

# Key messages and guidelines

## Current situation and trends...

### ... in Slovenia's productivity and competitiveness

**The low level of productivity is central to Slovenia's lag in GDP per capita.**

Productivity, measured as GDP per person employed (in PPS), reached 84% of the EU average in 2021. This is 1.7 p.p. higher than in the previous year and represents a greater progress compared to both the Visegrad countries (V4) and the innovation leaders. However, it only means that after more than a decade of slow productivity growth, Slovenia's gap with the EU average has returned to the level it was at before the onset of the global financial crisis in 2008. At the same time, Slovenia's productivity lead over the V4 narrowed significantly over the period 2008–2021, while the gap with the innovation leaders remained almost unchanged. All Slovenian regions lag behind the average productivity level in the EU. The already small regional productivity differences have narrowed even further, which means that the differences in GDP per capita are mainly arising from differences in employment rates.

**In addition to higher investment, increasing efficiency will also be key to further accelerating productivity growth throughout the economy.**

Given the ageing population and the already high employment rate, raising productivity is key to improving prosperity. While trend labour productivity growth has picked up since 2017 and is now slightly below 2%, this is due to more modest investment activity or capital deepening, especially by the corporate sector but also by the population, and is still more than 1 p.p. lower than before 2008. In order to further accelerate productivity growth, in addition to higher investment, total factor productivity growth needs to be further strengthened, i.e. production factors should be used more efficiently.

In the long term, productivity was driven by the more export-oriented parts of the economy: over the period 2005–2021, the highest increase in value added per hour worked in real terms was recorded in manufacturing, 71%, which is above the EU average (41%) but much lower than in the Visegrad countries (98%). Traditional market services also achieved fairly high productivity growth in the long-term, while ICT services deviated negatively compared to other countries. The relatively high productivity growth of the export-oriented parts of the economy is reflected, among other things, in the competitive position on foreign markets, as the share of exports in the trade in goods and traditional market services has increased over the long term. In recent years, export competitiveness has been strengthened or at least maintained by the majority of energy- and emissions-intensive activities, which are currently most exposed to the challenges of the energy crisis and the urgent green transition. Knowledge-based services have long represented an untapped potential.

**To increase efficiency, sound economic policy is needed in the short term, while more ambition is required in addressing long-term opportunities and challenges.**

In 2022, as the economy cools, there are signs of a gradual cyclical slowdown in real productivity growth in the business sector, while the market share in the goods market started to decline already in 2021. Labour cost growth increased slightly in the first half of 2022 against a backdrop of high inflation and labour shortages, and growth in prices of market services also accelerated. Should the situation worsen, domestic cost pressures could add to the global cost pressures that began to intensify in 2021 due to the sharp increase in energy and non-energy commodity prices. This requires a sound economic policy aimed at ambitious promotion of long-term productivity growth, which will, among other things, allow for sustainable wage growth while maintaining a competitive position.

### ... in financial performance of companies

**Notwithstanding the fact that the financial situation of the corporate sector remains strong for the time being...**

The overall financial situation of the corporate sector remained quite favourable in 2021. With low indebtedness and over-indebtedness and high profitability and liquidity, companies' debt repayment abilities continued to improve, reaching the most favourable figures since 2006. However, the corporate debt increased slightly as measures to mitigate the impact of the epidemic were gradually lifted and investment activity resumed. At the same time, the financial situation deteriorated significantly in certain segments of the economy: in 2020, the ability to repay debt temporarily deteriorated in some of the market services most affected by the COVID-19 epidemic (accommodation and food service activities, arts and recreation), while in 2021 it deteriorated in holding and leasing companies. Nevertheless, the share of companies with a relatively high risk of insolvency was already lower in 2021 (14.2%) than during the global financial crisis. The shares of these companies in terms of employment, capital and value added of the entire business sector were even lower than in 2008.

**... new challenges require an economic policy response, especially in support of the healthy cores of the economy.**

Given that the solvency of the corporate sector had not deteriorated by mid-2022 and the number of bankruptcy proceedings initiated against legal entities and sole proprietors was lower in the first nine months of 2022 than in the same period of 2019, it appears that the corporate sector has weathered the COVID-19 crisis quite successfully with the help of a number of intervention measures. On the other hand, the corporate sector is now facing new challenges due to the war in Ukraine and emergency situations, especially in the energy markets, amid high inflation and monetary policy tightening. The related economic policies must strive at supporting healthy cores of the economy that are not over-indebted and are viable in the long term, especially development-oriented niche parts of the economy that have great growth potential.

### ... in a changed global economic context

**De-globalisation tendencies represent an opportunity to strengthen economic activity which is currently under-exploited in Slovenia.**

The changed political context in a number of countries, increasing protectionism, the trade war between the US and China, the COVID-19 pandemic, the geopolitical situation related to the war in Ukraine, and the green and digital transformation are having a profound impact on the structure of global value chains (GVCs). Globalisation has increased the geographic and sectoral concentration of GVCs, which also poses major risks for international business related, for example, to exposure to suppliers of critical raw materials or countries with a dominant market position and to the underestimation of the total costs of offshoring. Due to widespread supply chain disruptions in relation to de-globalisation tendencies, the trend of GVC deepening and strengthening has reversed in recent years.

**International integration of service activities should be strengthened and functions performed in non-service activities upgraded.**

The changes in GVCs are crucial for Slovenia's competitiveness, as the country is strongly integrated into them as a small open economy, although there is still untapped potential. In the period 2010–2018, the share of foreign value added in Slovenian exports increased more than on average in the EU and V4, while at the same time the share of Slovenian value added exports in GVCs is below the average of the EU, innovation leaders and V4 countries, which is also related to the size of the Slovenian economy. On a per capita basis, Slovenia generates much higher value added in exports than the V4, but the gap with innovation leaders points to the need to further strengthen the international integration of service activities, especially knowledge-based ones, and to upgrade the functions performed by Slovenian companies in non-service activities.

At the same time, the transformation of GVCs may be reflected in reshoring of production or parts of production to Europe, which may represent an opportunity for Slovenia as for other Central and Eastern European countries. Available data show that companies are reacting to increased supply chain disruptions with greater caution in the form of increased inventories, while at the same time surveys, for example of German companies, confirm that companies are seriously considering reshoring or nearshoring their manufacturing operations. Survey data for Slovenian companies show that there have been no major changes in the production locations of companies or their subsidiaries in the last two years; companies only report of a change in the geographical structure of input suppliers.

### **... and under the impact of the transition to a low carbon and circular economy**

As environmental pressures increase, so does the global ecological deficit, which in the period 2014–2018 again increased relatively rapidly also in Slovenia. As the current growth model is not sustainable and is leading to an environmental crisis, commitments have been made at global, national and EU levels to reduce greenhouse gas (GHG) emissions and transition to climate neutrality. According to the adopted strategic targets in the National Energy and Climate Plan (NECP), GHG emissions in Slovenia are to be reduced by about one-third by 2030 and completely eliminated by 2050, but the national targets will have to be revised upwards due to the more ambitious EU targets. Both to achieve climate neutrality and to stop the growing pressure related to the overuse of natural resources, their expected scarcity and the associated price increases, it is necessary to decouple economic growth from GHG emissions growth and the use of natural resources, i.e. to move from a linear to a circular economy.

**The green transition will be characterised by large-scale changes in the structure of the economy...**

The cumulative, long-term impact of climate change on economic activity and employment is assessed to be modest, but the transition will be challenging due to the changed economic structure, which will be reflected in the following in particular:

- a) Activities under pressure from green transformation. These are activities that contribute most to accelerating climate change and where the changes will be most radical (energy, mining, energy-intensive industry, construction and agriculture). Particular attention must be paid to preventing carbon leakage across borders and addressing those areas and groups most affected by the transition process.
- b) Less polluting activities and especially activities that have a positive impact on the environment. These will be characterised by positive trends, as they will open up new opportunities for development and new jobs that will require new skills.

**... with the net benefits or costs depending on the ambition and speed of the transition to an integrated smart circular economy.**

A decade ago, sustainability at the corporate level was seen more as a niche concept and a function of public relations. In recent years, however, it has become a prerequisite for corporate success and a source of new competitive advantage. Not only is the green transformation of the corporate sector being accelerated by legislation, which will become even stricter in the coming years, but at the same time consumers, investors and employees increasingly expect a focus on sustainability. In the future, this trend will become even more pronounced, including in Slovenia, in part due to generational effects. Businesses must therefore optimise their activities from the perspective of creating wider economic, social and environmental benefits in order to maximise environmental benefits in the medium and long term in accordance with a new paradigm of an integrated smart circular economy.

## Key factors with recommendations on how to move forward

### With an agile business environment and ecosystem approach

**Despite making some progress in recent years, Slovenia remains in the bottom half of EU Member States in terms of institutional performance and the quality of the business environment.**

An effective institutional framework is the key to a supportive business environment. Slovenia has made progress in several areas in recent years, notably in insolvency legislation, the efficiency of the judiciary, the modernisation of public procurement, the reduction of administrative barriers and bureaucratisation, and the introduction of digital public services. International comparisons show that many other countries have made even greater changes, however, which is why Slovenia still ranks in the bottom half of EU Member States regarding most institutional performance indicators.

**De-bureaucratisation and business support ecosystems for a more responsive and flexible functioning of the state remain a priority.**

Addressing structural problems in the institutional environment, especially de-bureaucratisation, therefore remains a priority, and from a productivity perspective, government accountability and efficiency, especially in supporting the business activity, is becoming an increasingly important challenge. The latter refers both to public services provided directly by the State and to the creation of a scientific research, innovation and digital ecosystems, which is also very important for the green transition. In this respect, Slovenia's lag is greatest in the indicators of participation and government responsibility, where the country's ability to respond and adapt to an increasingly fast-changing and complex environment is also increasingly important for productivity and competitiveness.

The tax system is often mentioned as one of the obstacles to doing business. We expect that further reductions in the tax burden will be difficult to implement, given the development challenges and the tax changes adopted so far, which have resulted in record-low tax revenues as a percentage of GDP. However, this means that it is all the more important to address weaknesses related to the complexity of the tax system, in particular the number of tax procedures and the time needed to comply with tax obligations, and the frequency of changes in tax legislation, including tax rates.

### With an inclusive attitude and strengthening of social capital

Social capital is an increasingly important productivity factor and has an impact not only on the business operations of companies, but also on the quality of life in society in general. Analyses for Slovenia have for many years shown a strong identification of workers with the work organisation, the workplace and employment, but at the same time their assessments of the quality of employment and earnings, material well-being, and, above all, their health and work ability were poor.

**Strengthening social capital will not only improve the quality of life in Slovenia and increase its attractiveness, but also strengthen its resilience.**

In terms of employee engagement and percentage of successful employees, Slovenia ranks in the middle of EU Member States, but at the same time Europe as a whole ranks third in terms of success and last in terms of employee engagement among the ten major regions in the world. Employee engagement thus remains a challenge, and in terms of self-assessment of employee performance, Slovenia still lags far behind the innovation leaders, despite making progress compared to 2011.

Among the factors of employment and job quality, more attention should be paid to making working time more flexible, not least to enable a better reconciliation of family and work, and to health and safety at work measures. Slovenia scores better than the EU average on the cognitive development of workers. More workers find their tasks interesting and are given autonomy in their work, but at the same time they are less likely to solve challenging tasks or unforeseen problems independently. Worker participation in management and decision-making in companies and other organisations is also below the EU average and that of the innovation leaders, and issues such as health and safety at work and risks relating to digitalisation are less often discussed with workers, while maintaining productivity levels is discussed more often.

## With human resources development

**Human resources are one of the most important factors holding back productivity growth.**

In Slovenia, the lack of suitable labour, knowledge and skills is becoming one of the most important limiting factors for increasing productivity and economic development. Slovenia faces one of the largest labour shortages and the gap with the innovation leaders in terms of labour availability has widened.

**Therefore, there is an urgent need to strengthen the available human capital in line with changing needs...**

The educational level of the adult population and the labour force has been improving for several years, but at the same time the mismatch between supply and demand in the labour market is increasing. The proportion of people with tertiary education employed in occupations for which an upper secondary qualification is sufficient is increasing, due to the following factors, among others: (a) a mismatch between upper secondary and tertiary enrolments and the demand for labour, indicating a lack of strategic planning for human resource development, and (b) too slow and unambitious transformation of the business sector. Adapting and strengthening the skills and competences of young people while ensuring intensive retraining of workers, including older persons, are shaped by the green and digital transformation and other changes that are crucial for productivity growth and require, among other things, a greater emphasis on transversal skills.

**... and also to attract and integrate labour from abroad, while accelerating automation processes.**

Immigrants and migrants who are not in employment or do not have access to labour market (e.g. applicants for international protection and persons under international protection) are also a potential source of additional labour, which suggests the need for more proactive migration and integration policies. In general, Slovenia should more actively attract professionals from abroad and other staff by simplifying procedures, providing information, and generally improving working conditions and opportunities for professional development.

## With a strategic transition to innovation-driven growth

**Slovenia has made progress in recent years, but not enough to narrow the gap with the leading countries or to prevent the V4 countries from catching up.**

The transition to innovation-driven growth is the basis for increasing value added and thus catching up with economically more advanced countries. Slovenia's gap with the EU average has narrowed since 2019 after a sharp deterioration in 2017–2019, but the 2015 index value was not reached until 2022. At the same time, Slovenia's gap with the innovation leaders has not narrowed significantly, while its lead over V4 has narrowed noticeably.

**It is crucial to accelerate all innovation-related investments, including in soft forms of intangible capital, at both the government and corporate levels.**

The main reason for the slow transition to innovation-led growth over a longer period of time is insufficient investment from both the public and the corporate sectors. Slovenia's investment in innovation-driven growth (in R&D, ICT, and other machinery and equipment) fell sharply after 2008, so the gap is still large compared to the 2000–2008 period, despite the trend reversal in recent years. With regard to the softer forms of intangible capital, Slovenia is one of the most successful countries when it comes to investing in design and branding. At the same time, however, it is at the bottom of EU Member States when it comes to training in enterprises and improving organisation and business processes, and it also lags behind when it comes to investment in education, especially at the tertiary and upper secondary levels.

**The efficiency of the scientific research and innovation ecosystem has been improving in a number of elements...**

Human resources in research, development and innovation remain Slovenia's competitive advantage, but the trend is negative. On the other hand, strong positive trends have been observed over the last three years in the areas of innovation activity of the business sector, quality of the research system, and integration and cooperation, all of which represent comparative advantages for Slovenia compared to the EU as a whole, although the gap with the innovation leaders has been narrowing. In 2018–2020, business innovation activity reached its highest level in the last decade, with only SMEs lagging behind innovation leaders, which we link, among other things, to the above-mentioned trend reversal in investment in innovation-led growth since 2016, also in the context of resumed development policy. At the same time, early entrepreneurial activity remains low by international standards, but it is encouraging that at the same time the proportion of early entrepreneurs who have entered entrepreneurial activity due to perceived promising business opportunities rose noticeably again in 2021 after a decline in 2020, reaching its highest level ever.

**... with negative trends in human resources, connectivity and, increasingly, too shallow automation and digital transformation of the corporate sector.**

In the period 2017–2022, Slovenia improved its ranking among EU Member States in the area of digitalisation of the economy and society, but at the same time its lead over the EU average (according to DESI) continues to shrink, and in the global comparison Slovenia even fell from 31st to 37th place between 2020 and 2022. Slovenia is losing its relative advantage in connectivity and digital technology integration, but it is making progress in digital public services. In the area of human resources which are crucial for digitalisation, Slovenia remains slightly below the EU average and is increasingly falling behind the innovation leaders and losing its lead over the Visegrad Group.

Slovenia's competitive advantage over the EU has also gradually narrowed and its gap with innovation leaders in the areas of digitalisation and automation of the business sector has widened, with Slovenia remaining relatively competitive in robotisation and e-sales. At the same time, Slovenia continues to lag behind in integration, especially in the more sophisticated (digital) technologies, which is one of the indicators showing that the modernisation processes are still relatively shallow and not as thorough as in other countries. The data on companies Industry 4.0 adoption maturity also points to stagnation, as between 2018 and 2022 the proportion of companies demonstrating a high level of readiness actually fell from 26.3% to 24.4% of the companies surveyed.

**More ambition is needed in strengthening organisational factors, while paying more attention to disruption, creativity and innovation.**

The pace of a profound digital transformation of companies is slow and not even the COVID-19 crisis has noticeably helped to accelerate progress: the crisis mainly led to an accelerated use of basic digital tools (e.g. communication tools) and, for example, an increase in online sales, while its impact on the use of more sophisticated technologies or their integration was much smaller. In order to accelerate productivity growth, Slovenian companies must not only accelerate the adoption of individual

(more sophisticated) technologies, but also undertake a more comprehensive and ambitious (digital) transformation, both in terms of digitalisation and sustainability and in terms of strengthening organisational factors, with a stronger focus on disruption, creativity and innovation.

The main reasons for progress being too slow at company level include an unsystematic approach to (digital) transformation, low awareness of its importance and impact, a lack of staff and knowledge, and insufficient willingness to change, while the cost aspect, which is extremely important for small companies, also poses a challenge for medium and large companies when it comes to sophisticated technologies.

## And towards a low-carbon circular economy

**Despite improvements in environmental productivities, a more decisive shift is needed in the future.**

Total GHG emissions and energy and material consumption have declined over the long term, and associated emissions, energy and material productivity have improved. However, the gap with the EU average (with the exception of material productivity) has not narrowed significantly, so the transition to a low-carbon and circular economy requires even stronger measures. This is especially true for the use of renewable energy sources, which increased the least in Slovenia of all EU Member States in the period 2005–2020. On the other hand, the biggest changes have been made in the circular material use rate, which has doubled in the last ten years and has approached the EU average.

The need to accelerate the green transition is further dictated by rising commodity prices, especially the sharp increase in energy prices. In the corporate sector, the burden of material costs on income generally declined over the period 2008–2021, which has had a positive impact on the growth of value added and productivity. The surge in material and intermediate goods prices in 2021 has also not yet been reflected in an increase in the ratio of material costs to operating revenues, which means that generally companies have either passed on higher material costs to higher prices or increased their resource use efficiency. In view of the sharp rise in energy prices, cost pressure started to increase in 2022.

**So far, companies have successfully coped with the growing cost pressure...**

Particular attention should be paid to energy- and emissions-intensive manufacturing activities (manufacture of paper, non-metallic mineral products and metal products and the chemical industry), which are at greater risk of carbon leakage as they are more exposed to international competition. It is encouraging that in the period 2008–2021, the companies that are the largest energy consumers were more successful than average in reducing the burden of energy costs on operating revenues and that the majority of energy- and emission-intensive products were able to maintain or even improve their competitive position on the world market, which, however, with comparatively lower tax burdens on individual energy sources, was also a consequence of the slow progress in meeting climate and energy targets.

**... but sustainable change needs to be accelerated significantly at both the company and country levels.**

Accelerating the sustainable transformation of the business sector is crucial in the face of growing pressures – and also opportunities –, even though Slovenian companies are much less concerned about the impact of climate change on their business than companies in most other EU Member States. The main motivation for companies in Slovenia are savings and legal requirements, which is reflected in short-term-oriented measures to cope with cost pressures or simply the introduction of internal monitoring of the achievement of sustainability goals. However, Slovenian

companies lag far behind in promoting sustainable investments and in the overall sustainable transformation of companies in terms of product differentiation, the use of advanced sustainable technologies and the innovation of sustainable business models.

In order to achieve the energy and climate goals, the Government will also have to significantly accelerate its activities, with between EUR 11.6 and 12.3 billion available for these purposes in the period 2021–2030. Since, according to the National Energy and Climate Plan, investments of EUR 28 billion would be required, this indicates a considerable gap, which, however, is not insurmountable with an appropriate, broad-based economic and sustainability policy. In addition to incorporating the investment potential of private sources, the upgraded policy must also include a broad package of measures, from price-based instruments, subsidies and standards to the development of new technological solutions, the modernisation of infrastructure, the promotion of sustainable entrepreneurship, retraining and awareness-raising (for more detailed recommendations for the government and the business sectors, see Section 4.2.4).