenians said that their immediate neighbourhood was a secure place to live in and 95% of them said that Slovenia was a secure place to live in, which is more than in 2015 and more than on average in the EU.[5]

Table: Crime, vandalism or violence in the local area, in %

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	SDS 2030 target
Slovenia	10.5	9.5	10.2	8.7	12.5	9.3	8.6	8.1	9.1	10.1	9.2	8.5	8.0	< 10
EU	N/A	N/A	15.9	14.7	16.0	14.4	14.1	13.6	14.5	14.0	13.6	13.0	11.6	

Source: Eurostat, EU-SILC, 2019.
Notes: Data for the EU from 2007 to 2009 are for the EU-27, from 2010 onwards for the EU-28; N/A – not available.

Figure: Crime, vandalism or violence in the local area, 2017



Source: Eurostat, EU-SILC, 2019.
Note: Data for Ireland not available.

[1] I.e. the share of households having problems with crime, violence or vandalism in the neighbourhood where they live. The sampling unit described in the Survey of Living Conditions (Eurostat, EU-SILC) is private households or individuals living in these households in Slovenia.
[2] The cohesion region Zahodna Slovenija.
[3] The cohesion region Vzhodna Slovenija.
[4] The survey of the group of EU countries shows the average result for selected countries regardless of the size of national samples or the size of the country. It covers the countries whose data were available at the time of the survey (Belgium, Germany, Finland, France, Great Britain, Ireland, the Netherlands, Poland, Sweden and Slovenia).
[5] Special Eurobarometer 464b: Europeans' attitudes towards security, 2017.

Expenditure on official development assistance 5.8

Expenditure on official development assistance remains significantly lower than international commitments. Official development assistance is defined as aid provided by advanced countries in support of sustainable development in developing countries. Slovenia allocated EUR 67.2 million for development assistance in 2017, 9% less than in 2016. As a similar decline was also recorded in other EU Member States, Slovenia's share remains significantly below the EU average[1] (the gap with the EU average being wider than a decade before). Expenditure on official development assistance (0.16% of GNI) falls considerably short of international commitments, according to which Slovenia should strive to increase the share of GNI for official development assistance to 0.33% by 2030.

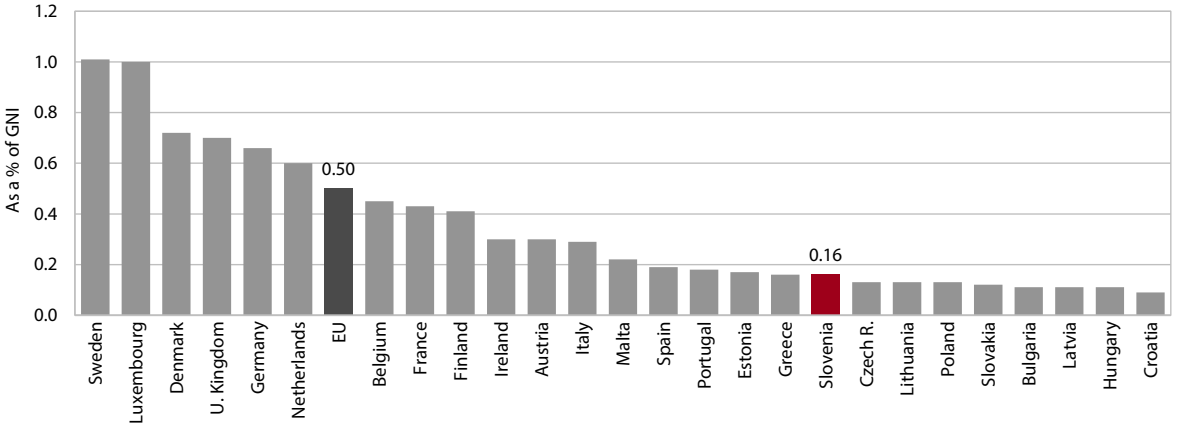
Particularly expenditure related to the refugee and migrant crisis, which had been the main reason for the increase in development assistance in previous years, declined in 2017. Migration developments related to the situation in the Middle East significantly influenced the structure of assistance in 2015 and 2016, which was reflected particularly in increased costs of caring for refugees and migrants in Slovenia. These costs dropped significantly in 2017. Dedicated humanitarian contributions to other international organisations meanwhile increased, largely owing to the higher contribution to the EU Facility for Refugees in Turkey. Development assistance is a sum of multilateral assistance (funding provided for regular development activities of international organisations) and bilateral assistance. Slovenia dedicated EUR 22.1 million for bilateral assistance[2] in 2017, around 85% of which to the Western Balkans and Turkey. Most of this aid was focused on projects in the area of education. Expenditure on multilateral assistance, most of which is dedicated to EU development cooperation programmes, declined in 2017, as did the contribution for UN peacekeeping operations.

Table: Official development assistance as a share of GNI, in %

	2005	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Slovenia	0.11	0.13	0.15	0.13	0.13	0.13	0.13	0.13	0.15	0.19	0.16
EU	0.42	0.40	0.42	0.44	0.42	0.39	0.41	0.41	0.46	0.53	0.50

Source: Eurostat Portal Page – Sustainable Development Indicators, 2019.

Figure: Official development assistance as a share of GNI in EU Member States in 2017, in %



Source: Eurostat Portal Page – Sustainable Development Indicators, 2019.

[1] Slovenia otherwise dedicates a higher share of gross national income for this purpose than most countries that acceded to the EU in 2004 or later.
[2] The priority development regions being (i) the Western Balkans (Bosnia and Herzegovina, Macedonia, Serbia, Montenegro, Kosovo, and Albania) and Turkey, (ii) Eastern Europe, the Caucasus and Central Asia, and (iii) Africa.

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Abbreviations

LFS	Labour Force Survey
ARSO	Slovenian Environment Agency
GDP	gross domestic product
GERD	Gross domestic expenditure on R&D
GNP	gross national product
CAF	Common Assesment Framework
CEPEJ	European Commission for the Efficiency of Justice)
CH_4	methane
CO_2	carbon dioxide
CPI	Consumer Price Index
DARS	Motorway Company of the Republic of Slovenia
VAT	value added tax
DESI	Digital Economy and Society Index
DRSI	Slovenian Infrastructure Agency
DUTB	Bank Assets Management Company
ECB	European Central Bank
EFQM	European Foundation for Quality Management
EII	European Innovation Index
EIPA	European Institute for Public Administration
EC	European Commission
EMMS	common methodology for measuring administrative costs
EMU	Economic and Monetary Union
EPO	European Patent Office
ESC	Economic and Social Council
ET 2020	Education and Training 2020
ETS	Emission Trading System
EU	European Union
EUIPO	European Union Intellectual Property Office
EUR	euro
EUROAC	The Academic Profession in Europe: Responsens to Societal Challanges
EUROSTAT	The Statistical Office of the European Union
FDA	functionally derelict areas
FURS	Financial Administration of the Republic of Slovenia
GDPR	General Data Protection Regulation
GEM	Global Entrepreneurship Monitor
GFN	Global Footprint Network
Gg	gigagram (1000 tonnes)
GRECO	The Group of States against Corruption
SMARS	Surveying and Mapping Authority of the Republic of Slovenia

Ha	hectare
IAEs	innovation-active enterprises
ICTWSS	Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts
IDEA	International Institute for Democracy and Electoral Assistance
ITR	implicit tax rate (on labour, capital, consumption and energy)
IER	Institute for Economic Research
ICT	information and communication technology
IMD	Institute for Management Development
IMF	Internatinal Monetary Fund
ISCO	International Standard Classification of Occupations
CPC	Commission for the Prevention of Corruption
UAA	utilised agricultural area
MGRT	Ministry of Economic Development and Technology
MJU	Ministry of the Interior
MKGP	Ministry of Agriculture, Forestry and Food
MNZ	Ministrstvo za notranje zadeve
MRA	Master Restructuring Agreement
SMEs	small and medium-sized enterprises
MZZ	Ministry of Foreign Affairs
N_2O	nitrous oxide
NATO	North Atlantic Treaty Organization
NKMB	Nova kreditna banka Maribor
NLB	Nova ljubljanska banka
NPK fertilizers	mineral fertilisers containing nitrogen, phosphorus and potassium
FDI	foreign direct investment
NUTS	The Nomenclature of Territorial Units for Statistics
pp	percentage point
OECD	Organisation for Economic Cooperation in Development
OHIM	Office for Harmonization in the Internal Market
OP ETID	the OECD's Programme for the International Assessment of Adult Competences
RES	renewable energy sources
UN	United Nations
PIAAC	OECD Programme for the International Assessment of Adult Competences
PISA	Programme for international student assessment
PPP	purchasing power parity
PM	particulate matter
PMR	product market regulation
PPS	purhaching power standard
PTŽ	life expectancy
REER ULC	real effective exchange rate based on unit labour cost
RIA	Regulatory Impact Assesment
RISS	Research and Innovation Strategy of Slovenia

ROE	return on equity
R&D	research and development activity
RS	Republic of Slovenia
RULC	real unit labour costs
S4	Slovenia's Smart Specialisation Strategy
SSH	Slovenian Sovereign Holding
SHA	System of Health Accounts
SHARE	Survey of Health, Ageing and Retirement in Europe
SID	Slovenian Export Corporation
SKD	Standard Classification of Activities
PPS	purchasing power standard
SPIRIT	Public Agency for Entrepreneurship, Internationalisation, Foreign Investments and Technology
SEF	the Slovene Enterprise Fund
SRIPs	Strategic Research and Innovation Partnerships
SDS	Slovenia's Development Strategy
SURS	Statistical Office of the Republic of Slovenia
TAXUD	Taxation and Customs Union Directorate
TEA	Total early-stage Entrepreneurial Activity
TEŠ	the Šoštanj Thermal Power Plant
TFP	Total factor productivity
GHG	greenhouse gases
tkm	tonne-kilometre
SIPO	Slovenian Intellectual Property Office
IMAD	Institute of Macroeconomic Analysis and Development
USD	US Dollar
WEF	the World Economic Forum
WIPO	World Intellectual Property Organization
ZGD	Companies Act
ZPIZ	Pension and Disability Insurance Institute of Slovenia
ZUJF	Fiscal Balance Act

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